ILLINOIS POLLUTION CONTROL BOARD
January 5, 2006

IN THE MATTER OF:	)	
	)	
UIC CORRECTIONS, USEPA	)	R06-5
AMENDMENTS January 1, 2005 through	)	(Identical-in-Substance
June 30, 2005)	)	Rulemaking - Land)
RCRA SUBTITLE D UPDATE, USEPA	)	R06-6
AMENDMENTS (January 1, 2005 through	)	(Identical-in-Substance
June 30, 2005 and August 1, 2005)	)	Rulemaking - Land)
RCRA SUBTITLE C UPDATE, USEPA	)	R06-7
AMENDMENTS (January 1, 2005 through	)	(Identical-in-Substance
June 30, 2005 and August 1, 2005)	)	Rulemaking - Land)
	)	(Consolidated)

Adopted Rule. Final Order.

ORDER OF THE BOARD (by G.T. Girard):

SUMMARY OF TODAY'S ACTION

The Board today adopts final identical-in-substance rules in three consolidated dockets. The rulemaking updates the Illinois underground injection control, municipal solid waste landfill, and hazardous waste regulations to incorporate revisions to the federal regulations. The federal amendments that prompted this action were made by the United States Environmental Protection Agency (USEPA) during the period of January 1, 2005 through June 30, 2005. This proceeding amends 35 Ill. Adm. Code 720 through 725, 728, and 738. These amendments also make a series of non-substantive corrections and stylistic revisions to segments of the text that are not otherwise affected by the covered federal amendments, principally to the text of 35 Ill. Adm. Code 723 and 738.

This order and the related opinion adopt identical-in-substance amendments in three distinct program areas:

1. Under Sections 7.2 and 13(c) of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 13(c) (2004)), the Board adopts amendments to the Illinois regulations that are "identical in substance" to underground injection control (UIC) regulations that the USEPA adopted to implement Section 1421 of the federal Safe Drinking Water Act (SDWA) (42 U.S.C. § 300h (2003)). The federal UIC regulations are found at 40 C.F.R. 144 through 148.

2. Under Sections 7.2 and 22.40(a) of the Act (415 ILCS 5/7.2 and 22.4(a) (2004)) the Board adopts regulations that are "identical in substance" to municipal solid

waste landfill (MSWLF) regulations adopted by the USEPA. These USEPA rules implement Subtitle D of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6941 *et seq*. (2003)). The federal RCRA Subtitle D MSWLF regulations are found at 40 C.F.R. 258.

3. Under Sections 7.2 and 22.4(a) of the Act (415 ILCS 5/7.2 and 22.4(a) (2004)) the Board adopts regulations that are "identical in substance" to hazardous waste regulations adopted by the USEPA. These USEPA rules implement Subtitle C of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6921 *et seq*. (2003)). The federal RCRA Subtitle C hazardous waste management regulations are found at 40 C.F.R. 260 through 266, 268, 270, 271, 273, and 279.

Sections 13(c), 22.40(a), and 22.4(a) also provide that Title VII of the Act and Section 5 of the Administrative Procedure Act (5 ILCS 100/5-35 and 5-40 (1998)) do not apply to the Board's adoption of identical-in-substance regulations.

This order is supported by an opinion that the Board also adopts today. The Board will file the adopted amendments with the Office of the Secretary of State 30 days after the date of this order, after which they will be published in the *Illinois Register*. This delay is specifically to allow USEPA time to review and comment on the adopted amendments before they are filed and become effective.

The Clerk is directed to cause the filing of the following adopted amendments with the Office of the Secretary of State for their publication in the *Illinois Register*:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER b: PERMITS

PART 703
RCRA PERMIT PROGRAM

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703.Appendix A Classification of Permit Modifications

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14289, effective October 12, 1983; amended in R83-24 at 8 Ill. Reg. 206, effective December 27, 1983; amended in R84-9 at 9 Ill. Reg. 11899, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1110, effective January 2, 1986; amended in R85-23 at 10 Ill. Reg. 13284, effective July 28, 1986; amended in R86-1 at 10 Ill. Reg. 14093, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20702, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6121, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13543, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19383, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2584, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13069, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 447, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18477, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6278, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14492, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9616, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14554, effective September 30, 1991; amended in R91-13 at 16 Ill. Reg. 9767, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5774, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20794, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6898, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12392, effective July 29, 1994; amended in R94-5 at 18 Ill. Reg. 18316, effective December 20, 1994; amended in R95-6 at 19 Ill. Reg. 9920, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11225, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 553, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7632, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17930, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2153, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9381, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9765, effective June 20, 2000; amended in R01-21/R01-23 at 25 Ill. Reg. 9313, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6539, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3496, effective February 14, 2003; amended in R03-18 at 27 Ill. Reg. 12683, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 5966, effective April 13,

2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART C: AUTHORIZATION BY RULE AND INTERIM STATUS

Section 703.140 Purpose and Scope

a) The Sections of this Subpart C are divided into the following two groups:

1) Section 703.141~~,~~ (Permits by Rule); and

2) Sections 703.151 through 703.158, relating to interim status;

b) The interim status rules correspond to subpart G of 40 CFR 270~~, Subpart G~~, which relates to interim status. Other portions of the federal rules may be found in Subpart B of this Part. The intent is to group the interim status rules so they can be more easily ignored by those to whom they do not apply, and so they can be conveniently repealed after the interim status period.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.141 Permits by Rule

Notwithstanding any other provision of this Part or 35 Ill. Adm. Code 705, the following must be deemed to have a RCRA permit if the conditions listed are met:

a) Ocean disposal barges or vessels. The owner or operator of a barge or other vessel that accepts hazardous waste for ocean disposal, if the owner or operator does the following:

1) It has a permit for ocean dumping issued by USEPA under 40 CFR 220~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~;

2) It complies with the conditions of that permit; and

3) It complies with the following hazardous waste regulations~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~:

A) ~~40 CFR 264.11,~~ 35 Ill. Adm. Code 724.111 (USEPA Identification ~~number~~ Number);

B) ~~40 CFR 264.71,~~ 35 Ill. Adm. Code 724.171 (Use of ~~manifest system~~ Manifest System);

C) ~~40 CFR 264.72,~~ 35 Ill. Adm. Code 724.172 (Manifest ~~discrepancies~~ Discrepancies);

D) ~~40 CFR 264.73(a) and (b)(1),~~ 35 Ill. Adm. Code 724.173(a) and (b)(1) (Operating ~~record~~ Record);

E) ~~40 CFR 264.75,~~ 35 Ill. Adm. Code 724.175 (Biennial ~~report~~ Report); and

F) ~~40 CFR 264.76,~~ 35 Ill. Adm. Code 724.176, (Unmanifested ~~waste report;~~ Waste Report).

b) Injection wells. The owner or operator of an underground injection well disposing of hazardous waste, if the owner or operator fulfills the following conditions:

1) It has a permit for underground injection issued under 35 Ill. Adm. Code 704; and

2) It complies with the conditions of that permit and the requirements of Subpart F of 35 Ill. Adm. Code 704 (requirements for wells managing hazardous waste); and

3) For UIC permits issued after November 8, 1984, the following:

A) It complies with 35 Ill. Adm. Code 724.201; and

B) Where the UIC well is the only unit at the facility that requires a RCRA permit, it complies with Section 703.187.

c) Publicly owned treatment works (POTW). The owner or operator of a POTW that accepts for treatment hazardous waste, if the owner or operator fulfills the following conditions:

1) It has an NPDES permit;

2) It complies with the conditions of that permit; ~~and~~

3) It complies with the following regulations:

A) 35 Ill. Adm. Code 724.111~~,~~ (Identification ~~number~~ Number);

B) 35 Ill. Adm. Code 724.171~~,~~ (Use of ~~manifest system~~ Manifest System);

C) 35 Ill. Adm. Code 724.172~~,~~ (Manifest ~~discrepencies~~ Discrepancies;

D) 35 Ill. Adm. Code 724.173(a) and (b)(1)~~,~~ (Operating ~~record~~

Record);

E) 35 Ill. Adm. Code 724.175~~,~~ (Annual ~~report~~ Report);

F) 35 Ill. Adm. Code 724.176~~,~~ (Unmanifested ~~waste report~~ Waste Report); and

G) For NPDES permits issued after November 8, 1984, 35 Ill. Adm. Code 724.201 (Corrective Action for Solid Waste Management Units); and

4) If the waste meets all federal, it complies with State and local pretreatment requirements that would be applicable to the waste if it were being discharged into the POTW through a sewer, pipe, or similar conveyance.

BOARD NOTE: Illinois pretreatment requirements are codified in 35 Ill. Adm. Code 307 and 310.

BOARD NOTE: See 40 CFR 270.60 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.153 Qualifying for Interim Status

a) Any person who owns or operates an existing HWM facility or a facility in existence on the effective date of statutory or regulatory amendments that render the facility subject to the requirement to have a RCRA permit must have interim status and must be treated as having been issued a permit to the extent he or she has fulfilled the following requirements:

1) ~~Complied~~ The owner or operator has complied with the requirements of Section 3010(a) of the federal Resource Conservation and Recovery Act (42 USC 6930(a)) pertaining to notification of hazardous waste activity;

BOARD NOTE: Some existing facilities may not be required to file a notification under Section 3010(a) of the federal Resource Conservation and Recovery Act (42 USC 6930(a)). These facilities may qualify for interim status by meeting subsection (a)(2).

2) ~~Complied~~ The owner or operator has complied with the requirements of Sections 703.150 and 703.152 governing submission of Part A applications~~;~~.

b) Failure to qualify for interim status. If the Agency has reason to believe upon examination of a Part A application that ~~it~~ the Part A application fails to meet the requirements of 35 Ill. Adm. Code 702.123 or 703.181, it must notify the owner

or operator in writing of the apparent deficiency. Such notice must specify the grounds for the Agency's belief that the application is deficient. The owner or operator must have 30 days from receipt to respond to such a notification and to explain or cure the alleged deficiency in its Part A application. If, after such notification and opportunity for response, the Agency determines that the application is deficient it may take appropriate enforcement action.

c) Subsection (a) of this Section must not apply to any facility that has been previously denied a RCRA permit or if authority to operate the facility under the federal Resource Conservation and Recovery Act (42 USC 6901 et seq.) has been previously terminated.

BOARD NOTE: Derived from 40 CFR 270.70 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.155 Changes During Interim Status

a) Except as provided in subsection (b)~~,~~ of this Section, the owner or operator of an interim status facility may make the following changes at the facility:

1) Treatment, storage, or disposal of new hazardous wastes not previously identified in Part A of the permit application (and, in the case of newly listed or identified wastes, addition of the units being used to treat, store, or dispose of the hazardous wastes on the date of the listing or identification) if the owner or operator submits a revised Part A permit application prior to such treatment, storage, or disposal;

2) Increases in the design capacity of processes used at the facility if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for the change) and the Agency approves the change because either of the following conditions exist:

A) There is a lack of available treatment, storage, or disposal capacity at other hazardous waste management facilities; or

B) The change is necessary to comply with a federal, State, or local requirement, including 35 Ill. Adm. Code 725, 728, or 729;

3) Changes in the processes for the treatment, storage, or disposal of hazardous waste may be made at a facility or addition of processes if the owner or operator submits a revised Part A permit application prior to such a change (along with a justification explaining the need for change) and the Agency approves the change because either of the following conditions exist:

A) The change is necessary to prevent a threat to human health or the environment because of an emergency situation; or

B) The change is necessary to comply with a federal, State, or local requirement, including 35 Ill. Adm. Code 725, 728, or 729;

4) Changes in the ownership or operational control of a facility if the new owner or operator submits a revised Part A permit application no later than 90 days prior to the scheduled change. When a transfer of ownership or operational control of a facility occurs, the old owner or operator must comply with the requirements of Subpart H of 35 Ill. Adm. Code 725 (financial requirements), until the new owner or operator has demonstrated to the Agency that it is complying with the requirements of that Subpart. The new owner or operator must demonstrate compliance with the financial assurance requirements within six months after the date of the change in the ownership or operational control of the facility. Upon demonstration to the Agency by the new owner or operator of compliance with the financial assurance requirements, the Agency must notify the old owner or operator in writing that the old owner or operator no longer needs to comply with Subpart H of 35 Ill. Adm. Code 725 as of the date of demonstration. All other interim status duties are transferred effective immediately upon the date of the change of ownership or operational control of the facility;

5) Changes made in accordance with an interim status corrective action order issued by: USEPA under Section 3008(h) of the federal Resource Conservation and Recovery Act (42 USC 6901 et seq.) or other federal authority; a court pursuant to a judicial action brought USEPA; a court pursuant to the Environmental Protection Act; or the Board. Changes under this subsection (a)(5) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility;

6) Addition of newly regulated units for the treatment, storage, or disposal of hazardous waste if the owner or operator submits a revised Part A permit application on or before the date on which the unit becomes subject to the new requirements.

b) Except as specifically allowed under this subsection (b), changes listed under subsection (a) of this Section must not be made if they amount to reconstruction of the HWM facility. Reconstruction occurs when the capital investment in the changes to the facility exceeds ~~fifty~~ 50 percent of the capital cost of a comparable entirely new HWM facility. If all other requirements are met, the following changes may be made even if they amount to a reconstruction:

1) Changes made solely for the purpose of complying with requirements of 35 Ill. Adm. Code 725.293 for tanks and ancillary equipment.

2) If necessary to comply with federal, State or local requirements, including 35 Ill. Adm. Code 725, 728, or 729, changes to an existing unit, changes solely involving tanks or containers, or addition of replacement surface impoundments that satisfy the statutory standards of Section 35 Ill. Adm. Code 728.139.

3) Changes that are necessary to allow an owner or operator to continue handling newly listed or identified hazardous wastes that have been treated, stored or disposed of at the facility prior to the effective date of the rule establishing the new listing or identification.

4) Changes during closure of a facility or of a unit within a facility made in accordance with an approved closure plan.

5) Changes necessary to comply with an interim status corrective action order issued by: USEPA under Section 3008(h) of the federal Resource Conservation and Recovery Act (42 USC 6930(a)) or other federal authority; a court pursuant to a judicial action brought by USEPA; a court pursuant to the Environmental Protection Act; or the Board. Changes under this subsection (b)(5) are limited to the treatment, storage, or disposal of solid waste from releases that originate within the boundary of the facility.

6) Changes to treat or store, in tanks, containers, or containment buildings, hazardous wastes subject to land disposal restrictions imposed in 35 Ill. Adm. Code 728, provided that such changes are made solely for the purpose of complying with 35 Ill. Adm. Code 728.

7) Addition of newly regulated units under subsection (a)(6) of this Section.

8) Changes necessary to comply with the federal Clean Air Act (CAA) Maximum Achievable Control Technology (MACT) emissions standards of subpart EEE of 40 CFR 63~~, Subpart EEE --~~(National Emission Standards for Hazardous Air Pollutants ~~From~~ from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

BOARD NOTE: Derived from 40 CFR 270.72 ~~(2002)~~ (2005). The federal CAA MACT standards are directly implemented in Illinois pursuant to Section 39.5 of the Environmental Protection Act [415 ILCS 5/39.5].

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART D: APPLICATIONS

Section 703.185 Groundwater Protection Information

The following additional information regarding protection of groundwater is required from an owner or operator of a hazardous waste facility containing a regulated unit, except as provided in 35 Ill. Adm. Code 724.190(b):

a) A summary of the groundwater monitoring data obtained during the interim status period under 35 Ill. Adm. Code 725.190 through 725.194, where applicable;

b) Identification of the uppermost aquifer and aquifers hydraulically interconnected beneath the facility property, including groundwater flow direction and rate, and the basis for such identification (i.e., the information obtained from hydrogeologic investigations of the facility area);

c) On the topographic map required under Section 703.183(s), a delineation of the waste management area, the property boundary, the proposed "point of compliance" as defined under 35 Ill. Adm. Code 724.195, the proposed location of groundwater monitoring wells as required under 35 Ill. Adm. Code 724.197 and, to the extent possible, the information required in subsection (b) of this Section;

d) A description of any plume of contamination that has entered the groundwater from a regulated unit at the time that the application is submitted that does the following:

1) It delineates the extent of the plume on the topographic map required under Section 703.183(s);

2) It identifies the concentration of each Appendix I to 35 Ill. Adm. Code 724 constituent throughout the plume or identifies the maximum concentrations of each Appendix I to 35 Ill. Adm. Code 724 constituent in the plume;

e) Detailed plans and an engineering report describing the proposed groundwater monitoring program to be implemented to meet the requirements of 35 Ill. Adm. Code 724.197;

f) If the presence of hazardous constituents has not been detected in the groundwater at the time of permit application, the owner or operator must submit sufficient information, supporting data and analyses to establish a detection monitoring program that meets the requirements of 35 Ill. Adm. Code 724.198. This submission must address the following items as specified under that Section:

1) A proposed list of indicator parameters, waste constituents or reaction

products that can provide a reliable indication of the presence of hazardous constituents in the groundwater;

2) A proposed groundwater monitoring system;

3) Background values for each proposed monitoring parameter or constituent, or procedures to calculate such values; and

4) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

g) If the presence of hazardous constituents has been detected in the groundwater at the point of compliance at the time of permit application, the owner or operator must submit sufficient information, supporting data and analyses to establish a compliance monitoring program that meets the requirements of 35 Ill. Adm. Code 724.199. Except as provided in 35 Ill. Adm. Code 724.198(h)(5), the owner or operator must also submit an engineering feasibility plan for a corrective action program necessary to meet the requirements of 35 Ill. Adm. Code 724.200, unless the owner or operator obtains written authorization in advance from the Agency to submit a proposed permit schedule for submittal of such a plan. To demonstrate compliance with 35 Ill. Adm. Code 724.199, the owner or operator must address the following items:

1) A description of the wastes previously handled at the facility;

2) A characterization of the contaminated groundwater, including concentrations of hazardous constituents;

3) A list of hazardous constituents for which compliance monitoring will be undertaken in accordance with 35 Ill. Adm. Code 724.197 and 724.199;

4) Proposed concentration limits for each hazardous constituent, based on the criteria set forth in 35 Ill. Adm. Code 724.194(a), including a justification for establishing any alternate concentration limits;

5) Detailed plans and an engineering report describing the proposed groundwater monitoring system, in accordance with the requirements of 35 Ill. Adm. Code 724.197; and

6) A description of proposed sampling, analysis, and statistical comparison procedures to be utilized in evaluating groundwater monitoring data;

h) If hazardous constituents have been measured in the groundwater that exceed the concentration limits established under 35 Ill. Adm. Code 724.194, Table 1, or if groundwater monitoring conducted at the time of permit application under 35 Ill. Adm. Code 725.190 through 725.194 at the waste boundary indicates the

presence of hazardous constituents from the facility in groundwater over background concentrations, the owner or operator must submit sufficient information, supporting data, and analyses to establish a corrective action program that meets the requirements of 35 Ill. Adm. Code 724.200. However, an owner or operator is not required to submit information to establish a corrective action program if it demonstrates to the Agency that alternate concentration limits will protect human health and the environment after considering the criteria listed in 35 Ill. Adm. Code 724.194(b). An owner or operator who is not required to establish a corrective action program for this reason must instead submit sufficient information to establish a compliance monitoring program that meets the requirements of subsection (f) and 35 Ill. Adm. Code 724.199. ~~To demonstrate compliance with 35 Ill. Adm. Code 724.200, the owner or operator must address, at a minimum, the following items:~~

1) To demonstrate compliance with 35 Ill. Adm. Code 724.200, the owner or operator must address, at a minimum, the following items:

~~1~~A) A characterization of the contaminated groundwater, including concentrations of hazardous constituents;

~~2~~B) The concentration limit for each hazardous constituent found in the groundwater, as set forth in 35 Ill. Adm. Code 724.194;

~~3~~C) Detailed plans and an engineering report describing the corrective action to be taken; and

~~4~~D) A description of how the groundwater monitoring program will assess the adequacy of the corrective action.

~~5~~2) The permit may contain a schedule for submittal of the information required in subsections ~~(h)(3)~~ (h)(1)(C) and ~~(h)(4)~~ (h)(1)(D) of this Section, provided the owner or operator obtains written authorization from the Agency prior to submittal of the complete permit application.

BOARD NOTE: ~~See~~ Derived from 40 CFR 270.14(c) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.204 Waste Piles

For a facility that stores or treats hazardous waste in waste piles, except as otherwise provided in 35 Ill. Adm. Code 724.101, the Part B application must include the following:

a) A list of hazardous wastes placed or to be placed in each waste pile;

b) If an exemption is sought to 35 Ill. ~~Adm.~~ Adm. Code 724.351 and Subpart F of 35

Ill. Adm. Code 724, as provided by 35 Ill. Adm. Code 724.350(c) or 724.190(b)(2), an explanation of how the requirements of 35 Ill. Adm. Code 724.350(c) will be complied with or detailed plans and an engineering report describing how the requirements of 35 Ill. Adm. Code 724.190(b)(2) will be met;

c) Detailed plans and an engineering report describing how the pile is designed and is or will be constructed, operated and maintained to meet the requirements of 35 Ill. Adm. Code 724.119, 724.351, 724.352, and 724.353, addressing the following items:

1) Liner, leak detection, and removal system.

A) The liner system (except for an existing portion of a waste pile), if the waste pile must meet the requirements of 35 Ill. Adm. Code 724.351(a). If an exemption from the requirement for a liner is sought, as provided by 35 Ill. Adm. Code 724.351(b), the owner or operator must submit a copy of the Board order granting an adjusted standard pursuant to 35 Ill. Adm. Code 724.351(b);

B) The double liner and leak (leachate) detection, collection and removal system, if the waste pile must meet the requirements of 35 Ill. Adm. Code 724.351(c). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by 35 Ill. Adm. Code 724.351(d), (e), or (f), submit appropriate information;

C) If the leak detection system is located in a saturated zone, submit detailed plans and an engineering report explaining the leak detection system design and operation, and the location of the saturated zone in relation to the leak detection system;

D) The CQA plan, if required under 35 Ill. Adm. Code 724.119;

E) Proposed action leakage rate, with rationale, if required under 35 Ill. Adm. Code 724.352, and response action plan, if required under 35 Ill. Adm. Code 724.353;

2) Control of run-on;

3) Control of run-off;

4) Management of collection and holding units associated with run-on and run-off control systems; and

5) Control of wind dispersal of particulate matter, where applicable;

d) A description of how each waste pile, including the double liner system, leachate collection and removal system, leak detection system, cover system, and appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of 35 Ill. Adm. Code 724.354(a), (b), and (c). This information must be included in the inspection plan submitted under Section 703.183(e)~~.~~;

e) If the treatment is carried out on or in the pile, details about the process and equipment used, and the nature and quality of the residuals;

f) If ignitable or reactive wastes are to be placed in a waste pile, an explanation of how the applicant will comply with requirements of 35 Ill. Adm. Code 724.356 ~~will be complied with~~;

g) If incompatible wastes, or incompatible wastes and materials, will be placed in a waste pile, an explanation of how the applicant will comply with 35 Ill. Adm. Code 724.357 ~~will be complied with~~;

h) A description of how hazardous waste residues and contaminated materials will be removed from the waste pile at closure, as required under 35 Ill. Adm. Code 724.358(a). For any waste not to be removed from the waste pile upon closure, the owner or operator must submit detailed plans and an engineering report describing how the applicant will comply with 35 Ill. Adm. Code 724.410(a) and (b) ~~will be complied with~~. This information must be included in the closure plan and, where applicable, the post-closure plan submitted under Section 703.183(m); and

i) A waste management plan for hazardous waste numbers F020, F021, F022, F023, F026, and F027 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of 35 Ill. Adm. Code 724.359. This submission must address the following items as specified in that Section:

1) The volume, physical, and chemical characteristics of the wastes, including their potential to migrate through soil or to volatilize or escape into the atmosphere;

2) The attenuative properties of underlying and surrounding soils or other materials;

3) The mobilizing properties of other materials co-disposed with these wastes; and

4) The effectiveness of additional treatment, design, or monitoring techniques.

BOARD NOTE: Derived from 40 CFR 270.18 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.205 Incinerators that Burn Hazardous Waste

For a facility that incinerates hazardous waste, except as 35 Ill. Adm. Code 724.440 and subsection (e) of this Section provide otherwise, the applicant must fulfill the requirements of subsection (a), (b), or (c) of this Section in completing the Part B application.

a) When seeking exemption under 35 Ill. Adm. Code 724.440(b) or (c) (ignitable, corrosive, or reactive wastes only), the applicant must fulfill the following requirements:

1) Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both;

2) Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is reactive (Hazard Code R) for characteristics other than those listed in 35 Ill. Adm. Code 721.123(a)(4) and (a)(5) and will not be burned when other hazardous wastes are present in the combustion zone;

3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability or corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under Subpart C of 35 Ill. Adm. Code 721; or

4) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in 35 Ill. Adm. Code 721.123(a)(1) through (a)(3) or (a)(6) through (a)(8), and that it will not be burned when other hazardous wastes are present in the combustion zone.

b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.222 et seq.

c) In lieu of a trial burn, the applicant may submit the following information:

1) An analysis of each waste or mixture of wastes to be burned including the following:

A) Heat value of the waste in the form and composition in which it will be burned;

B) Viscosity (if applicable) or description of physical form of the waste;

C) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721 that are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Appendix H to 35 Ill. Adm. Code 721 that would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on appropriate analytical techniques ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111, or their equivalent~~;

D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the appropriate analytical methods ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111~~; and

E) A quantification of those hazardous constituents in the waste that may be designated as POHCs based on data submitted from other trial or operational burns that demonstrate compliance with the performance standard in 35 Ill. Adm. Code 724.443;

2) A detailed engineering description of the incinerator, including the following:

A) Manufacturer's name and model number of incinerator;

B) Type of incinerator;

C) Linear dimension of incinerator unit including cross sectional area of combustion chamber;

D) Description of auxiliary fuel system (type/feed);

E) Capacity of prime mover;

F) Description of automatic waste feed cutoff systems;

G) Stack gas monitoring and pollution control monitoring system;

H) Nozzle and burner design;

I) Construction materials; and

J) Location and description of temperature, pressure and flow indicating devices and control devices;

3) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (c)(1) of this Section. This analysis should specify the POHCs that the applicant has identified in the waste for which a permit is sought, and any differences from the POHCs in the waste for which burn data are provided;

4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

5) A description of the results submitted from any previously conducted trial burns, including the following:

A) Sampling and analysis techniques used to calculate performance standards in 35 Ill. Adm. Code 724.443;

B) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement); and

C) The certification and results required by subsection (b) of this Section;

6) The expected incinerator operation information to demonstrate compliance with 35 Ill. Adm. Code 724.443 and 724.445, including the following:

A) Expected carbon monoxide (CO) level in the stack exhaust gas;

B) Waste feed rate;

C) Combustion zone temperature;

D) Indication of combustion gas velocity;

E) Expected stack gas volume, flow rate, and temperature;

F) Computed residence time for waste in the combustion zone;

G) Expected hydrochloric acid removal efficiency;

H) Expected fugitive emissions and their control procedures; and

I) Proposed waste feed cut-off limits based on the identified significant operating parameters;

7) The Agency may, pursuant to 35 Ill. Adm. Code 705.122, request such additional information as may be necessary for the Agency to determine whether the incinerator meets the requirements of Subpart O of 35 Ill. Adm. Code 724 and what conditions are required by that Subpart and Section 39(d) of the Environmental Protection Act [415 ILCS 5/39(d)]; and

8) Waste analysis data, including that submitted in subsection (c)(1) of this Section, sufficient to allow the Agency to specify as permit Principal Organic Hazardous Constituents (permit POHCs) those constituents for which destruction and removal efficiencies will be required.

d) The Agency must approve a permit application without a trial burn if it finds the following:

1) The wastes are sufficiently similar; and

2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under 35 Ill. Adm. Code 724.445) operating conditions that will ensure that the performance standards in 35 Ill. Adm. Code 724.443 will be met by the incinerator.

e) When an owner or operator demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of subpart EEE of 40 CFR 63~~, subpart EEE~~), the requirements of this Section do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) if the owner or operator elects to comply with Section 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(b)(2).

BOARD NOTE: Operating conditions used to determine effective treatment of hazardous waste remain effective after the owner or operator demonstrates compliance with the standards of subpart EEE of 40 CFR 63~~, subpart EEE~~.

BOARD NOTE: Derived from 40 CFR 270.19 ~~(2002), as amended at 67 Fed. Reg. 77687 (December 19, 2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.208 Boilers and Industrial Furnaces Burning Hazardous Waste

When the owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of subpart EEE of 40 CFR 63~~, subpart EEE~~), the requirements of this Section do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 726.202(e)(1) and (e)(2)(C) if the owner or operator elects to comply with Section 703.310(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

a) Trial burns.

1) General. Except as provided below, an owner or operator that is subject to the standards to control organic emissions provided by 35 Ill. Adm. Code 726.204, standards to control particulate matter provided by 35 Ill. Adm. Code 726.205, standards to control metals emissions provided by 35 Ill. Adm. Code 726.206, or standards to control hydrogen chloride (HCl) or chlorine gas emissions provided by 35 Ill. Adm. Code 726.207 must conduct a trial burn to demonstrate conformance with those standards and must submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.232.

A) Under subsections (a)(2) through (a)(5) of this Section and 35 Ill. Adm. Code 726.204 through 726.207, the Agency may waive a trial burn to demonstrate conformance with a particular emission standard; and

B) The owner or operator may submit data in lieu of a trial burn, as prescribed in subsection (a)(6) of this Section.

2) Waiver of trial burn of DRE (destruction removal efficiency).

A) Boilers operated under special operating requirements. When

seeking to be permitted under 35 Ill. Adm. Code 726.204(a)(4) and 726.210, which automatically waive the DRE trial burn, the owner or operator of a boiler must submit documentation that the boiler operates under the special operating requirements provided by 35 Ill. Adm. Code 726.210.

B) Boilers and industrial furnaces burning low risk waste. When seeking to be permitted under the provisions for low risk waste provided by 35 Ill. Adm. Code 726.204(a)(5) and 726.209(a), which waive the DRE trial burn, the owner or operator must submit the following:

i) Documentation that the device is operated in conformance with the requirements of 35 Ill. Adm. Code 726.209(a)(1).

ii) Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in Appendix H to 35 Ill. Adm. Code 721, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on appropriate analytical techniques ~~specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, incorporated by reference in 35 Ill. Adm. Code 720.111~~.

iii) Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in subsection (a)(2)(B)(ii) of this Section using procedures provided by 35 Ill. Adm. Code 726.209(a)(2)(B).

iv) Results of emissions dispersion modeling for emissions identified in subsection (a)(2)(B)(iii) of this Section using modeling procedures prescribed by 35 Ill. Adm. Code 726.206(h). The Agency must review the emission modeling conducted by the applicant to determine conformance with these procedures. The Agency must either approve the modeling or determine that alternate or supplementary modeling is appropriate.

v) Documentation that the maximum annual average ground level concentration of each constituent identified in subsection (a)(2)(B)(ii) of this Section quantified in conformance with subsection (a)(2)(B)(iv) of this Section does not exceed the allowable ambient level established in

Appendix D or E to 35 Ill. Adm. Code 726. The acceptable ambient concentration for emitted constituents for which a specific reference air concentration has not been established in Appendix D to 35 Ill. Adm. Code 726 or risk-specific doses has not been established in Appendix E to 35 Ill. Adm. Code 726 is 0.1 micrograms per cubic meter, as noted in the footnote to Appendix D to 35 Ill. Adm. Code 726.

3) Waiver of trial burn for metals. When seeking to be permitted under the Tier I (or adjusted Tier I) metals feed rate screening limits provided by 35 Ill. Adm. Code 726.206(b) and (e) that control metals emissions without requiring a trial burn, the owner or operator must submit the following:

A) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

B) Documentation of the concentration of each metal controlled by 35 Ill. Adm. Code 726.206(b) or (c) in the hazardous waste, other fuels and industrial furnace feedstocks, and calculations of the total feed rate of each metal;

C) Documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by 35 Ill. Adm. Code 726.206(b) or (e) will not be exceeded during the averaging period provided by that subsection;

D) Documentation to support the determination of the TESH (terrain-adjusted effective stack height), good engineering practice stack height, terrain type, and land use, as provided by 35 Ill. Adm. Code 726.206(b)(3) through (b)(5);

E) Documentation of compliance with the provisions of 35 Ill. Adm. Code 726.206(b)(6), if applicable, for facilities with multiple stacks;

F) Documentation that the facility does not fail the criteria provided by 35 Ill. Adm. Code 726.206(b)(7) for eligibility to comply with the screening limits; and

G) Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.

4) Waiver of trial burn for PM (particulate matter). When seeking to be permitted under the low risk waste provisions of 35 Ill. Adm. Code 726.209(b), which waives the particulate standard (and trial burn to

demonstrate conformance with the particulate standard), applicants must submit documentation supporting conformance with subsections (a)(2)(B) and (a)(3) of this Section.

5) Waiver of trial burn for HCl and chlorine gas. When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chlorine and chloride provided by 35 Ill. Adm. Code 726.207(b)(1) and (e) that control emissions of HCl and chlorine gas without requiring a trial burn, the owner or operator must submit the following:

A) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;

B) Documentation of the levels of total chlorine and chloride in the hazardous waste, other fuels and industrial furnace feedstocks, and calculations of the total feed rate of total chlorine and chloride;

C) Documentation of how the applicant will ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by 35 Ill. Adm. Code 726.207(b)(1) or (e) will not be exceeded during the averaging period provided by that subsection;

D) Documentation to support the determination of the TESH, good engineering practice stack height, terrain type and land use as provided by 35 Ill. Adm. Code 726.207(b)(3);

E) Documentation of compliance with the provisions of 35 Ill. Adm. Code 726.207(b)(4), if applicable, for facilities with multiple stacks;

F) Documentation that the facility does not fail the criteria provided by 35 Ill. Adm. Code 726.207(b)(3) for eligibility to comply with the screening limits; and

G) Proposed sampling and analysis plan for total chlorine and chloride for the hazardous waste, other fuels, and industrial furnace feedstocks.

6) Data in lieu of trial burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with Section 703.232 and 35 Ill. Adm. Code 726.204 through 726.207 by providing the information required by Section 703.232 from previous compliance testing of the device in conformance with 35 Ill. Adm. Code 726.203 or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn

waiver, the design and operating information required by Section 703.232 must be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information must be provided. The Agency must approve a permit application without a trial burn if the Agency finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under 35 Ill. Adm. Code 726.102) operating conditions that will ensure conformance with 35 Ill. Adm. Code 726.102(c). In addition, the following information must be submitted:

A) For a waiver from any trial burn, the following:

i) A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing or operational or trial burns are provided to support the contention that a trial burn is not needed;

ii) The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and

iii) Such supplemental information as the Agency finds necessary to achieve the purposes of this subsection (a).

B) For a waiver of the DRE trial burn, the basis for selection of POHCs (principal organic hazardous constituents) used in the other trial or operational burns that demonstrate compliance with the DRE performance standard in 35 Ill. Adm. Code 726.204(a). This analysis should specify the constituents in Appendix H to 35 Ill. Adm. Code 721 that the applicant has identified in the hazardous waste for which a permit is sought and any differences from the POHCs in the hazardous waste for which burn data are provided.

b) Alternative HC limit for industrial furnaces with organic matter in raw materials. An owner or operator of industrial furnaces requesting an alternative HC limit under 35 Ill. Adm. Code 726.204(f) must submit the following information at a minimum:

1) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;

2) Documentation of the proposed baseline flue gas HC (and CO)

concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;

3) Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuels and destruction of hydrocarbon emissions from nonfuel sources;

4) Trial burn plan to do the following:

A) To demonstrate when burning hazardous waste that flue gas HC (and CO) concentrations do not exceed the baseline HC (and CO) level; and

B) To identify, in conformance with Section 703.232(d), the types and concentrations of organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 that are emitted when burning hazardous waste;

5) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and

6) Such other information as the Agency finds necessary to achieve the purposes of this subsection (b).

c) Alternative metals implementation approach. When seeking to be permitted under an alternative metals implementation approach under 35 Ill. Adm. Code 726.206(f), the owner or operator must submit documentation specifying how the approach ensures compliance with the metals emissions standards of 35 Ill. Adm. Code 726.106(c) or (d) and how the approach can be effectively implemented and monitored. Further, the owner or operator must provide such other information that the Agency finds necessary to achieve the purposes of this subsection (c).

d) Automatic waste feed cutoff system. An owner or operator must submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

e) Direct transfer. An owner or operator that uses direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in 35 Ill. Adm. Code 726.211) directly to the boiler or industrial furnace must submit information supporting conformance with the standards for direct transfer provided by 35 Ill.

Adm. Code 726.211.

f) Residues. An owner or operator that claims that its residues are excluded from regulation under the provisions of 35 Ill. Adm. Code 726.212 must submit information adequate to demonstrate conformance with those provisions.

BOARD NOTE: Derived from 40 CFR 270.22 ~~(2002), as amended at 67 Fed. Reg. 77687 (December 19, 2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.210 Process Vents

Except as otherwise provided in 35 Ill. Adm. Code 724.101, the owner or operator of a facility that has process vents to which Subpart AA of 35 Ill. Adm. Code 724 applies must provide the following additional information:

a) For facilities that cannot install a closed-vent system and control device to comply with Subpart AA of 35 Ill. Adm. Code 724 on the effective date on which the facility becomes subject to that Subpart or Subpart AA of 35 Ill. Adm. Code 725, an implementation schedule, as specified in 35 Ill. Adm. Code 724.933(a)(2).

b) Documentation of compliance with the process vent standards in 35 Ill. Adm. Code 724.932, including the following:

1) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated emission rates for the affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan);

2) Information and data supporting estimates of vent emissions and emission reduction achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, estimates of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or concentrations) that represent the conditions that exist when the waste management unit is operating at the highest load or capacity level reasonably expected to occur; and

3) Information and data used to determine whether or not a process vent is subject to 35 Ill. Adm. Code 724.932.

c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process

heater, condenser, or carbon adsorption system to comply with 35 Ill. Adm. Code 724.932, and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 35 Ill. Adm. Code 724.935(b)(3).

d) Documentation of compliance with 35 Ill. Adm. Code 724.933, including the following:

1) A list of all information references and sources used in preparing the documentation.

2) Records, including the dates of each compliance test required by 35 Ill. Adm. Code 724.933(k).

3) A design analysis, specifications, drawings, schematics, piping, and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," USEPA publication number EPA-450/2-81-005, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), or other engineering texts approved by the Agency that present basic control device design information. The design analysis must address the vent stream characteristics and control device parameters as specified in 35 Ill. Adm. Code 724.935(b)(4)(C).

4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater, unless the total organic emission limits of 35 Ill. Adm. Code 724.932(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency less than 95 weight percent.

BOARD NOTE: Derived from 40 CFR 270.24 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.211 Equipment

Except as otherwise provided in 35 Ill. Adm. Code 724.101, the owner or operator of a facility that has equipment to which Subpart BB of 35 Ill. Adm. Code 724 applies must provide the following additional information:

a) For each piece of equipment to which Subpart BB of 35 Ill. Adm. Code 724 applies, the following:

1) Equipment identification number and hazardous waste management unit identification;

2) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);

3) Type of equipment (e.g., a pump or pipeline valve);

4) Percent by weight total organics in the hazardous wastestream at the equipment;

5) Hazardous waste state at the equipment (e.g., gas/vapor or liquid); and

6) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals").

b) For facilities that cannot install a closed-vent system and control device to comply with Subpart BB of 35 Ill. Adm. Code 724 on the effective date that facility becomes subject to this Subpart or Subpart BB of 35 Ill. Adm. Code 724, an implementation schedule as specified in 35 Ill. Adm. Code 724.933(a)(2).

c) Where an owner or operator applies for permission to use a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system and chooses to use test data to determine the organic removal efficiency or the total organic compound concentration achieved by the control device, a performance test plan as specified in 35 Ill. Adm. Code 724.935(b)(3).

d) Documentation that demonstrates compliance with the equipment standards in 35 Ill. Adm. Code 724.952 or 724.959. This documentation must contain the records required under 35 Ill. Adm. Code 724.964. The Agency must request further documentation if necessary to demonstrate compliance. Documentation to demonstrate compliance with 35 Ill. Adm. Code 724.960 must include the following information:

1) A list of all information references and sources used in preparing the documentation;

2) Records, including the dates of each compliance test required by 35 Ill. Adm. Code 724.933(j);

3) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI

Course 415: Control of Gaseous Emissions," USEPA publication number EPA-450/2-81-005, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), or other engineering texts approved by the Agency that present basic control device design information. The design analysis must address the vent stream characteristics and control device parameters, as specified in 35 Ill. Adm. Code 724.935(b)(4)(C);

4) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur; and

5) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 weight percent or greater.

BOARD NOTE: Derived from 40 CFR 270.25 (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.213 Air Emission Controls for Tanks, Surface Impoundments, and Containers

Except as otherwise provided in 35 Ill. Adm. Code 724.101, the owner or operator of a tank, a surface impoundment, or a container that uses air emission controls in accordance with the requirements of Subpart CC of 35 Ill. Adm. Code 724 must provide the following additional information:

a) Documentation for each floating roof cover installed on a tank subject to 35 Ill. Adm. Code 724.984(d)(1) or (d)(2) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications, as listed in 35 Ill. Adm. Code 725.991(e)(1) or (f)(1).

b) Identification of each container area subject to the requirements of Subpart CC of 35 Ill. Adm. Code 724 and certification by the owner or operator that the requirements of this Subpart D are met.

c) Documentation for each enclosure used to control air pollutant emissions from containers in accordance with the requirements of 35 Ill. Adm. Code 724.984(d)(5) or 724.986(e)(1)(ii) that includes records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" ~~under~~ in appendix B to 40 CFR 52.741~~, appendix B~~ (VOM

Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

d) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of 35 Ill. Adm. Code 724.985(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in 35 Ill. Adm. Code 724.985(c)(1).

e) Documentation for each closed-vent system and control device installed in accordance with the requirements of 35 Ill. Adm. Code 724.987 that includes design and performance information, as specified in Section 703.124(c) and (d).

f) An emission monitoring plan for both Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), and control device monitoring methods. This plan must include the following information: monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting ~~exceedances~~ exceedences, and procedures for mitigating noncompliances.

g) When an owner or operator of a facility subject to Subpart CC of 35 Ill. Adm. Code 725 cannot comply with Subpart CC of 35 Ill. Adm. Code 724 by the date of permit issuance, the schedule of implementation required under 35 Ill. Adm. Code 725.982.

BOARD NOTE: Derived from 40 CFR 270.27(a) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: SHORT TERM AND PHASED PERMITS

Section 703.221 Alternative Compliance with the Federal NESHAPS

When an owner or operator demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of ~~subpart EEE~~ to 40 CFR 63~~, subpart EEE~~), the requirements of Sections 703.221 through 703.225 do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) if the owner or operator elects to comply with Section 703.310(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency

may apply the provisions of Sections 703.221 through 703.225, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

BOARD NOTE: Derived from 40 CFR 270.62 preamble ~~(2002), as amended at 67 Fed. Reg. 77687 (December 19, 2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.223 Incinerator Conditions During Trial Burn

For the purposes of determining feasibility of compliance with the performance standards of 35 Ill. Adm. Code 724.443 and of determining adequate operating conditions under 35 Ill. Adm. Code 724.445, the Agency must establish conditions in the permit to a new hazardous waste incinerator to be effective during the trial burn.

a) Applicants must propose a trial burn plan, prepared under subsection (b) of this Section with Part B of the permit application;

b) The trial burn plan must include the following information:

1) An analysis of each waste or mixture of wastes to be burned that includes the following:

A) Heat value of the waste in the form and composition in which it will be burned;

B) Viscosity (if applicable), or description of physical form of the waste;

C) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721, that are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Appendix H to 35 Ill. Adm. Code 721 that would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified, and the basis for their exclusion stated. The waste analysis must rely on appropriate analytical techniques ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or their equivalent~~; and

D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the appropriate analytical methods ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA~~

~~Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or their equivalent~~;

2) A detailed engineering description of the incinerator for which the permit is sought including the following:

A) Manufacturer's name and model number of incinerator (if available);

B) Type of incinerator;

C) Linear dimensions of the incinerator unit including the cross sectional area of combustion chamber;

D) Description of the auxiliary fuel system (type/feed);

E) Capacity of prime mover;

F) Description of automatic waste feed cut-off systems;

G) Stack gas monitoring and pollution control equipment;

H) Nozzle and burner design;

I) Construction materials;

J) Location and description of temperature-, pressure-, and flow-indicating and control devices;

3) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis;

4) A detailed test schedule for each waste for which the trial burn is planned including dates, duration, quantity of waste to be burned, and other factors relevant to the Agency's decision under subsection (e) of this Section;

5) A detailed test protocol, including, for each waste identified, the ranges of temperature, waste feed rate, combustion gas velocity, use of auxiliary fuel, and any other relevant parameters that will be varied to affect the destruction and removal efficiency of the incinerator;

6) A description of, and planned operating conditions for, any emission control equipment that will be used;

7) Procedures for rapidly stopping waste feed, shutting down the incinerator, and controlling emissions in the event of an equipment malfunction;

8) Such other information as the Agency reasonably finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subsection (b) and the criteria in subsection (e) of this Section. Such information must be requested by the Agency pursuant to 35 Ill. Adm. Code 705.123;

c) The Agency, in reviewing the trial burn plan, must evaluate the sufficiency of the information provided and must require the applicant, pursuant to 35 Ill. Adm. Code 705.123, to supplement this information, if necessary, to achieve the purposes of this Section;

d) Based on the waste analysis data in the trial burn plan, the Agency must specify as trial Principal Organic Hazardous Constituents (POHCs), those constituents for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs must be specified by the Agency based on its estimate of the difficulty of incineration of the constituents identified in the waste analysis, their concentration or mass in the waste feed, and, for wastes listed in Subpart D of 35 Ill. Adm. Code 721, the hazardous waste organic constituent of constituents identified in Appendix G or H to 35 Ill. Adm. Code 721 as the basis for listing;

e) The Agency must approve a trial burn plan if it finds the following:

1) That the trial burn is likely to determine whether the incinerator performance standard required by 35 Ill. Adm. Code 724.443 can be met;

2) That the trial burn itself will not present an imminent hazard to human health or the environment;

3) That the trial burn will help the Agency to determine operating requirements to be specified under 35 Ill. Adm. Code 724.445; and

4) That the information sought in subsections (e)(1) and (e)(3) of this Section cannot reasonably be developed through other means;

f) The Agency must send a notice to all persons on the facility mailing list, as set forth in 35 Ill. Adm. Code 705.161(a), and to the appropriate units of State and local government, as set forth in 35 Ill. Adm. Code 705.163(a)(5), announcing the scheduled commencement and completion dates for the trial burn. The applicant may not commence the trial burn until after the Agency has issued such notice.

1) This notice must be mailed within a reasonable time period before the scheduled trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the

Agency.

2) This notice must contain the following:

A) The name and telephone number of the applicant's contact person;

B) The name and telephone number of the Agency regional office appropriate for the facility;

C) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

D) An expected time period for commencement and completion of the trial burn;

g) During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

1) A quantitative analysis of the trial POHCs, in the waste feed to the incinerator;

2) A quantitative analysis of the exhaust gas for the concentration and mass emissions of the trial POHCs, molecular oxygen, and hydrogen chloride (HCl);

3) A quantitative analysis of the scrubber water (if any), ash residues, and other residues, for the purpose of estimating the fate of the trial POHCs;

4) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in 35 Ill. Adm. Code 724.443(a);

5) If the HCl (hydrogen chloride) emission rate exceeds 1.8 kilograms of HCl per hour (4 pounds per hour), a computation of HCl removal efficiency, in accordance with 35 Ill. Adm. Code 724.443(b);

6) A computation of particulate emissions, in accordance with 35 Ill. Adm. Code 724.443(c);

7) An identification of sources of fugitive emissions and their means of control;

8) A measurement of average, maximum and minimum temperatures, and combustion gas velocity;

9) A continuous measurement of carbon monoxide (CO) in the exhaust gas;

10) Such other information as the Agency specifies as necessary to ensure that the trial burn will determine compliance with the performance standards in 35 Ill. Adm. Code 724.443 and to establish the operating conditions required by 35 Ill. Adm. Code 724.445 as necessary to meet that performance standard;

h) The applicant must submit to the Agency a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and must submit the results of all the determinations required in subsection (g) of this Section. This submission must be made within 90 days after completion of the trial burn, or later, if approved by the Agency;

i) All data collected during any trial burn must be submitted to the Agency following the completion of the trial burn;

j) All submissions required by this Section must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under 35 Ill. Adm. Code 702.126;

k) Based on the results of the trial burn, the Agency must set the operating requirements in the final permit according to 35 Ill. Adm. Code 724.445. The permit modification must proceed as a minor modification according to Section 703.280.

BOARD NOTE: Derived from 40 CFR 270.62(b) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.232 Permits for Boilers and Industrial Furnaces Burning Hazardous Waste

When the owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of subpart EEE of 40 CFR 63~~, subpart EEE~~), the requirements of this Section do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 726.202(e)(1) and (e)(2)(C) if the owner or operator elects to comply with Section 703.310(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

a) General. The owner or operator of a new boiler or industrial furnace (one not operating under the interim status standards of 35 Ill. Adm. Code 726.203) is subject to subsections (b) through (f) of this Section. A boiler or industrial furnace operating under the interim status standards of 35 Ill. Adm. Code 726.203 is subject to subsection (g) of this Section.

b) Permit operating periods for a new boiler or industrial furnace. A permit for a new boiler or industrial furnace must specify appropriate conditions for the following operating periods:

1) Pretrial burn period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operation readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the Agency must establish permit conditions in the pretrial burn period, including but not limited to allowable hazardous waste feed rates and operating conditions. The Agency must extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit must be modified to reflect the extension according to Sections 703.280 through 703.283.

A) Applicants must submit a statement, with Part B of the permit application, that suggests the conditions necessary to operate in compliance with the standards of 35 Ill. Adm. Code 726.204 through 726.207 during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in 35 Ill. Adm. Code 726.202 (e).

B) The Agency must review this statement and any other relevant information submitted with Part B of the permit application and specify requirements for this period sufficient to meet the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.

2) Trial burn period. For the duration of the trial burn, the Agency must establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 and determining adequate operating conditions under 35 Ill. Adm. Code 726.202(e). Applicants must propose a trial burn plan, prepared under subsection (c) of this Section, to be submitted with Part B of the permit application.

3) Post-trial burn period.

A) For the period immediately following completion of the trial burn,

and only for the minimum period sufficient to allow sample analysis, data computation and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Agency to reflect the trial burn results, the Agency must establish the operating requirements most likely to ensure compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.

B) Applicants must submit a statement, with Part B of the application, that identifies the conditions necessary to operate during this period in compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207. This statement should include, at a minimum, restrictions on the operating requirements provided by 35 Ill. Adm. Code 726.202 (e).

C) The Agency must review this statement and any other relevant information submitted with Part B of the permit application and specify requirements of this period sufficient to meet the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.

4) Final permit period. For the final period of operation the Agency must develop operating requirements in conformance with 35 Ill. Adm. Code 726.202(e) that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207. Based on the trial burn results, the Agency must make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification must proceed according to Sections 703.280 through 703.283.

c) Requirements for trial burn plans. The trial burn plan must include the following information. The Agency, in reviewing the trial burn plan, must evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection (c).

1) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks, as fired, that includes the following:

A) Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine and chloride, and ash; and

B) Viscosity or description of the physical form of the feed stream.

2) An analysis of each hazardous waste, as fired, including the following:

A) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721 that are present in the feed stream, except that the applicant need not analyze for constituents listed in Appendix H that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis must be identified and the basis for this exclusion explained. The analysis must be conducted in accordance with appropriate analytical techniques ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or their equivalent~~;

B) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the appropriate analytical methods ~~specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or other equivalent~~; and

C) A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.

3) A detailed engineering description of the boiler or industrial furnace, including the following:

A) Manufacturer's name and model number of the boiler or industrial furnace;

B) Type of boiler or industrial furnace;

C) Maximum design capacity in appropriate units;

D) Description of the feed system for the hazardous waste and, as appropriate, other fuels and industrial furnace feedstocks;

E) Capacity of hazardous waste feed system;

F) Description of automatic hazardous waste feed cutoff systems;

G) Description of any pollution control system; and

H) Description of stack gas monitoring and any pollution control monitoring systems.

4) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and sample analysis.

5) A detailed test schedule for each hazardous waste for which the trial burn is planned, including dates, duration, quantity of hazardous waste to be burned, and other factors relevant to the Agency's decision under subsection (b)(2) of this Section.

6) A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in 35 Ill. Adm. Code 726.204 through 726.207.

7) A description of and planned operating conditions for any emission control equipment that will be used.

8) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.

9) Such other information as the Agency finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subsection (c) and the criteria in subsection (b)(2) of this Section.

d) Trial burn procedures.

1) A trial burn must be conducted to demonstrate conformance with the standards of 35 Ill. Adm. Code 726.104 through 726.107.

2) The Agency must approve a trial burn plan if the Agency finds as follows:

A) That the trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of 35 Ill. Adm. Code 726.104 through 726.107;

B) That the trial burn itself will not present an imminent hazard to human health and the environment;

C) That the trial burn will help the Agency to determine operating requirements to be specified under 35 Ill. Adm. Code 726.102(e);

and

D) That the information sought in the trial burn cannot reasonably be developed through other means.

3) The Agency must send a notice to all persons on the facility mailing list, as set forth in 35 Ill. Adm. Code 705.161(a), and to the appropriate units of State and local government, as set forth in 35 Ill. Adm. Code 705.163(a)(5), announcing the scheduled commencement and completion dates for the trial burn. The applicant may not commence the trial burn until after the Agency has issued such notice.

A) This notice must be mailed within a reasonable time period before the trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the Agency.

B) This notice must contain the following:

i) The name and telephone number of applicant's contact person;

ii) The name and telephone number of the Agency regional office appropriate for the facility;

iii) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

iv) An expected time period for commencement and completion of the trial burn.

4) The applicant must submit to the Agency a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and submit the results of all the determinations required in subsection (c) of this Section. The Agency must, in the trial burn plan, require that the submission be made within 90 days after completion of the trial burn, or later if the Agency determines that a later date is acceptable.

5) All data collected during any trial burn must be submitted to the Agency following completion of the trial burn.

6) All submissions required by this subsection (d) must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under 35 Ill. Adm. Code 702.126.

e) Special procedures for DRE trial burns. When a DRE trial burn is required under

35 Ill. Adm. Code 726.104, the Agency must specify (based on the hazardous waste analysis data and other information in the trial burn plan) as trial Principal Organic Hazardous Constituents (POHCs) those compounds for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the Agency based on information including the Agency's estimate of the difficulty of destroying the constituents identified in the hazardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in Subpart D of 35 Ill. Adm. Code 721, the hazardous waste organic constituents identified in Appendix G to 35 Ill. Adm. Code 721 as the basis for listing.

f) Determinations based on trial burn. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:

1) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);

2) When a DRE trial burn is required under 35 Ill. Adm. Code 726.204(a), the following determinations:

A) A quantitative analysis of the trial POHCs in the hazardous waste feed;

B) A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and

C) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in 35 Ill. Adm. Code 726.204(a);

3) When a trial burn for chlorinated dioxins and furans is required under 35 Ill. Adm. Code 726.204(e), a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetra- through octa-congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard;

4) When a trial burn for PM, metals, or HCl and chlorine gas is required under 35 Ill. Adm. Code 726.205, 726.206(c) or (d), or 726.207(b)(2) or (c), a quantitative analysis of the stack gas for the concentrations and mass emissions of PM, metals, or HCl and chlorine gas, and computations showing conformance with the applicable emission performance standards;

5) When a trial burn for DRE, metals, and HCl and chlorine gas is required under 35 Ill. Adm. Code 726.204(a), 726.206(c) or (d), or 726.207(b)(2) or (c), a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine and chloride;

6) An identification of sources of fugitive emissions and their means of control;

7) A continuous measurement of carbon monoxide (CO), oxygen, and, where required, hydrocarbons (HC) in the stack gas; and

8) Such other information as the Agency specifies as necessary to ensure that the trial burn will determine compliance with the performance standards 35 Ill. Adm. Code 726.204 through 726.207 and to establish the operating conditions required by 35 Ill. Adm. Code 726.204 through 726.207 and of determining adequate operating conditions under 35 Ill. Adm. Code 726.203, and to establish the operating conditions required by 35 Ill. Adm. Code 726.202(e) as necessary to meet those performance standards.

g) Interim status boilers and industrial furnaces. For the purpose of determining feasibility of compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 and of determining adequate operating conditions under 35 Ill. Adm. Code 726.203, an applicant that owns or operates an existing boiler or industrial furnace which is operated under the interim status standards of 35 Ill. Adm. Code 726.203 must either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of this Section or submit other information as specified in Section 703.208(a)(6). The Agency must announce its intention to approve of the trial burn plan in accordance with the timing and distribution requirements of subsection (d)(3) of this Section. The contents of the notice must include all of the following information: the name and telephone number of a contact person at the facility; the name and telephone number of the Agency regional office appropriate for the facility; the location where the trial burn plan and any supporting documents can be reviewed and copied; and a schedule of the activities that are required prior to permit issuance, including the anticipated time schedule for Agency approval of the plan, and the time periods during which the trial burn would be conducted. Applicants that submit a trial burn plan and receive approval before submission of the Part B permit application must complete the trial burn and submit the results specified in subsection (f) of this Section with the Part B permit application. If completion of this process conflicts with the date set for submission of the Part B application, the applicant must contact the Agency to establish a later date for submission of the Part B application or the trial burn results. If the applicant submits a trial burn plan with Part B of the permit application, the trial burn must be conducted and the results submitted within a time period prior to permit issuance to be specified by the

Agency.

BOARD NOTE: Derived from 40 CFR 270.66 ~~(2002), as amended at 67 Fed. Reg. 77687 (December 19, 2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: REMEDIAL ACTION PLANS

Section 703.300 Special Regulatory Format

USEPA wrote the federal counterpart to this Subpart H, subpart H of 40 CFR 270~~, Subpart H~~, in a special format to make it easier to understand the regulatory requirements. The Board has adapted the substance of the corresponding federal regulations in this Subpart H to use a more conventional regulatory format, rather than the question-and-answer format used by USEPA.

BOARD NOTE: Derived from 40 CFR 270.79 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.305 Operating Under a RAP

a) The records an owner or operator must maintain concerning its RAP. An owner or operator is required to keep records of the following:

1) All data used to complete RAP applications and any supplemental information that an owner or operator submits for a period of at least three years from the date the application is signed; and

2) Any operating or other records the Agency requires an owner or operator to maintain as a condition of the RAP.

BOARD NOTE: Subsection (a) is derived from 40 CFR 270.210 (2002).

b) How time periods in the requirements in Subpart H of this Part and the RAP are computed.

1) Any time period scheduled to begin on the occurrence of an act or event must begin on the day after the act or event. (For example, if a RAP specifies that the owner or operator must close a staging pile within 180 days after the operating term for that staging pile expires, and the operating term expires on June 1, then June 2 counts as day one of the 180 days, and the owner or operator would have to complete closure by November 28.)

2) Any time period scheduled to begin before the occurrence of an act or event must be computed so that the period ends on the day before the act or event.

(For example, if an owner or operator is transferring ownership or operational control of its site, and the owner or operator wishes to transfer its RAP, the new owner or operator must submit a revised RAP application no later than 90 days before the scheduled change. Therefore, if an owner or operator plans to change ownership on January 1, the new owner or operator must submit the revised RAP application no later than October 3, so that the 90th day would be December 31.)

3) If the final day of any time period falls on a weekend or legal holiday, the time period must be extended to the next working day. (For example, if an owner or operator wishes to appeal the Agency's decision to modify its RAP, then an owner or operator must petition the Board within 35 days after the Agency has issued the final RAP decision. If the 35th day falls on Sunday, then the owner or operator may submit its appeal by the Monday after. If the 35th day falls on July 4th, then the owner or operator may submit its appeal by July 5th.)

4) Whenever a party or interested person has the right to or is required to act within a prescribed period after the service of notice or other paper upon him by mail, four days may not be added to the prescribed term. (For example, if an owner or operator wishes to appeal the Agency's decision to modify its RAP, then the owner or operator must petition the Board within 35 days after the Agency has issued the final RAP decision.)

BOARD NOTE: Subsection (b) is derived from 40 CFR 270.215 (2002). Federal subsections (c) and (d) provide that a RAP is effective 30 days after the Agency notice of approval. The Board has used 35 days to be consistent with the 35 days within which a permit appeal must be filed under Section 40(a)(1) of the Act [415 ILCS 5/40(a)(1)]. Further, federal subsection (d) provides three days for completion of service by mail. The addition of four days (see procedural rule 35 Ill. Adm. Code 101.144(c)) to be consistent with 40 CFR 270.215(d) would exceed the 35 days allowed under Section 40(a)(1) of the Act [415 ILCS 5/40(a)(1)].

c) How an owner or operator may transfer its RAP to a new owner or operator.

1) If an owner or operator wishes to transfer its RAP to a new owner or operator, the owner or operator must follow the requirements specified in its RAP for RAP modification to identify the new owner or operator, and incorporate any other necessary requirements. These modifications do not constitute "significant" modifications for purposes of Section 703.304(a). The new owner or operator must submit a revised RAP application no later than 90 days before the scheduled change along with a written agreement containing a specific date for transfer of RAP responsibility between the owner or operator and the new permittees.

2) When a transfer of ownership or operational control occurs, the old owner

or operator must comply with the applicable requirements in Subpart H of 35 Ill. Adm. Code 724 (Financial Requirements) until the new owner or operator has demonstrated that it is complying with the requirements in that Subpart. The new owner or operator must demonstrate compliance with Subpart H of 35 Ill. Adm. Code 724 within six months after the date of the change in ownership or operational control of the facility or remediation waste management site. When the new owner or operator demonstrates compliance with Subpart H of 35 Ill. Adm. Code 724 to the Agency, the Agency must notify the former owner or operator that it no longer needs to comply with Subpart H of 35 Ill. Adm. Code 724 as of the date of demonstration.

BOARD NOTE: Subsection (c) is derived from 40 CFR 270.220 (2002).

d) What the Agency must report about noncompliance with RAPs. The Agency must report noncompliance with RAPs according to the provisions of 40 CFR 270.5 (Noncompliance and Program Reporting by the Director), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

BOARD NOTE: Subsection (d) is derived from 40 CFR 270.225 ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 703.306 Obtaining a RAP for an Off-Site Location

An owner or operator may perform remediation waste management activities under a RAP at a location removed from the area where the remediation wastes originated.

a) An owner or operator may request a RAP for remediation waste management activities at a location removed from the area where the remediation wastes originated if the owner or operator believes such a location would be more protective than the contaminated area or areas in close proximity.

b) If the Agency determines that an alternative location, removed from the area where the remediation waste originated, is more protective than managing remediation waste at the area of contamination or areas in close proximity, then the Agency must approve a RAP for this alternative location.

c) An owner or operator must request the RAP, and the Agency must approve or deny the RAP, according to the procedures and requirements in this Subpart H.

d) A RAP for an alternative location must also meet the following requirements, which the Agency must include in the RAP for such locations:

1) The RAP for the alternative location must be issued to the person responsible for the cleanup from which the remediation wastes originated;

2) The RAP is subject to the expanded public participation requirements in Sections 703.191, 703.192, and 703.193;

3) The RAP is subject to the public notice requirements in 35 Ill. Adm. Code 705.163;

4) The site permitted in the RAP may not be located within 61 meters or 200 feet of a fault that has had displacement in the Holocene time. (The owner or operator must demonstrate compliance with this standard through the requirements in Section 703.183(k).) (See the definitions of terms in 35 Ill. Adm. Code 724.118(a).)

BOARD NOTE: Sites in Illinois are assumed to be in compliance with the requirement of subsection (d)(4) of this Section, since they are not listed in appendix VI to 40 CFR 264~~, Appendix VI~~ (Political Jurisdictions in Which Compliance with§ 264.18(a) Must Be Demonstrated).

e) These alternative locations are remediation waste management sites, and retain the following benefits of remediation waste management sites:

1) Exclusion from facility-wide corrective action under 35 Ill. Adm. Code 724.201; and

2) Application of 35 Ill. Adm. Code 724.101(j) in lieu of Subparts B, C, and D of 35 Ill. Adm. Code 724.

BOARD NOTE: Derived from 40 CFR 270.230~~ (2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART I: INTEGRATION WITH MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY (MACT) STANDARDS

Section 703.320 Options for Incinerators and Cement and Lightweight Aggregate Kilns to Minimize Emissions from Startup, Shutdown, and Malfunction Events

a) Facilities with existing permits.

1) Revisions to permit conditions after documenting compliance with MACT. The owner or operator of a RCRA-permitted incinerator, cement kiln, or lightweight aggregate kiln, when requesting removal of permit conditions that are no longer applicable according to 35 Ill. Adm. Code 724.440(b) and 726.200(b), may request that the Agency address permit conditions that minimize emissions from startup, shutdown, and malfunction events under any of the following options:

A) Retain relevant permit conditions. Under this option, the Agency must do the following:

i) Retain permit conditions that address releases during startup, shutdown, and malfunction events, including releases from emergency safety vents, as these events are defined in the facility's startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2) (When and How Must You Comply with the Standards and Operating Requirements?), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b); and

ii) Limit applicability of those permit conditions only to when the facility is operating under its startup, shutdown, and malfunction plan.

B) Revise relevant permit conditions. Under this option, the Agency must do the following:

i) Identify a subset of relevant existing permit requirements, or develop alternative permit requirements, that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history; and

ii) Retain or add these permit requirements to the permit to apply only when the facility is operating under its startup, shutdown, and malfunction plan.

iii) The owner or operator must comply with subsection (a)(3) of this Section.

BOARD NOTE: The Board found it necessary to deviate from the structure of corresponding 40 CFR 270.235(a)(1)(ii) in this subsection (a)(1)(B) in order to comport with Illinois ~~Adminisrative~~ Administrative Code codification requirements. The substance of 40 CFR 270.235(a)(1)(ii)(A), (a)(1)(ii)(A)(*1*), and (a)(1)(ii)(A)(*2*) appear as subsections (a)(1)(B), (a)(1)(B)(i), and (a)(1)(B)(ii). The substance of 40 CFR 270.235(a)(1)(ii)(B) has been codified as subsection (a)(3) of this Section. Subsection (a)(1)(B)(iii) of this Section was added to direct attention to subsection (a)(3).

C) Remove permit conditions. Under this option the following are required:

i) The owner or operator must document that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2)~~, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ has been approved by the Administrator under 40 CFR 63.1206(c)(2)(ii)(B)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~; and

ii) The Agency must remove permit conditions that are no longer applicable according to 35 Ill. Adm. Code 724.440(b) and 726.200(b).

2) Addressing permit conditions upon permit reissuance. The owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that has conducted a comprehensive performance test and submitted to the Agency a Notification of Compliance documenting compliance with the standards of subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code~~ 720.111§~~ 720.111(b), may request in the application to reissue the permit for the combustion unit that the Agency control emissions from startup, shutdown, and malfunction events under any of the following options:

A) RCRA option A. Under this option, the Agency must do the following:

i) Include, in the permit, conditions that ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) or 726.202(e)(1) and (e)(2)(C) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, including releases from emergency safety vents; and

ii) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan; or

BOARD NOTE: The Board found it necessary to deviate from the structure of corresponding 40 CFR 270.235(a)(2)(i) in this subsection (a)(2)(A) in order to comport with Illinois ~~Adminisrative~~ Administrative Code codification requirements. The substance of 40 CFR 270.235(a)(2)(i)(A), (a)(2)(i)(A)(*1*), and (a)(2)(i)(A)(*2*) appear as subsections (a)(2)(A), (a)(2)(A)(i), and (a)(2)(A)(ii).

B) RCRA option B. Under this option, the Agency must do the following:

i) Include, in the permit, conditions that ensure emissions of toxic compounds are minimized from startup, shutdown, and malfunction events, including releases from emergency safety vents, based on review of information including the source's startup, shutdown, and malfunction plan, design, and operating history; and

ii) Specify that these permit requirements apply only when the facility is operating under its startup, shutdown, and malfunction plan.

iii) The owner or operator must comply with subsection (a)(3) of this Section.

BOARD NOTE: The Board found it necessary to deviate from the structure of corresponding 40 CFR 270.235(a)(2)(ii) in this subsection (a)(2)(B) in order to comport with Illinois ~~Adminisrative~~ Administrative Code codification requirements. The substance of 40 CFR 270.235(a)(2)(ii)(A), (a)(2)(ii)(A)(*1*), and (a)(2)(ii)(A)(*2*) appear as subsections (a)(2)(B), (a)(2)(B)(i), and (a)(2)(B)(ii). The substance of 40 CFR 270.235(a)(2)(ii)(B) has been codified as subsection (a)(3) of this Section. Subsection (a)(2)(B)(iii) of this Section was added to direct attention to subsection (a)(3).

C) CAA option. Under this option the following are required:

i) The owner or operator must document that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2)~~, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ has been approved by the Agency under 40 CFR 63.1206(c)(2)(ii)(B)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~; and

ii) The Agency must omit from the permit conditions that are not applicable under 35 Ill. Adm. Code 724.440(b) and 726.200(b).

3) Changes that may significantly increase emissions.

A) The owner or operator must notify the Agency in writing of changes to the startup, shutdown, and malfunction plan or changes to the design of the source that may significantly increase

emissions of toxic compounds from startup, shutdown, or malfunction events, including releases from emergency safety vents. The owner or operator must notify the Agency of such changes within five days of making such changes. The owner or operator must identify in the notification recommended revisions to permit conditions necessary as a result of the changes to ensure that emissions of toxic compounds are minimized during these events.

B) The Agency may revise permit conditions as a result of these changes to ensure that emissions of toxic compounds are minimized during startup, shutdown, or malfunction events, including releases from emergency safety vents in either of the following ways:

i) Upon permit renewal; or~~,~~

ii) If warranted, by modifying the permit under ~~§§ 270.41(a) or 270.42~~ Section 703.270 or 703.280 though 703.283.

BOARD NOTE: The substance of 40 CFR 270.235(a)(1)(ii)(B) and (a)(2)(ii)(B) has been codified as this subsection (a)(3).

b) Interim status facilities.

1) Interim status operations. In compliance with 35 Ill. Adm. Code 725.440 and 726.200(b), the owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that is operating under the interim status standards of 35 Ill. Adm. Code 725 or 726 may control emissions of toxic compounds during startup, shutdown, and malfunction events under either of the following options after conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance documenting compliance with the standards of subpart EEE of 40 CFR 63~~, subpart EEE, incorporated by reference in 35 Ill. Adm. Code 720.111~~:

A) RCRA option. Under this option, the owner or operator must continue to comply with the interim status emission standards and operating requirements of 35 Ill. Adm. Code 725 or 726 relevant to control of emissions from startup, shutdown, and malfunction events. Those standards and requirements apply only during startup, shutdown, and malfunction events; or

B) CAA option. Under this option, the owner or operator is exempt from the interim status standards of 35 Ill. Adm. Code 725 or 726 relevant to control of emissions of toxic compounds during startup, shutdown, and malfunction events upon submission of written

notification and documentation to the Agency that the startup, shutdown, and malfunction plan required under 40 CFR 63.1206(c)(2)~~, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ has been approved by the Agency under 40 CFR 63.1206(c)(2)(ii)(B)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~.

2) Operations under a subsequent RCRA permit. When an owner or operator of an incinerator, cement kiln, or lightweight aggregate kiln that is operating under the interim status standards of 35 Ill. Adm. Code 725 or 726 submits a RCRA permit application, the owner or operator may request that the Agency control emissions from startup, shutdown, and malfunction events under any of the options provided by subsection (a)(2)(A), (a)(2)(B), or (a)(2)(C) of this Section.

BOARD NOTE: Derived from 40 CFR 270.235~~ (2002)~~ (2005). Operating conditions used to determine effective treatment of hazardous waste remain effective after the owner or operator demonstrates compliance with the standards of subpart EEE of 40 CFR 63~~, subpart EEE~~.

(Source: Added at 30 Ill. Reg. _____, effective _____)

Section 703.Appendix A Classification of Permit Modifications

Class	Modifications
	A. General Permit Provisions
1	1. Administrative and informational changes.
1	2. Correction of typographical errors.
1	3. Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls).
	4. Changes in the frequency of or procedures for monitoring, reporting, sampling, or maintenance activities by the permittee:
1	a. To provide for more frequent monitoring, reporting, or maintenance.
2	b. Other changes.
	5. Schedule of compliance:
1*	a. Changes in interim compliance dates, with prior approval of the Agency.

3 b. Extension of final compliance date.

1* 6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the Agency.

1* 7. Changes in ownership or operational control of a facility, provided the procedures of Section 703.260(b) are followed.

1* 8. Changes to remove permit conditions that are no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the facility).

B. General Facility Standards

1. Changes to waste sampling or analysis methods:

1 a. To conform with Agency guidance or Board regulations.

1* b. To incorporate changes associated with F039 (multi-source leachate) sampling or analysis methods.

1* c. To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes.

2 d. Other changes.

2. Changes to analytical quality assurance or quality control plan:

1 a. To conform with agency guidance or regulations.

2 b. Other changes.

1 3. Changes in procedures for maintaining the operating record.

2 4. Changes in frequency or content of inspection schedules.

5. Changes in the training plan:

2 a. That affect the type or decrease the amount of training given to employees.

1 b. Other changes.

6. Contingency plan:

2 a. Changes in emergency procedures (i.e., spill or release response procedures).

1 b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed.

2 c. Removal of equipment from emergency equipment list.

1 d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan.

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change must be reviewed under the same procedures as the permit modification.

7. CQA plan:

1 a. Changes that the CQA officer certifies in the operating record will provide equivalent or better certainty that the unit components meet the design specifications.

2 b. Other changes.

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change must be reviewed under the same procedures as a permit modification.

C. Groundwater Protection

1. Changes to wells:

2 a. Changes in the number, location, depth, or design of upgradient or downgradient wells of permitted groundwater monitoring system.

1 b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design, or depth of the well.

1* 2. Changes in groundwater sampling or analysis procedures or monitoring schedule, with prior approval of the Agency.

1* 3. Changes in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred, with prior approval of the Agency.

2* 4. Changes in point of compliance.

5. Changes in indicator parameters, hazardous constituents, or concentration limits (including ACLs (Alternate Concentration Limits)):

3 a. As specified in the groundwater protection standard.

2 b. As specified in the detection monitoring program.

2 6. Changes to a detection monitoring program as required by 35 Ill. Adm. Code 724.198(j), unless otherwise specified in this Appendix.

7. Compliance monitoring program:

3 a. Addition of compliance monitoring program as required by 35 Ill. Adm. Code 724.198(h)(4) and 724.199.

2 b. Changes to a compliance monitoring program as required by 35 Ill. Adm. Code 724.199(k), unless otherwise specified in this Appendix.

8. Corrective action program:

3 a. Addition of a corrective action program as required by 35 Ill. Adm. Code 724.199(i)(2) and 724.200.

2 b. Changes to a corrective action program as required by 35 Ill. Adm. Code 724.200(h), unless otherwise specified in this Appendix.

D. Closure

1. Changes to the closure plan:

1* a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the Agency.

1* b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility or extension of the closure period, with prior approval of the Agency.

1*		c.	Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the Agency.
1*		d.	Changes in procedures for decontamination of facility equipment or structures, with prior approval of the Agency.
2		e.	Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this Appendix.
2		f.	Extension of the closure period to allow a landfill, surface impoundment, or land treatment unit to receive non-hazardous wastes after final receipt of hazardous wastes under 35 Ill. Adm. Code 724.213(d) or (e).
3	2.		Creation of a new landfill unit as part of closure.
	3.		Addition of the following new units to be used temporarily for closure activities:
3		a.	Surface impoundments.
3		b.	Incinerators.
3		c.	Waste piles that do not comply with 35 Ill. Adm. Code 724.350(c).
2		d.	Waste piles that comply with 35 Ill. Adm. Code 724.350(c).
2		e.	Tanks or containers (other than specified in paragraph D(3)(f) below).
1*		f.	Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the Agency.
2		g.	Staging piles.
	E. Post-Closure		
1	1.		Changes in name, address, or phone number of contact in post-closure plan.
2	2.		Extension of post-closure care period.

3 3. Reduction in the post-closure care period.

1 4. Changes to the expected year of final closure, where other permit conditions are not changed.

2 5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure.

F. Containers

1. Modification or addition of container units:

3 a. Resulting in greater than 25 percent increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a).

2 b. Resulting in up to 25 percent increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a).

1 c. Modification or addition of container units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards, with prior approval of the Agency. This modification may also involve the addition of new waste codes or narrative description of wastes. It is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

2. Modification of container units without an increased capacity or alteration of the system:

2 a. Modification of a container unit without increasing the capacity of the unit.

1 b. Addition of a roof to a container unit without alteration of the containment system.

3. Storage of different wastes in containers, except as provided in F(4):

3 a. That require additional or different management practices from those authorized in the permit.

2 b. That do not require additional or different management practices from those authorized in the permit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

4. Storage or treatment of different wastes in containers:

2 a. That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards. It is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

1* b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

G. Tanks

1.

3 a. Modification or addition of tank units resulting in greater than 25 percent increase in the facility's tank capacity, except as provided in paragraphs G(1)(c), G(1)(d), and G(1)(e).

2 b. Modification or addition of tank units resulting in up to 25 percent increase in the facility's tank capacity, except as provided in paragraphs G(1)(d) and G(1)(e).

2 c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation.

1* d. After prior approval of the Agency, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation, or component separation.

1* e. Modification or addition of tank units or treatment processes that are necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards, with prior approval of the Agency. This modification may also involve the addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

2	2.	Modification of a tank unit or secondary containment system without increasing the capacity of the unit.
1	3.	Replacement of a tank with a tank that meets the same design standards and has a capacity within ± 10 percent of the replaced tank provided:
		a. The capacity difference is no more than 1500 gallons,
		b. The facility's permitted tank capacity is not increased, and
		c. The replacement tank meets the same conditions in the permit.
2	4.	Modification of a tank management practice.
	5.	Management of different wastes in tanks:
3		a. That require additional or different management practices, tank design, different fire protection specifications or significantly different tank treatment process from that authorized in the permit, except as provided in paragraph G(5)(c).
2		b. That do not require additional or different management practices or tank design, different fire protection specification, or significantly different tank treatment process than authorized in the permit, except as provided in paragraph G(5)(d). Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.
1*		c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards. The modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).
1		d. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028). Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

H. Surface Impoundments

3 1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity.

3 2. Replacement of a surface impoundment unit.

2 3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system, or leachate collection system.

2 4. Modification of a surface impoundment management practice.

5. Treatment, storage, or disposal of different wastes in surface impoundments:

3 a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.

2 b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

1 c. That are wastes restricted from land disposal that meet the applicable treatment standards. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

1 d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2) (Procedures for Case-by-Case Extensions to an Effective Date), incorporated by reference in 35 Ill. Adm. Code ~~728.105~~ 720.111(b), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

1* 6. Modifications of unconstructed units to comply with 35 Ill. Adm. Code 724.321(c), 724.322, 724.323, and 724.326(d).

7. Changes in response action plan:

3 a. Increase in action leakage rate.

3 b. Change in a specific response reducing its frequency or effectiveness.

2 c. Other changes.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

I. Enclosed Waste Piles. For all waste piles, except those complying with 35 Ill. Adm. Code 724.350(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with 35 Ill. Adm. Code 724.350(c).

1. Modification or addition of waste pile units:

3 a. Resulting in greater than 25 percent increase in the facility's waste pile storage or treatment capacity.

2 b. Resulting in up to 25 percent increase in the facility's waste pile storage or treatment capacity.

2 2. Modification of waste pile unit without increasing the capacity of the unit.

1 3. Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit.

2 4. Modification of a waste pile management practice.

5. Storage or treatment of different wastes in waste piles:

3 a. That require additional or different management practices or different design of the unit.

2 b. That do not require additional or different management practices or different design of the unit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

2 6. Conversion of an enclosed waste pile to a containment building unit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

J. Landfills and Unenclosed Waste Piles

3 1. Modification or addition of landfill units that result in increasing the facility's disposal capacity.

3 2. Replacement of a landfill.

3 3. Addition or modification of a liner, leachate collection system, leachate detection system, runoff control, or final cover system.

2 4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, runoff control, or final cover system.

2 5. Modification of a landfill management practice.

6. Landfill different wastes:

3 a. That require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system.

2 b. That do not require additional or different management practices, different design of the liner, leachate collection system, or leachate detection system.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

1 c. That are wastes restricted from land disposal that meet the applicable treatment standards. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

1 d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2) (Procedures for Case-by-Case Extensions to an Effective Date), incorporated by reference in 35 Ill. Adm. Code ~~728.105~~ 720.111(b), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).

1* 7. Modification of unconstructed units to comply with 35 Ill. Adm. Code 724.351(c), 724.352, 724.353, 724.354(c), 724.401(c), 724.402, 724.403(c), and 724.404.

8. Changes in response action plan:

3 a. Increase in action leakage rate.

3 b. Change in a specific response reducing its frequency or effectiveness.

2 c. Other changes.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

K. Land Treatment

3 1. Lateral expansion of or other modification of a land treatment unit to increase area extent.

2 2. Modification of runon control system.

3 3. Modify runoff control system.

2 4. Other modification of land treatment unit component specifications or standards required in permit.

5. Management of different wastes in land treatment units:

3 a. That require a change in permit operating conditions or unit design specifications.

2 b. That do not require a change in permit operating conditions or unit design specifications.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

6. Modification of a land treatment unit management practice to:

3 a. Increase rate or change method of waste application.

1 b. Decrease rate of waste application.

2 7. Modification of a land treatment unit management practice to change measures of pH or moisture content or to enhance microbial or chemical reactions.

3 8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted crops with different food chain crops or to modify operating plans for distribution of animal feeds resulting from such crops.

3 9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to 35 Ill. Adm. Code 724.378(g)(2).

3 10. Changes in the unsaturated zone monitoring system that result in a change to the location, depth, or number of sampling points or which replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements.

2 11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, or number of sampling points or which replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements.

2 12. Changes in background values for hazardous constituents in soil and soil-pore liquid.

2 13. Changes in sampling, analysis, or statistical procedure.

2 14. Changes in land treatment demonstration program prior to or during the demonstration.

1* 15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the Agency's prior approval has been received.

1*	16.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the Agency.
3	17.	Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration.
2	18.	Changes in vegetative cover requirements for closure.

L. Incinerators, Boilers and Industrial Furnaces

3	1.	Changes to increase by more than 25 percent any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.
2	2.	Changes to increase by up to 25 percent any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.
3	3.	Modification of an incinerator, boiler, or industrial furnace unit by changing the internal size or geometry of the primary or secondary combustion units; by adding a primary or secondary combustion unit; by substantially changing the design of any component used to remove HCl/Cl_2, metals, or particulate from the combustion gases; or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards, unless this demonstration can be made through other means.

2 4. Modification of an incinerator, boiler, or industrial furnace unit in a manner that will not likely affect the capability of the unit to meet the regulatory performance standards but which will change the operating conditions or monitoring requirements specified in the permit. The Agency may require a new trial burn to demonstrate compliance with the regulatory performance standards.

5. Operating requirements:

3 a. Modification of the limits specified in the permit for minimum or maximum combustion gas temperature, minimum combustion gas residence time, oxygen concentration in the secondary combustion chamber, flue gas carbon monoxide or hydrocarbon concentration, maximum temperature at the inlet to the PM emission control system, or operating parameters for the air pollution control system. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

3 b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls.

2 c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit.

6. Burning different wastes:

3 a. If the waste contains a POHC that is more difficult to burn than authorized by the permit or if burning of the waste requires compliance with different regulatory performance standards than specified in the permit, the Agency must require a new trial burn to substantiate compliance with the regulatory performance standards, unless this demonstration can be made through other means.

2 b. If the waste does not contain a POHC that is more difficult to burn than authorized by the permit and if burning of the waste does not require compliance with different regulatory performance standards than specified in the permit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

7. Shakedown and trial burn:

2 a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period or the period immediately following the trial burn.

1* b. Authorization of up to an additional 720 hours of waste burning during the shakedown period for determining operational readiness after construction, with the prior approval of the Agency.

1* c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the Agency.

1* d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the Agency.

1 8. Substitution of an alternative type of non-hazardous waste fuel that is not specified in the permit.

1* 9. Technology changes needed to meet standards under federal subpart EEE of 40 CFR 63 (~~subpart EEE --~~National Emission Standards for Hazardous Air Pollutants ~~From~~ from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), provided the procedures of Section 703.280(j) are followed.

M. Containment Buildings

1. Modification or addition of containment building units:

3 a. Resulting in greater than 25 percent increase in the facility's containment building storage or treatment capacity.

2 b. Resulting in up to 25 percent increase in the facility's containment building storage or treatment capacity.

2 2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit.

3. Replacement of a containment building with a containment building that meets the same design standards provided:

1 a. The unit capacity is not increased.

1 b. The replacement containment building meets the same conditions in the permit.

2 4. Modification of a containment building management practice.

5. Storage or treatment of different wastes in containment buildings:

3 a. That require additional or different management practices.

2 b. That do not require additional or different management practices.

N. Corrective Action

3 1. Approval of a corrective action management unit pursuant to 35 Ill. Adm. Code 724.652.

2 2. Approval of a temporary unit or time extension pursuant to 35 Ill. Adm. Code 724.653.

2 3. Approval of a staging pile or staging pile operating term extension pursuant to 35 Ill. Adm. Code 724.654.

Note: * indicates modifications requiring prior Agency approval.

BOARD NOTE: Derived from appendix I to 40 CFR 270.42~~, Appendix I (2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 720
HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

Section
720.101 Purpose, Scope, and Applicability
720.102 Availability of Information; Confidentiality of Information
720.103 Use of Number and Gender

SUBPART B: DEFINITIONS AND REFERENCES

Section
720.110 Definitions
720.111 References

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section
720.120 Rulemaking
720.121 Alternative Equivalent Testing Methods
720.122 Waste Delisting
720.123 Petitions for Regulation as Universal Waste
720.130 Procedures for Solid Waste Determinations
720.131 Solid Waste Determinations
720.132 Boiler Determinations
720.133 Procedures for Determinations
720.140 Additional Regulation of Certain Hazardous Waste Recycling Activities on a Case-by-Case Basis
720.141 Procedures for Case-by-Case Regulation of Hazardous Waste Recycling Activities

720.Appendix A Overview of ~~40 CFR,~~ Federal RCRA Subtitle C (Hazardous Waste) Regulations

AUTHORITY: Implementing Sections 7.2, 13, and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 13, 22.4, and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-19 at 7 Ill. Reg. 14015, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11819, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6017, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2450, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 12999, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 362, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18278, effective November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3075, effective February 20, 1990; amended in R89-9 at 14 Ill. Reg. 6225, effective April 16, 1990; amended in R90-10 at 14 Ill. Reg. 16450, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7934, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9323, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14446, effective September 30, 1991; amended in R91-13 at 16 Ill. Reg. 9489, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17636, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5625, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20545, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6720, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12160, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17480, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg.

9508, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10929, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 256, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7590, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17496, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1704, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9094, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1063, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9443, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1266, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9168, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6550, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3712, effective February 14, 2003; amended in R03-18 at 27 Ill. Reg. 12713, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 5974, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6290, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART B: DEFINITIONS AND REFERENCES

Section 720.110 Definitions

When used in 35 Ill. Adm. Code 720 through 726, 728, 733, and 739 only, the following terms have the meanings given below:

"Aboveground tank" means a device meeting the definition of tank that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

"Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Agency receives certification of final closure.

"Active portion" means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after May 19, 1980, and which is not a closed portion. (See also "closed portion" and "inactive portion.")

"Administrator" means the Administrator of the United States Environmental Protection Agency or the Administrator's designee.

"Agency" means the Illinois Environmental Protection Agency.

"Ancillary equipment" means any device, including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to storage or treatment tanks, between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

"Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

"Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.

"Battery" means a device that consists of one or more electrically connected electrochemical cells which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

"Board" means the Illinois Pollution Control Board.

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

Boiler physical characteristics.

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and the unit's combustion chamber and primary energy recovery sections must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery sections (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and

While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit may be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps.); or

Boiler by designation. The unit is one that the Board has determined, on a case-by-case basis, to be a boiler, after considering the standards in Section 720.132.

"Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

"Certification" means a statement of professional opinion based upon knowledge and belief.

"Closed portion" means that portion of a facility that an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion.")

"Component" means either the tank or ancillary equipment of a tank system.

"Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under the provisions of Subpart DD of 35 Ill. Adm. Code 724 and Subpart DD of 35 Ill. Adm. Code 725.

"Contingency plan" means a document setting out an organized, planned and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment.

"Corrosion expert" means a person who, by reason of knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"Designated facility" means ~~a hazardous waste treatment, storage, or disposal facility,~~ either of the following entities:

~~Of~~ A hazardous waste treatment, storage, or disposal facility that has been

designated on the manifest by the generator, pursuant to 35 Ill. Adm. Code 722.120, of which any of the following is true:

The facility has received a RCRA permit (or interim status) pursuant to 35 Ill. Adm. Code 702, 703, and 705;

The facility has received a RCRA permit from USEPA pursuant to 40 CFR 124 and 270 ~~(2002)~~ (2005);

The facility has received a RCRA permit from a state authorized by USEPA pursuant to 40 CFR 271 ~~(2002)~~ (2005); or

The facility is regulated under 35 Ill. Adm. Code 721.106(c)(2) or Subpart F of 35 Ill. Adm. Code 266; ~~and~~ or

~~The facility has been designated on the manifest by the generator pursuant to 35 Ill. Adm. Code 722.120.~~

Effective September 5, 2006, a generator site designated by the hazardous waste generator on the manifest to receive back its own waste as a return shipment from a designated hazardous waste treatment, storage, or disposal facility that has rejected the waste in accordance with 35 Ill. Adm. Code 724.172(f) or 725.172(f).

If a waste is destined to a facility in a state other than Illinois that has been authorized by USEPA pursuant to 40 CFR 271, but which has not yet obtained authorization to regulate that waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

"Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in 35 Ill. Adm. Code 733.113(a) and (c) and 733.133(a) and (c). A facility at which a particular category of universal waste is only accumulated is not a destination facility for the purposes of managing that category of universal waste.

"Dike" means an embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.

"Dioxins and furans" or "D/F" means tetra, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

"Director" means the Director of the Illinois Environmental Protection Agency.

"Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

"Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit (CAMU) into which remediation wastes are placed.

"Drip pad" means an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation and surface water runon to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device of which the following is true:

It is used for neutralizing wastes that are hazardous only because they exhibit the corrosivity characteristic defined in 35 Ill. Adm. Code 721.122 or which are listed in Subpart D of 35 Ill. Adm. Code 721 only for this reason; and

It meets the definition of tank, tank system, container, transport vehicle, or vessel in this Section.

"EPA hazardous waste number" or "USEPA hazardous waste number" means the number assigned by USEPA to each hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 and to each characteristic identified in Subpart C of 35 Ill. Adm. Code 721.

"EPA identification number" or "USEPA identification number" means the number assigned by USEPA pursuant to 35 Ill. Adm. Code 722 through 725 to each generator; transporter; and treatment, storage, or disposal facility.

"EPA region" or "USEPA region" means the states and territories found in any one of the following ten regions:

Region I: Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Region II: New York, New Jersey, Commonwealth of Puerto Rico, and the U.S. Virgin Islands.

Region III: Pennsylvania, Delaware, Maryland, West Virginia, Virginia, and the District of Columbia.

Region IV: Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina, and Florida.

Region V: Minnesota, Wisconsin, Illinois, Michigan, Indiana, and Ohio.

Region VI: New Mexico, Oklahoma, Arkansas, Louisiana, and Texas.

Region VII: Nebraska, Kansas, Missouri, and Iowa.

Region VIII: Montana, Wyoming, North Dakota, South Dakota, Utah, and Colorado.

Region IX: California, Nevada, Arizona, Hawaii, Guam, American Samoa, and Commonwealth of the Northern Mariana Islands.

Region X: Washington, Oregon, Idaho, and Alaska.

"Equivalent method" means any testing or analytical method approved by the Board pursuant to Section 720.120.

"Existing hazardous waste management (HWM) facility" or "existing facility" means a facility that was in operation or for which construction commenced on or before November 19, 1980. A facility had commenced construction if the owner or operator had obtained the federal, State, and local approvals or permits necessary to begin physical construction and either of the following had occurred:

A continuous on-site, physical construction program had begun; or

The owner or operator had entered into contractual obligations that could not be canceled or modified without substantial loss for physical construction of the facility to be completed within a reasonable time.

"Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

"Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and which was in operation, or for which installation was commenced, on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator has obtained all federal, State, and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either of the following is true:

A continuous on-site physical construction or installation program has begun;

or

The owner or operator has entered into contractual obligations that cannot be canceled or modified without substantial loss for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance (UXO), damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

"Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment, or destruction of the explosives or munitions or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at RCRA facilities.

"Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. Explosives or munitions emergency response specialists include United States Department of Defense (USDOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and USDOD-certified civilian or contractor personnel and other federal, State, or local government or civilian personnel who are similarly trained in explosives or munitions emergency responses.

"Facility" means the following:

All contiguous land and structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

For the purpose of implementing corrective action under 35 Ill. Adm. Code 724.201, all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. This definition also applies to facilities implementing corrective action under RCRA section 3008(h).

Notwithstanding the immediately-preceding paragraph of this definition, a remediation waste management site is not a facility that is subject to 35 Ill. Adm. Code 724.201, but a facility that is subject to corrective action requirements if the site is located within such a facility.

"Federal agency" means any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal government, including any government corporation and the Government Printing Office.

"Federal, State, and local approvals or permits necessary to begin physical construction" means permits and approvals required under federal, State, or local hazardous waste control statutes, regulations, or ordinances.

"Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under 35 Ill. Adm. Code 724 and 725 are no longer conducted at the facility unless subject to the provisions of 35 Ill. Adm. Code 722.134.

"Food-chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals whose products are consumed by humans.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.

"Free liquids" means liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.

"Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in 35 Ill. Adm. Code 721 or whose act first causes a hazardous waste to become subject to regulation.

"Groundwater" means water below the land surface in a zone of saturation.

"Hazardous waste" means a hazardous waste as defined in 35 Ill. Adm. Code 721.103.

"Hazardous waste constituent" means a constituent that caused the hazardous waste to be listed in Subpart D of 35 Ill. Adm. Code 721, or a constituent listed in 35 Ill.

Adm. Code 721.124.

"Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system, and a container storage area. A container alone does not constitute a unit; the unit includes containers, and the land or pad upon which they are placed.

"Inactive portion" means that portion of a facility that is not operated after November 19, 1980. (See also "active portion" and "closed portion.")

"Incinerator" means any enclosed device of which the following is true:

The facility uses controlled flame combustion, and both of the following are true of the facility:

The facility does not meet the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor

The facility is not listed as an industrial furnace; or

The facility meets the definition of infrared incinerator or plasma arc incinerator.

"Incompatible waste" means a hazardous waste that is unsuitable for the following:

Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or

Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire, or explosion, violent reaction, toxic dusts, mists, fumes or gases, or flammable fumes or gases.

(See Appendix E to 35 Ill. Adm. Code 725 for examples.)

"Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

Cement kilns;

Lime kilns;

Aggregate kilns;

Phosphate kilns;

Coke ovens;

Blast furnaces;

Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);

Titanium dioxide chloride process oxidation reactors;

Methane reforming furnaces;

Pulping liquor recovery furnaces;

Combustion devices used in the recovery of sulfur values from spent sulfuric acid;

Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least three percent, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20 percent, as generated; and

Any other such device as the Agency determines to be an industrial furnace on the basis of one or more of the following factors:

> The design and use of the device primarily to accomplish recovery of material products;
>
> The use of the device to burn or reduce raw materials to make a material product;
>
> The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;
>
> The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

The use of the device in common industrial practice to produce a material product; and

Other relevant factors.

"Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

"Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Inground tank" means a device meeting the definition of tank whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

"In operation" refers to a facility that is treating, storing, or disposing of hazardous waste.

"Injection well" means a well into which fluids are being injected. (See also "underground injection.")

"Inner liner" means a continuous layer of material placed inside a tank or container that protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

"Installation inspector" means a person who, by reason of knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

"International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

"Lamp" or "universal waste lamp" means the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, or infrared regions of the electromagnetic spectrum. Examples of common universal waste lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high-pressure sodium, and metal halide lamps.

"Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

"Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit (CAMU).

"Landfill cell" means a discrete volume of a hazardous waste landfill that uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

"LDS" means leak detection system.

"Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

"Liner" means a continuous layer of natural or manmade materials beneath or on the sides of a surface impoundment, landfill, or landfill cell that restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

"Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

"Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

"Manifest" means the shipping document USEPA Form 8700-22 (including, if necessary, USEPA Form 8700-22A) originated and signed by the generator or offeror that contains the information required by Subpart B of 35 Ill. Adm. Code 722 and the applicable requirements of 35 Ill. Adm. Code 722 through 725.

"Manifest document number" means, until September 5, 2006, the USEPA twelve digit identification number assigned to the generator plus a unique five-digit document number assigned to the manifest by the generator for recording and reporting purposes.

"Manifest tracking number" means, effective September 5, 2006, the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits) that is pre-printed in Item 4 of the manifest by a registered source.

"Mercury-containing equipment" means mercury switches and mercury relays, and scientific instruments and instructional equipment containing mercury added during their manufacture.
BOARD NOTE: The definition of "mercury-containing equipment" was added pursuant to Sections 3.283, 3.284, and 22.23b of the Act [415 ILCS 5/3.283, 3.284, and 22.23b]~~,~~ (~~See~~ see P.A. 93-964, effective August 20, 2004).

"Mercury relay" means a product or device, containing mercury added during its manufacture, that opens or closes electrical contacts to effect the operation of other devices in the same or another electrical circuit. Mercury relay includes, but is not limited to, mercury displacement relays, mercury wetted reed relays, and mercury contact relays. [415 ILCS 5/3.283]
BOARD NOTE: The definition of "mercury relay" was added pursuant to Section 3.283 of the Act [415 ILCS 5/~~.283~~3.283]~~,~~ (~~See~~ see P.A. 93-964, effective August 20, 2004).

"Mercury switch" means a product or device, containing mercury added during its manufacture, that opens or closes an electrical circuit or gas valve, including, but not limited to, mercury float switches actuated by rising or falling liquid levels, mercury tilt switches actuated by a change in the switch position, mercury pressure switches actuated by a change in pressure, mercury temperature switches actuated by a change in temperature, and mercury flame sensors. [415 ILCS 5/3.284]
BOARD NOTE: The definition of "mercury switch" was added pursuant to Section 3.284 of the Act [415 ILCS 5/~~.284~~3.284]~~,~~ (~~See~~ see P.A. 93-964, effective August 20, 2004).

"Military munitions" means all ammunition products and components produced or used by or for the United States Department of Defense or the United States Armed Services for national defense and security, including military munitions under the control of the United States Department of Defense (USDOD), the United States Coast Guard, the United States Department of Energy (USDOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by USDOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components of these items and devices. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components of these items and devices. However, the term does include non-nuclear components of nuclear devices, managed under USDOE's nuclear weapons program after all sanitization operations required under the Atomic Energy Act of 1954 (42 USC 2014 et seq.), as amended, have been completed.

"Mining overburden returned to the mine site" means any material overlying an economic mineral deposit that is removed to gain access to that deposit and is then used for reclamation of a surface mine.

"Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container; tank; surface impoundment; pile; land treatment unit; landfill; incinerator; boiler; industrial furnace; underground injection well with appropriate technical standards under 35 Ill. Adm. Code 730; containment building; corrective action management unit (CAMU); unit eligible for a research, development, and demonstration permit under 35 Ill. Adm. Code 703.231; or staging pile.

"Movement" means hazardous waste that is transported to a facility in an individual vehicle.

"New hazardous waste management facility" or "new facility" means a facility that began operation, or for which construction commenced after November 19, 1980. (See also "Existing hazardous waste management facility.")

"New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation commenced after July 14, 1986; except, however, for purposes of 35 Ill. Adm. Code 724.293(g)(2) and 725.293(g)(2), a new tank system is one for which construction commenced after July 14, 1986. (See also "existing tank system.")

"Onground tank" means a device meeting the definition of tank that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surfaces so that the external tank bottom cannot be visually inspected.

"On-site" means the same or geographically contiguous property that may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection and access is by crossing as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way that the owner controls and to which the public does not have access is also considered on-site property.

"Open burning" means the combustion of any material without the following characteristics:

> Control of combustion air to maintain adequate temperature for efficient combustion;
>
> Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

Control of emission of the gaseous combustion products.

(See also "incineration" and "thermal treatment.")

"Operator" means the person responsible for the overall operation of a facility.

"Owner" means the person that owns a facility or part of a facility.

"Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of 35 Ill. Adm. Code 724 or 725 at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body.

"Personnel" or "facility personnel" means all persons who work at or oversee the operations of a hazardous waste facility and whose actions or failure to act may result in noncompliance with the requirements of 35 Ill. Adm. Code 724 or 725.

"Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or intended for use as a plant regulator, defoliant, or desiccant, other than any article that fulfills one of the following descriptions:

It is a new animal drug under section 201(v) of the Federal Food, Drug and Cosmetic Act (FFDCA; 21 USC 321(v)), incorporated by reference in Section ~~720.111~~ 720.111(c);

It is an animal drug that has been determined by regulation of the federal Secretary of Health and Human Services pursuant to FFDCA section 512 (21 USC 360b), incorporated by reference in Section ~~720.111~~ 720.111(c), to be an exempted new animal drug; or

It is an animal feed under FFDCA section 201(w) (21 USC 321(w)), incorporated by reference in Section ~~720.111~~ 720.111(c), that bears or contains any substances described in either of the two preceding paragraphs of this definition.

BOARD NOTE: The second exception of corresponding 40 CFR 260.10 reads as follows: "Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug." This is very similar to the language of section 2(u) of the Federal

Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 USC 136(u)). The three exceptions, taken together, appear intended not to include as pesticide any material within the scope of federal Food and Drug Administration regulation. The Board codified this provision with the intent of retaining the same meaning as its federal counterpart while adding the definiteness required under Illinois law.

"Pile" means any noncontainerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage, and that is not a containment building.

"Plasma arc incinerator" means any enclosed device that uses a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

"Point source" means any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

"Publicly owned treatment works" or "POTW" is as defined in 35 Ill. Adm. Code 310.110.

"Qualified groundwater scientist" means a scientist or engineer who has received a baccalaureate or postgraduate degree in the natural sciences or engineering, and has sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration, professional certifications, or completion of accredited university courses that enable the individual to make sound professional judgments regarding groundwater monitoring and contaminant rate and transport. BOARD NOTE: State registration includes, but is not limited to, registration as a professional engineer with the Department of Professional Regulation, pursuant to 225 ILCS 325 and 68 Ill. Adm. Code 1380. Professional certification includes, but is not limited to, certification under the certified groundwater professional program of the National Ground Water Association.

"RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC 6901 et seq.).

"Regional Administrator" means the Regional Administrator for the USEPA Region in which the facility is located or the Regional Administrator's designee.

"Remediation waste" means all solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris that are managed for implementing cleanup.

"Remediation waste management site" means a facility where an owner or operator

is or will be treating, storing, or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under 35 Ill. Adm. Code 724.201, but a remediation waste management site is subject to corrective action requirements if the site is located in such a facility.

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and which is subsequently reused to treat, store, or dispose of hazardous waste. Replacement unit does not include a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with a closure or corrective action plan approved by USEPA or the Agency.

"Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) that can be expected to exhibit the average properties of the universe or whole.

"Runoff" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

"Runon" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

"Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

"SIC ~~Code~~ code" means "Standard Industrial Classification ~~Code~~ code," as ~~defined~~ assigned to a site by the United States Department of Transportation, Federal Highway Administration, based on the particular activities that occur on the site, as set forth in its publication "Standard Industrial Classification Manual," incorporated by reference in Section ~~720.111~~ 720.111(a).

"Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

"Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and which has a total thermal input, excluding the heating value of the sludge itself, of ~~2500~~ 2,500 Btu/lb or less of sludge treated on a wet-weight basis.

"Small quantity generator" means a generator that generates less than ~~1000~~ 1,000 kg of hazardous waste in a calendar month.

"Solid waste" means a solid waste as defined in 35 Ill. Adm. Code 721.102.

"Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. "Sorb" means to either adsorb or absorb, or both.

"Staging pile" means an accumulation of solid, non-flowing "remediation waste" (as defined in this Section) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the Agency according to the requirements of 35 Ill. Adm. Code 724.654.

"State" means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

"Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that, as used in the landfill, surface impoundment, and waste pile rules, sump means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection system for subsequent removal from the system.

"Surface impoundment" or "impoundment" means a facility or part of a facility that is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials) that is designed to hold an accumulation of liquid wastes or wastes containing free liquids and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds, and lagoons.

"Tank" means a stationary device, designed to contain an accumulation of hazardous waste that is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.

"Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

"TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin and furan congeners to the toxicity of 2,3,7,8-tetra-chlorodibenzo-p-dioxin.

"Thermal treatment" means the treatment of hazardous waste in a device that uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.")

"Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element and mercury-containing ampules that have been removed from such a temperature control device in compliance with the requirements of 35 Ill. Adm. Code 733.113(c)(2) or 733.133(c)(2).

"Totally enclosed treatment facility" means a facility for the treatment of hazardous waste that is directly connected to an industrial production process and which is constructed and operated in a manner that prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

"Transfer facility" means any transportation related facility, including loading docks, parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

"Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

"Transportation" means the movement of hazardous waste by air, rail, highway, or water.

"Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

"Treatability study" means the following:

A study in which a hazardous waste is subjected to a treatment process to determine the following:

Whether the waste is amenable to the treatment process;

What pretreatment (if any) is required;

The optimal process conditions needed to achieve the desired treatment;

The efficiency of a treatment process for a specific waste or wastes; and

The characteristics and volumes of residuals from a particular treatment process;

Also included in this definition for the purpose of 35 Ill. Adm. Code 721.104(e) and (f) exemptions are liner compatibility, corrosion and other

material compatibility studies, and toxicological and health effects studies. A treatability study is not a means to commercially treat or dispose of hazardous waste.

"Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize the waste, recover energy or material resources from the waste, or render the waste non-hazardous or less hazardous; safer to transport, store, or dispose of; or amenable for recovery, amenable for storage, or reduced in volume.

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled, or driven well or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well.")

"Underground tank" means a device meeting the definition of tank whose entire surface area is totally below the surface of and covered by the ground.

"Unfit-for-use tank system" means a tank system that has been determined, through an integrity assessment or other inspection, to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

"United States" means the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

"Universal waste" means any of the following hazardous wastes that are managed under the universal waste requirements of 35 Ill. Adm. Code 733:

Batteries, as described in 35 Ill. Adm. Code 733.102;

Pesticides, as described in 35 Ill. Adm. Code 733.103;

Thermostats, as described in 35 Ill. Adm. Code 733.104;

Lamps, as described in 35 Ill. Adm. Code 733.105; and

Mercury-containing equipment, as described in 35 Ill. Adm. Code 733.106.

BOARD NOTE: Mercury-containing equipment was added pursuant to Sections 3.283, 3.284, and 22.23b of the Act [415 ILCS 5/~~.283~~3.283, 3.284, and 22.23b] (~~See~~ see P.A. 93-964, effective August 20, 2004).

"Universal waste handler" means either of the following:

A generator (as defined in this Section) of universal waste; or

The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates the universal waste, and sends that universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

"Universal waste handler" does not mean either of the following:

A person that treats (except under the provisions of Section 733.113(a) or (c) or 733.133(a) or (c)), disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

"Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

"Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

"USDOT" or "Department of Transportation" means the United States Department of Transportation.

"Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

"USEPA" or "EPA" or "U.S. EPA" means the United States Environmental Protection Agency.

"Vessel" includes every description of watercraft used or capable of being used as a means of transportation on the water.

"Wastewater treatment unit" means a device of which the following is true:

It is part of a wastewater treatment facility that has an NPDES permit

pursuant to 35 Ill. Adm. Code 309 or a pretreatment permit or authorization to discharge pursuant to 35 Ill. Adm. Code 310; ~~and~~

It receives and treats or stores an influent wastewater that is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or generates and accumulates a wastewater treatment sludge that is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or treats or stores a wastewater treatment sludge that is a hazardous waste as defined in 35 Ill. Adm. Code 721.103; and

It meets the definition of tank or tank system in this Section.

"Water (bulk shipment)" means the bulk transportation of hazardous waste that is loaded or carried on board a vessel without containers or labels.

"Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

"Well injection" (See "underground injection.")

"Zone of engineering control" means an area under the control of the owner or operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to groundwater or surface water.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 720.111 References

The following documents are incorporated by reference for the purposes of this Part and 35 Ill. Adm. Code 703 through 705, 721 through 726, 728, 730, 733, 738, and 739:

a) Non-Regulatory Government Publications and Publications of Recognized Organizations and Associations:

ACI. Available from the American Concrete Institute, Box 19150, Redford Station, Detroit, Michigan 48219:

ACI 318-83: "Building Code Requirements for Reinforced Concrete," adopted September 1983, <u>referenced in 35 Ill. Adm. Code 724.673 and 725.543</u>.

ANSI. Available from the American National Standards Institute, 1430 Broadway, New York, New York 10018, 212-354-3300:

~~ANSI B31.3 and B31.4.~~ See ASME/ANSI B31.3 and B31.4 <u>and supplements below in this subsection (a) under ASME</u>.

API. Available from the American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005, 202-682-8000:

"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, Second Edition, December 1987, referenced in 35 Ill. Adm. Code 724.292, 724.295, 725.292, and 725.295.

"Evaporative Loss from External Floating-Roof Tanks," API ~~Publication~~ publication 2517, Third Edition, February 1989, USEPA-approved for 35 Ill. Adm. Code 725.984.

"Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low Pressure Storage Tanks," 4th Edition, 1981, reaffirmed December 1987, referenced in 35 Ill. Adm. Code 724.291, 724.293, 725.291, and 725.292.

"Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, Fourth Edition, November 1987, referenced in 35 Ill. Adm. Code 724.292.

ASME. Available from the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017, 212-705-7722:

"Chemical Plant and Petroleum Refinery Piping," ASME/ANSI B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, referenced in 35 Ill. Adm. Code 724.292 and 725.292. Also available from ANSI.

"Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI B31.4-1986, as supplemented by B31.4a-1987, referenced in 35 Ill. Adm. Code 724.292 and 725.292. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, 610-832-9585:

ASTM C 94-90, "Standard Specification for Ready-Mixed Concrete," approved March 30, 1990, referenced in 35 Ill. Adm. Code 724.673 and 725.543.

ASTM D 88-87, "Standard Test Method for Saybolt Viscosity," approved April 24, 1981, reapproved January 1987, referenced in 35 Ill. Adm. Code 726.200.

ASTM D 93-85, "Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," approved October 25, 1985, USEPA-approved for 35 Ill. Adm. Code 721.121.

ASTM D 140-70, "Standard Practice for Sampling Bituminous Materials," approved 1970, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 346-75, "Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis," approved 1975, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 420–69, "Guide to Site Characterization for Engineering, Design, and Construction Purposes," approved 1969, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 1452–65, "Standard Practice for Soil Investigation and Sampling by Auger Borings," approved 1965, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 1946-90, "Standard Practice for Analysis of Reformed Gas by Gas Chromatography," approved March 30, 1990, USEPA-approved for 35 Ill. Adm. Code 724.933 and 725.933.

ASTM D 2161-87, "Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity," March 27, 1987, referenced in 35 Ill. Adm. Code 726.200.

ASTM D 2234-76, "Standard Practice for Collection of a Gross Sample of Coal," approved 1976, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 2267-88, "Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," approved November 17, 1988, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM D 2382-88, "Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method)," approved October 31, 1988, USEPA-approved for 35 Ill. Adm. Code 724.933 and 725.933.

ASTM D 2879-92, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature

of Liquids by Isoteniscope," approved 1992, USEPA-approved for 35 Ill. Adm. Code 725.984, referenced in 35 Ill. Adm. Code 724.963 and 725.963.

ASTM D 3828-87, "Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," approved December 14, 1988, USEPA-approved for 35 Ill. Adm. Code 721.121(a).

ASTM E 168-88, "Standard Practices for General Techniques of Infrared Quantitative Analysis," approved May 27, 1988, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM E 169-87, "Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," approved February 1, 1987, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM E 260-85, "Standard Practice for Packed Column Gas Chromatography," approved June 28, 1985, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM Method G 21-70 (1984a), "Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi.", referenced in 35 Ill. Adm. Code 724.414 and 725.414.

ASTM Method G 22-76 (1984b), "Standard Practice for Determining Resistance of Plastics to Bacteria.", referenced in 35 Ill. Adm. Code 724.414 and 725.414.

~~MICE. Methods Information Communication Exchange Service, 703-821-4690:~~

~~"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number SW-846, Update IIIA (April 1998).~~

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, 202-512-1800:

Standard Industrial Classification Manual (1972), and 1977 Supplement, republished in 1983, referenced in 35 Ill. Adm. Code 702.110 and Section 720.110.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846 (Third Edition, November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January

1995), ~~and~~ III (December 1996), IIIA (April 1998), and IIIB (November 2004) (document number 955-001-00000-1). See below in this subsection (a) under NTIS.

NACE. Available from the National Association of Corrosion Engineers, 1400 South Creek Dr., Houston, TX 77084, 713-492-0535:

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice ~~RP-02-85~~ RP0285-85, approved March 1985, referenced in 35 Ill. Adm. Code 724.292, 724.295, 725.292, and 725.295.

NFPA. Available from the National Fire Protection Association, 1 Batterymarch Park, Boston, MA 02269, 617-770-3000 or 800-344-3555:

"Flammable and Combustible Liquids Code," NFPA 30, issued ~~July 17, 1987~~ July 18, 2003, as supplemented by TIA 03-1, issued July 15, 2004, and corrected by Errata 30-03-01, issued August 13, 2004, USEPA-approved for 35 Ill. Adm. Code 724.298 and 725.298, referenced in 35 Ill. Adm. Code 724.298 and 726.211.~~ Also available from ANSI.~~

NTIS. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, 703-605-6000 or 800-553-6847 (Internet address: www.ntis.gov):

"APTI Course 415: Control of Gaseous Emissions," December 1981, USEPA publication number 450/2-81-005, NTIS document number PB80-208895, ~~December 1981~~ USEPA-approved for 35 Ill. Adm. Code 703.210, 703.211, 724.935, and 725.935. BOARD NOTE: "APTI" denotes USEPA's "Air Pollution Training Institute" (Internet address: www.epa.gov/air/oaqps/eog/).

"Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," ~~EPA/530-SW-87-011~~ USEPA publication number EPA-530/SW-87-011, March 15, 1987, ~~(~~NTIS document number PB88-170766~~)~~, referenced in 35 Ill. Adm. Code 728.106.

~~"Guideline on Air Quality Models," Revised 1986 (document number PB86-245-248 (Guideline) and PB88-150-958 (Supplement), also set forth at 40 CFR 51, Appendix W).~~

"Method ~~164,~~ 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane

Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry," (USEPA publication number EPA-821/R-98-002, NTIS document number PB99-121949), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.
BOARD NOTE: EPA-821/R-98-002 is also available on the Internet for free download as a PDF document from the USEPA website at: www.epa.gov/waterscience/methods/16640514.pdf.

"Methods for Chemical Analysis of Water and Wastes," Third Edition, March 1983, USEPA document number EPA-600/4-79-020, (NTIS document number PB84-128677), referenced in 35 Ill. Adm. Code 725.192.
BOARD NOTE: EPA-600/4-79-002 is also available on the Internet as a viewable/printable HTML document from the USEPA website at: www.epa.gov/clariton/clhtml/pubtitleORD.html as document 600479002.

~~"Methods Manual for Compliance with BIF Regulations," December 1990 (document number PB91-120-006).~~

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities," August 1977, EPA-530/SW-611, NTIS document number PB84-174820, referenced in 35 Ill. Adm. Code 725.192.

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources," October 1992, USEPA publication number ~~EPA-450/R-92-019~~ EPA-454/R-92-019, NTIS document number 93-219095, referenced in 35 Ill. Adm. Code 726.204 and 726.206.
BOARD NOTE: EPA-454/R-92-019 is also available on the Internet for free download as a WordPerfect document from the USEPA website at following Internet address: www.epa.gov/scram001/guidance/guide/scrng.wpd.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846 (Third Edition, November 1986; Revision 6, January 2005), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), ~~and~~ IIIA (April 1998), and IIIB (November 2004) (document number 955-001-00000-1)., generally referenced in Appendices A and I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 726.200, 726.206, 726.212, and 728.106 (in addition to the references cited below for specific methods):

Method 0010 (September 1986) (Modified Method 5

Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0011 (December 1996) (Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and for Appendix I to 35 Ill. Adm. Code 726.

Method 0020 (September 1986) (Source Assessment Sampling System), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0023A (December 1996) (Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.204.

Method 0030 (September 1986) (Volatile Organic Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0031 (December 1996) (Sampling Method for Volatile Organic Compounds (SMVOC)), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0040 (December 1996) (Sampling of Principal Organic Hazardous Constituents from Combustion Sources Using Tedlar® Bags), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0050 (December 1996) (Isokinetic HCl/Cl_2 Emission Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.207.

Method 0051 (December 1996) (Midget Impinger HCl/Cl_2 Emission Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.207.

Method 0060 (December 1996) (Determination of Metals in Stack Emissions), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.206.

Method 0061 (December 1996) (Determination of Hexavalent Chromium Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, 35 Ill. Adm. Code 726.206, and Appendix I to 35 Ill. Adm. Code 726.

Method 1010A (November 2004) (Test Methods for Flash Point by Pensky-Martens Closed Cup Tester), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1020B (November 2004) (Standard Test Methods for Flash Point by Setaflash (Small Scale) Closed-cup Apparatus), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1110A (November 2004) (Corrosivity Toward Steel), USEPA-approved for 35 Ill. Adm. Code 721.122 and Appendix I to 35 Ill. Adm. Code 721.

Method 1310B (November 2004) (Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and referenced in Appendix I to 35 Ill. Adm. Code 728.

Method 1311 (September 1992) (Toxicity Characteristic Leaching Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721; for 35 Ill. Adm. Code 721.124, 728.107, and 728.140; and for Table T to 35 Ill. Adm. Code 728.

Method 1312 (September 1994) (Synthetic Precipitation Leaching Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1320 (September 1986) (Multiple Extraction Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1330A (September 1992) (Extraction Procedure for Oily Wastes), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9010C (November 2004) (Total and Amenable Cyanide: Distillation), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 728.140,

728.144, and 728.148, referenced in Table H to 35 Ill. Adm. Code 728.

Method 9012B (November 2004) (Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation)), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 728.140, 728.144, and 728.148, referenced in Table H to 35 Ill. Adm. Code 728.

Method 9040C (November 2004) (pH Electrometric Measurement), USEPA-approved for 35 Ill. Adm. Code 721.122 and Appendix I to 35 Ill. Adm. Code 721.

Method 9045D (November 2004) (Soil and Waste pH), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9060A (November 2004) (Total Organic Carbon), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 724.934, 724.963, 725.934, and 725.963.

Method 9070A (November 2004) (n-Hexane Extractable Material (HEM) for Aqueous Samples), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9071B (April 1998) (n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9095B (November 2004) (Paint Filter Liquids Test), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 724.290, 724.414, 725.290, 725.414, 725.981, and 728.132.

BOARD NOTE: EPA-530/SW-846 is also available on the Internet for free download in segments in PDF format from the USEPA website at: www.epa.gov/SW-846.

OECD. Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France (www.oecd.org), also OECD Washington Center, 2001 L Street, NW, Suite 650, Washington, DC 20036-4922, 202-785-6323 or 800-456-6323 (www.oecdwash.org):

OECD "Amber List of Wastes," Appendix 4 to the OECD Council

Decision ~~C(92)39/FINAL~~ C(92)39(Final) (March 30, 1992, revised May 1993) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations), ~~"Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations."~~USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Amber Tier," Section IV of the annex to the OECD Council Decision C(92)39(Final) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

Annex to OECD Council Decision C(88)90(Final), as amended by C(94)152/FINAL (revised July 1994), referenced in 35 Ill. Adm. Code 722.187.

OECD "Green List of Wastes," Appendix 3 to the OECD Council Decision ~~C(92)39/FINAL~~ C(92)39(Final) (March 30, 1992, revised May 1994) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)), ~~"Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations."~~USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Green Tier," Section III of the annex to the OECD Council Decision C(92)39(Final) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

OECD Guideline for Testing of Chemicals, "Ready Biodegradability," Method 301B (July 17, 1992), "CO_2 Evolution (Modified Sturm Test)~~.~~," referenced in 35 Ill. Adm. Code 724.414.

OECD "Red List of Wastes," Appendix 5 to the OECD Council Decision ~~C(92)39/FINAL~~ C(92)39(Final) (March 30, 1992, revised revised May 1993), ~~"Decision of the Council Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations."~~USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Red Tier," Section V of the annex to the OECD Council Decision C(92)39(Final) (Concerning the Control of Transfrontier

Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

Table 2.B of the Annex of OECD Council Decision C(88)90(Final) (May 27, 1988), amended by C(94)152(Final) (July 28, 1994), "Decision of the Council on Transfrontier Movements of Hazardous Wastes," referenced in 35 Ill. Adm. Code 722.181 and 722.187.

STI. Available from the Steel Tank Institute, 728 Anthony Trail, Northbrook, IL 60062, 708-498-1980:

"Standard for Dual Wall Underground Steel Storage Tanks" (1986), referenced in 35 Ill. Adm. Code 724.293.

USDOD. Available from the United States Department of Defense:

"DOD Ammunition and Explosives Safety Standards" (DOD 6055.9-STD), as in effect in July 1999, referenced in 35 Ill. Adm. Code 726.305.

"The Motor Vehicle Inspection Report" (DD Form 626), as in effect on November 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"Requisition Tracking Form" (DD Form 1348), as in effect on November 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"The Signature and Tally Record" (DD Form 1907), as in effect on November 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"Special Instructions for Motor Vehicle Drivers" (DD Form 836), as in effect on November 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

USEPA, Office of Drinking Water. Available from United States Environmental Protection Agency, Office of Drinking Water, State Programs Division, WH 550 E, Washington, D.C. 20460:

"Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells," ~~EPA 570/9-87-002~~ USEPA publication number EPA-570/9-87-002, August 1987, referenced in 35 Ill. Adm. Code 730.165.

USEPA, Receptor Analysis Branch. Available from Receptor Analysis Branch, USEPA (MD-14), Research Triangle Park, NC 27711:

~~"Samplers and Sampling Procedures for Hazardous Waste Streams," EPA-600/2-80-018, January 1980.~~

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, USEPA publication number ~~EPA-450/R-92-019~~ EPA-454/R-92-019, USEPA-approved for Appendix I to 35 Ill. Adm. Code 726.
BOARD NOTE: EPA-454/R-92-019 is also available for purchase from NTIS (see above) and on the Internet for free download as a WordPerfect document from the USEPA website at following Internet address:
www.epa.gov/scram001/guidance/guide/scrng.wpd.

USEPA Region 6. Available from United States Environmental Protection Agency, Region 6, Multimedia Permitting and Planning Division, 1445 Ross Avenue, Dallas, TX 75202 (phone: 214-665-7430):

"EPA RCRA Delisting Program--Guidance Manual for the Petitioner," March 23, 2000, referenced in Section 720.122.

USGSA. Available from the United States Government Services Administration:

Government Bill of Lading (GBL) (GSA Standard Form 1109), as in effect on November 8, 1995, referenced in Section 726.303.

b) Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, 202-783-3238:

10 CFR 20.2006 ~~(2004)~~ (2005) (Transfer for Disposal and Manifests), referenced in 35 Ill. Adm. Code 702.110, 726.425, and 726.450.

Table II, column 2 in Appendix B to 10 CFR 20~~, Appendix B (2004)~~ (2005) (Water Effluent Concentrations), referenced in 35 Ill. Adm. Code 702.110, 730.103, and 730.151.

Appendix G to 10 CFR 20 (2005) (Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests), referenced in 35 Ill. Adm. Code 726.440.

10 CFR 71 ~~(2004)~~ (2005) (Packaging and Transportation of Radioactive Material), referenced generally in 35 Ill. Adm. Code 726.430.

10 CFR 71.5 (2005) (Transportation of Licensed Material), referenced in 35 Ill. Adm. Code 726.425.

33 CFR 153.203 (2005) (Procedure for the Notice of Discharge), referenced in 35 Ill. Adm. Code 723.130 and 739.143.

40 CFR 51.100(ii) ~~(2004)~~ (2005) (Definitions), referenced in 35 Ill. Adm. Code 726.200.

Appendix W to 40 CFR 51~~, Appendix W (2004)~~ (2005) (Guideline on Air Quality Models), referenced in 35 Ill. Adm. Code 726.204.
BOARD NOTE: Also available from NTIS (see above for contact information) as "Guideline on Air Quality Models," Revised 1986, USEPA publication number EPA-450/12-78-027R, NTIS document numbers PB86-245248 (Guideline) and PB88-150958 (Supplement).

Appendix B to 40 CFR 52.741~~, Appendix B (2004)~~ (2005) (VOM Measurement Techniques for Capture Efficiency), referenced in 35 Ill. Adm. Code 703.213, 724.982, 724.984, 724.986, 724.989, 725.983, 725.985, 725.987, and 725.990.

40 CFR 60 ~~(2004)~~ (2005) (Standards of Performance for New Stationary Sources), referenced generally in 35 Ill. Adm. Code 724.964, 724.980, 725.964, and 725.980.

Subpart VV of 40 CFR 60 (2005) (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), referenced in 35 Ill. Adm. Code 724.989 and 725.990.

Appendix A to 40 CFR 60 (2005) (Test Methods), referenced generally in 35 Ill. Adm. Code 726.205 (in addition to the references cited below for specific methods):

Method 1 (Sample and Velocity Traverses for Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), referenced in 35 Ill. Adm. Code 724.933, 724.934, 725.933, 725.934, and 726.205.

Method 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2B (Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators), referenced in 35 Ill. Adm. Code 726.205.

Method 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2E (Determination of Landfill Gas Production Flow Rate), referenced in 35 Ill. Adm. Code 726.205.

Method 2F (Determination of Stack Gas Velocity and Volumetric Flow Rate with Three-Dimensional Probes), referenced in 35 Ill. Adm. Code 726.205.

Method 2G (Determination of Stack Gas Velocity and Volumetric Flow Rate with Two-Dimensional Probes), referenced in 35 Ill. Adm. Code 726.205.

Method 2H (Determination of Stack Gas Velocity Taking into Account Velocity Decay Near the Stack Wall), referenced in 35 Ill. Adm. Code 726.205.

Method 3 (Gas Analysis for the Determination of Dry Molecular Weight), referenced in 35 Ill. Adm. Code 724.443 and 726.205.

Method 3A (Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)), referenced in 35 Ill. Adm. Code 726.205.

Method 3B (Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air), referenced in 35 Ill. Adm. Code 726.205.

Method 3C (Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 4 (Determination of Moisture Content in Stack Gases), referenced in 35 Ill. Adm. Code 726.205.

Method 5 (Determination of Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5A (Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry), referenced in 35 Ill. Adm. Code 726.205.

Method 5B (Determination of Nonsulfuric Acid Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5D (Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters), referenced in 35 Ill. Adm. Code 726.205.

Method 5E (Determination of Particulate Matter Emissions from the Wool Fiberglass Insulation Manufacturing Industry), referenced in 35 Ill. Adm. Code 726.205.

Method 5F (Determination of Nonsulfate Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5G (Determination of Particulate Matter Emissions from Wood Heaters (Dilution Tunnel Sampling Location)), referenced in 35 Ill. Adm. Code 726.205.

Method 5H (Determination of Particulate Emissions from Wood Heaters from a Stack Location), referenced in 35 Ill. Adm. Code 726.205.

Method 5I (Determination of Low Level Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography), referenced in 35 Ill. Adm. Code 724.933, 724.934, 725.933, and 725.934.

Method 21 (Determination of Volatile Organic Compound Leaks), referenced in 35 Ill. Adm. Code 703.213, 724.934, 724.935, 724.963, 725.934, 725.935, 725.963, and 725.984.

Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares), referenced in 35 Ill. Adm. Code 724.933, 724.1101, 725.933, and 725.1101.

Method 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer), referenced in

35 Ill. Adm. Code 724.934 and 725.985.

Method 25D (Determination of the Volatile Organic Concentration of Waste Samples), referenced in 35 Ill. Adm. Code 724.982, 725.983, and 725.984.

Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples), referenced in 35 Ill. Adm. Code 725.984.

Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test), referenced in 35 Ill. Adm. Code 724.987 and 725.987.

40 CFR 61 (2005) (National Emission Standards for Hazardous Air Pollutants), referenced generally in 35 Ill. Adm. Code 725.933, 725.964, and 725.980.

Subpart V of 40 CFR 61~~, Subpart V (2004)~~ (2005) (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), referenced in 35 Ill. Adm. Code 724.989 and 725.990.

Subpart FF of 40 CFR 61 (2005) (National Emission Standard for Benzene Waste Operations), referenced in 35 Ill. Adm. Code 724.982 and 725.983.

40 CFR 63 (2005) (National Emission Standards for Hazardous Air Pollutants for Source Categories), referenced generally in 35 Ill. Adm. Code 725.933, 725.964, and 725.980.

Subpart RR of 40 CFR 63 (2005) (National Emission Standards for Individual Drain Systems), referenced in 35 Ill. Adm. Code 724.982, 724.984, 724.985, 725.983, 725.985, and 725.986.

Subpart EEE of 40 CFR 63~~ (2004)~~ (2005) (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (includes 40 CFR 63.1206 (When and How Must You Comply with the Standards and Operating Requirements?)), referenced in Appendix A to 35 Ill. Adm. Code 703 and 35 Ill. Adm. Code 703.155, 703.205, 703.208, 703.221, 703.232, 703.320, 724.440, 724.701, 724.950, 725.440, and 726.200.

Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (2005) (Test Methods), referenced in 35 Ill. Adm. Code 725.984.

Appendix C to 40 CFR 63 (2005) (Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit), referenced in 35 Ill. Adm. Code 725.984.

Appendix D to 40 CFR 63 (2005) (Test Methods), referenced in 35 Ill. Adm. Code 725.984.

40 CFR ~~136 (2004)~~ 136.3 (Identification of Test Procedures) (2005), referenced in 35 Ill. Adm. Code 702.110, 704.150, 704.187, and 730.103.

~~40 CFR 142 (2004)~~

40 CFR 144.70 (2005) (Wording of the Instruments), referenced in 35 Ill. Adm. Code 704.240.

~~40 CFR 220 (2004)~~

40 CFR 232.2 ~~(2004)~~ (2005) (Definitions), referenced in 35 Ill. Adm. Code 721.104.

40 CFR 257 (2005) (Criteria for Classification of Solid Waste Disposal Facilities and Practices), referenced in 35 Ill. Adm. Code 739.181.

40 CFR 258 (2005) (Criteria for Municipal Solid Waste Landfills), referenced in 35 Ill. Adm. Code 739.181.

~~40 CFR 260.20 (2004)~~

40 CFR 260.21 (2005) (Alternative Equivalent Testing Methods), referenced in Section 720.121.

Appendix I to 40 CFR 260 (2005) (Overview of Subtitle C Regulations), referenced in Appendix A to 35 Ill. Adm. Code 720.

Appendix III to 40 CFR 261 (2005) (Chemical Analysis Test Methods), referenced in 35 Ill. Adm. Code 704.150 and 704.187.

40 CFR 262.53 ~~through 262.57 and Appendix (2004)~~ (2005) (Notification of Intent to Export), referenced in 35 Ill. Adm. Code 722.153.

40 CFR 262.54 (2005) (Special Manifest Requirements), and as amended at 70 Fed. Reg. 10776 (March 4, 2005), referenced in 35 Ill. Adm. Code 722.154.

40 CFR 262.55 (2005) (Exception Reports), referenced in 35 Ill. Adm. Code 722.155.

40 CFR 262.56 (2005) (Annual Reports), referenced in 35 Ill. Adm. Code 722.156.

40 CFR 262.57 (2005) (Recordkeeping), referenced in 35 Ill. Adm. Code 722.157.

Appendix to 40 CFR 262 (2005) (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22a and Their Instructions)), and as amended at 70 Fed. Reg. 10776 (March 4, 2005), referenced in Appendix A to 35 Ill. Adm. Code 722 and 35 Ill. Adm. Code 724.986 and 725.987.

40 CFR ~~264 (2004)~~ 264.151 (2005) (Wording of the Instruments), referenced in 35 Ill. Adm. Code 724.251.

Appendix I to 40 CFR 264 (2005) (Recordkeeping Instructions), referenced in Appendix A to 35 Ill. Adm. Code 724.

Appendix IV to 40 CFR 264 (2005) (Cochran's Approximation to the Behrens-Fisher Students' T-Test), referenced in Appendix D to 35 Ill. Adm. Code 724.

Appendix V to 40 CFR 264 (2005) (Examples of Potentially Incompatible Waste), referenced in Appendix E to 35 Ill. Adm. Code 724.

Appendix VI to 40 CFR 264 (2005) (Political Jurisdictions in Which Compliance with§ 264.18(a) Must Be Demonstrated), referenced in 35 Ill. Adm. Code 703.306 and 724.118.

~~40 CFR 265, Appendices I and III through V (2004)~~

Appendix I to 40 CFR 265 (2005) (Recordkeeping Instructions), referenced in Appendix A to 35 Ill. Adm. Code 725.

Appendix III to 40 CFR 265 (2005) (EPA Interim Primary Drinking Water Standards), referenced in Appendix C to 35 Ill. Adm. Code 725.

Appendix IV to 40 CFR 265 (2005) (Tests for Significance), referenced in Appendix D to 35 Ill. Adm. Code 725.

Appendix V to 40 CFR 265 (2005) (Examples of Potentially Incompatible Waste), referenced in 35 Ill. Adm. Code 725.277, 725.330, 725.357, 725.382, and 725.413 and Appendix E to 35 Ill. Adm. Code 725.

Appendix IX to 40 CFR 266 (2005) (Methods Manual for Compliance

with the BIF Regulations), referenced generally in Appendix I to 35 Ill. Adm. Code 726.

Section 4.0 (Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners), referenced in 35 Ill. Adm. Code 726.200 and 726.204.

Section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure), referenced in 35 Ill. Adm. Code 726.204.

Section 7.0 (Statistical Methodology for Bevill Residue Determinations), referenced in 35 Ill. Adm. Code 726.212.

BOARD NOTE: Also available from NTIS (see above for contact information) as "Methods Manual for Compliance with BIF Regulations: Burning Hazardous Waste in Boilers and Industrial Furnaces," December 1990, USEPA publication number EPA-530/SW-91-010, NTIS document number PB91-120006.

~~40 CFR 268, Appendix IX (2004)~~

40 CFR 270.5 ~~(2004)~~ (2005) (Noncompliance and Program Reporting by the Director), referenced in 35 Ill. Adm. Code 703.305.

~~40 CFR 302 (2004)~~

~~40 CFR 423, appendix A (2004)~~

40 CFR 761 ~~(2004)~~ (2005) (Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions), referenced generally in 35 Ill. Adm. Code 728.145.

40 CFR 761.3 (2005) (Definitions), referenced in 35 Ill. Adm. Code 728.102 and 739.110.

40 CFR 761.60 (2005) (Disposal Requirements), referenced in 35 Ill. Adm. Code 728.142.

40 CFR 761.65 (2005) (Storage for Disposal), referenced in 35 Ill. Adm. Code 728.150.

40 CFR 761.70 (2005) (Incineration), referenced in 35 Ill. Adm. Code 728.142.

Subpart B of 49 CFR 107 ~~(2003)~~ (2004) (Exemptions), referenced generally in 35 Ill. Adm. Code 724.986 and 725.987.

49 CFR 171 ~~(2003)~~ (2004) (General Information, Regulations, and Definitions), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.

49 CFR 171.3 (2004) (Hazardous Waste), referenced in 35 Ill. Adm. Code 722.133.

49 CFR 171.8 (2004) (Definitions and Abbreviations), referenced in 35 Ill. Adm. Code 733.118, 733.138, 733.152, 733.155, and 739.143.

49 CFR 171.15 (2004) (Immediate Notice of Certain Hazardous Materials Incidents), referenced in 35 Ill. Adm. Code 723.130 and 739.143.

49 CFR 171.16 (2004) (Detailed Hazardous Materials Incident Reports), referenced in 35 Ill. Adm. Code 723.130 and 739.143.

49 CFR 172 ~~(2003)~~ (2004) (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), referenced generally in 35 Ill. Adm. Code 722.131, 722.132, 724.986, 725.987, 733.114, 733.118, 733.134, 733.138, 733.152, 733.155, and 739.143.

49 CFR 172.304 (2004) (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), referenced in 35 Ill. Adm. Code 722.132.

Subpart F of 49 CFR 172 (2004) (Placarding), referenced in 35 Ill. Adm. Code 722.133.

49 CFR 173 ~~(2003)~~ (2004) (Shippers—General Requirements for Shipments and Packages), referenced generally in 35 Ill. Adm. Code 722.130, 724.986, 724.416, 725.987, 733.118, 733.138, 733.152, and 739.143.

49 CFR 173.2 (2004) (Hazardous Materials Classes and Index to Hazard Class Definitions), referenced in 35 Ill. Adm. Code 733.152.

49 CFR 173.12 (2004) (Exceptions for Shipments of Waste Materials), referenced in 35 Ill. Adm. Code 724.416, 724.986, and 725.987.

49 CFR 173.28 (2004) (Reuse, Reconditioning, and Remanufacture of Packagings), referenced in 35 Ill. Adm. Code 725.273.

49 CFR 173.50 (2004) (Class 1--Definitions), referenced in 35 Ill. Adm. Code 721.124.

49 CFR 173.54 (2004) (Forbidden Explosives), referenced in 35 Ill. Adm. Code 721.124.

49 CFR 173.115 (2004) (Class 2, Divisions 2.1, 2.2, and 2.3--Definitions), referenced in 35 Ill. Adm. Code 721.121.

49 CFR 173.127 (2004) (Class 5, Division 5.1—Definition and Assignment of Packaging Groups), referenced in 35 Ill. Adm. Code 721.121.

49 CFR 174 (2004) (Carriage by Rail), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.

49 CFR 175 (2004) (Carriage by Aircraft), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.

49 CFR 176 (2004) (Carriage by Vessel), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.

49 CFR 177 (2004) (Carriage by Public Highway), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.

49 CFR 178 ~~(2003)~~ (2004) (Specifications for Packagings), referenced generally in 35 Ill. Adm. Code 722.130, 724.416, 724.986, 725.416, 725.987, 733.118, 733.138, 733.152, and 739.143.

49 CFR 179 ~~(2003)~~ (2004) (Specifications for Tank Cars), referenced in 35 Ill. Adm. Code 722.130, 724.416, 724.986, 725.416, 725.987, 733.118, 733.138, 733.152, and 739.143.

49 CFR 180 (2004) (Continuing Qualification and Maintenance of Packagings), referenced generally in 35 Ill. Adm. Code 724.986, 725.987, 733.118, 733.138, 733.152, and 739.143.

c) Federal Statutes:

Section 11 of the Atomic Energy Act of 1954 (42 USC 2014), as amended through January 23, 2000, referenced in 35 Ill. Adm. Code 721.104 and 726.310.

Sections 201(v), 201(w), and ~~360b(j)~~ 512(j) of the Federal Food, Drug, and Cosmetic Act (FFDCA; 21 USC 321(v), 321(w), and ~~512(j)~~ 360b(j)), as amended through January 2, 2001, referenced in Section 720.110 and 35 Ill. Adm. Code 733.109.

Section 1412 of the Department of Defense Authorization Act of 1986, Pub. L. 99-145~~,~~ (50 USC 1521(j)(1)), as amended through January 23, 2000, referenced in 35 Ill. Adm. Code 726.301.

d) This Section incorporates no later editions or amendments.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section 720.121 Alternative Equivalent Testing Methods

a) The Agency has no authority to alter the universe of regulated wastes. Modification of testing methods that are stated in 35 Ill. Adm. Code 721 requires rulemaking pursuant to Section 720.120. However, deviation from these methods is allowed under 35 Ill. Adm. Code 721, as observed, for example, in the Board Note appended to 35 Ill. Adm. Code 721.120(c).

b) The Agency may approve alternative equivalent testing methods for a particular person's use to determine whether specified waste streams are subject to these regulations. This must be done by permit condition or letter. Any petition to the Board or request to the Agency concerning alternative equivalent testing methods must include the information required by 40 CFR 260.21(b), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

c) The testing methods specified in 35 Ill. Adm. Code 721 or alternative equivalent testing methods approved by the Agency need not be applied to identify or distinguish waste streams that are known, admitted, or assumed to be subject to these regulations. In this case, any method may be used, subject to the Agency's authority to approve the testing procedures used.

d) ~~Any petition to the Board or request to the Agency concerning alternative equivalent testing methods must include the information required by 40 CFR 260.21(b).~~ If USEPA amends the federal regulations to allow the use of a new testing method, USEPA has stated that it will incorporate the new method by reference in 40 CFR 260.11 and add it to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in Section 720.111(b).

e) Alternative equivalent testing methods will not be approved if the result of the approval would make the Illinois RCRA Subtitle C program less than substantially equivalent to the federal.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 720.122 Waste Delisting

a) Any person seeking to exclude a waste from a particular generating facility from the lists in Subpart D of 35 Ill. Adm. Code 721 may file a petition, as specified in subsection (n) of this Section. The Board will grant the petition if the following occur:

1) The petitioner demonstrates that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous or acute hazardous waste; and

2) ~~If the~~ The Board determines that there is a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "EPA RCRA Delisting Program--Guidance Manual for the Petitioner," incorporated by reference in Section 720.111(a). A waste that is so excluded, however, still may be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721.

b) Listed wastes and mixtures. A person may also petition the Board to exclude from 35 Ill. Adm. Code 721.103(a)(2)(B) or (a)(2)(C), a waste that is described in these Sections and is either a waste listed in Subpart D of 35 Ill. Adm. Code 721, or is derived from a waste listed in that Subpart. This exclusion may only be granted for a particular generating, storage, treatment, or disposal facility. The petitioner must make the same demonstration as required by subsection (a) of this Section. Where the waste is a mixture of a solid waste and one or more listed hazardous wastes or is derived from one or more listed hazardous wastes, the demonstration must be made with respect to the waste mixture as a whole; analyses must be conducted for not only those constituents for which the listed waste contained in the mixture was listed as hazardous, but also for factors (including additional constituents) that could cause the waste mixture to be a hazardous waste. A waste that is so excluded may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721.

c) Ignitable, corrosive, reactive and toxicity characteristic wastes. If the waste is listed in codes "I," "C," "R," or "E" in Subpart D of 35 Ill. Adm. Code 721, the following requirements apply:

1) The petitioner must demonstrate that the waste does not exhibit the relevant characteristic for which the waste was listed, as defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections. The petitioner must also show that the waste does not exhibit any of the other characteristics, defined in those Sections, using any applicable methods prescribed in those Sections; and

2) Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "EPA RCRA Delisting Program--Guidance Manual for the Petitioner," incorporated by reference in Section 720.111(a). A waste that is so excluded, however, may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721.

d) Toxic waste. If the waste is listed in code "T" in Subpart D of 35 Ill. Adm. Code 721, the following requirements apply:

1) The petitioner must demonstrate that the waste fulfills the following criteria:

A) It does not contain the constituent or constituents (as defined in Appendix G of 35 Ill. Adm. Code 721) that caused USEPA to list the waste~~, using the appropriate test methods prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference in Section 720.111(a)~~; or

B) Although containing one or more of the hazardous constituents (as defined in Appendix G of 35 Ill. Adm. Code 721) that caused USEPA to list the waste, the waste does not meet the criterion of 35 Ill. Adm. Code 721.111(a)(3) when considering the factors used in 35 Ill. Adm. Code 721.111(a)(3)(A) through (a)(3)(K) under which the waste was listed as hazardous.

2) Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste.

3) The petitioner must demonstrate that the waste does not exhibit any of the characteristics, defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections.

4) A waste that is so excluded, however, may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721.

e) Acute hazardous waste. If the waste is listed with the code "H" in Subpart D of

35 Ill. Adm. Code 721, the following requirements apply:

1) The petitioner must demonstrate that the waste does not meet the criterion of 35 Ill. Adm. Code 721.111(a)(2); and

2) Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "EPA RCRA Delisting Program--Guidance Manual for the Petitioner," incorporated by reference in Section 720.111(a).

3) The petitioner must demonstrate that the waste does not exhibit any of the characteristics, defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections.

4) A waste that is so excluded, however, may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721.

f) This subsection (f) corresponds with 40 CFR 260.22(f), which USEPA has marked "reserved." This statement maintains structural consistency with the federal regulations.

g) This subsection (g) corresponds with 40 CFR 260.22(g), which USEPA has marked "reserved." This statement maintains structural consistency with the federal regulations.

h) Demonstration samples must consist of enough representative samples, but in no case less than four samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.

i) Each petition must include, in addition to the information required by subsection (n) of this Section:

1) The name and address of the laboratory facility performing the sampling or tests of the waste;

2) The names and qualifications of the persons sampling and testing the waste;

3) The dates of sampling and testing;

4) The location of the generating facility;

5) A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;

6) A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;

7) Pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in 35 Ill. Adm. Code 721.111(a)(3);

8) A description of the methodologies and equipment used to obtain the representative samples;

9) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, and preservation of the samples;

10) A description of the tests performed (including results);

11) The names and model numbers of the instruments used in performing the tests; and

12) The following statement signed by the generator or the generator's authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

j) After receiving a petition, the Board may request any additional information that the Board needs to evaluate the petition.

k) An exclusion will only apply to the waste generated at the individual facility covered by the demonstration and will not apply to waste from any other facility.

l) The Board will exclude only part of the waste for which the demonstration is submitted if the Board determines that variability of the waste justifies a partial exclusion.

BOARD NOTE: See "EPA RCRA Delisting Program--Guidance Manual for the Petitioner," incorporated by reference in Section 720.111(a).

m) Delisting of specific wastes from specific sources that have been adopted by USEPA may be proposed as State regulations that are identical in substance pursuant to Section 720.120(a).

n) Delistings that have not been adopted by USEPA may be proposed to the Board pursuant to a petition for adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104. The justification for the adjusted standard is as specified in subsections (a) through (g) of this Section, as applicable to the waste in question. The petition must be clearly labeled as a RCRA delisting adjusted standard petition.

1) In accordance with 35 Ill. Adm. Code 101.304, the petitioner must serve copies of the petition, and any other documents filed with the Board, on USEPA at the following addresses:

USEPA
Office of Solid Waste and Emergency Response
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460

USEPA, Region 5
77 West Jackson Boulevard
Chicago, IL 60604

2) The Board will mail copies of all opinions and orders to USEPA at the above addresses.

3) In conjunction with the normal updating of the RCRA regulations, the Board will maintain, in Appendix I of 35 Ill. Adm. Code 721, a listing of all adjusted standards granted by the Board.

o) The Agency may determine in a permit or a letter directed to a generator that, based on 35 Ill. Adm. Code 721, a waste from a particular source is not subject to these regulations. Such a finding is evidence against the Agency in any subsequent proceedings but will not be conclusive with reference to other persons or the Board.

p) Any petition to delist directed to the Board or request for determination directed to the Agency must include a showing that the waste will be generated or managed in Illinois.

q) The Board will not grant any petition that would render the Illinois RCRA program less stringent than if the decision were made by USEPA.

r) Delistings apply only within Illinois. Generators must comply with 35 Ill. Adm. Code 722 for waste that is hazardous in any state to which it is to be transported.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 720.Appendix A Overview of ~~40 CFR,~~ Federal RCRA Subtitle C (Hazardous Waste) Regulations

See ~~Appendix~~ appendix I to 40 CFR 260 (Overview of Subtitle C Regulations), incorporated by reference in Section 720.111(c).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 721
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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721.101 Purpose and Scope
721.102 Definition of Solid Waste
721.103 Definition of Hazardous Waste
721.104 Exclusions
721.105 Special Requirements for Hazardous Waste Generated by Small Quantity Generators
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SUBPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES

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721.135 Wood Preserving Wastes
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721.Appendix A Representative Sampling Methods
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721.Appendix C Chemical Analysis Test Methods
Table A Analytical Characteristics of Organic Chemicals (Repealed)
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721.Appendix G Basis for Listing Hazardous Wastes
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721.Appendix I Wastes Excluded by Administrative Action
Table A Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Non-Specific Sources
Table B Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Specific Sources
Table C Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof
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721.Appendix J Method of Analysis for Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (Repealed)
721.Appendix Y Table to Section 721.138
721.Appendix Z Table to Section 721.102

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9 at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective

March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective September 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17490, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17531, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1281, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9108, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6584, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. 12760, effective July 17, 2003; amended in R04-16 at 28 Ill. Reg. 10693, effective July 19, 2004; amended in R05-8 at 29 Ill. Reg. 6003, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 721.103 Definition of Hazardous Waste

a) A solid waste, as defined in Section 721.102, is a hazardous waste if the following is true of the waste:

1) It is not excluded from regulation as a hazardous waste under Section 721.104(b); and

2) It meets any of the following criteria:

A) It exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under Subpart C of

this Part is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if the mixture continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Section 721.124 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

B) It is listed in Subpart D of this Part and has not been excluded from the lists in Subpart D of this Part under 35 Ill. Adm. Code 720.120 and 720.122.

C) This subsection (a)(2)(B) corresponds with 40 CFR 261.3(a)(2)(iii), which USEPA removed and marked as "reserved" at 66 Fed. Reg. 27266 (May 16, 2001). This statement maintains structural consistency with the federal regulations.

D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this Part and has not been excluded from this subsection (a)(2) under 35 Ill. Adm. Code 720.120 and 720.122, subsection (g) of this Section, or subsection (h) of this Section; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D of this Part are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this Section) if the generator demonstrates that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities that have eliminated the discharge of wastewater) and the following is true of the waste:

i) It is one or more of the following solvents listed in Section 721.131: carbon tetrachloride, tetrachloroethylene, trichloroethylene, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million;

ii) It is one or more of the following spent solvents listed in Section 721.131: methylene chloride, 1,1,1-trichloro-

ethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million;

iii) It is one of the following wastes listed in Section 721.132, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation: heat exchanger bundle cleaning sludge from the petroleum refining industry (USEPA hazardous waste no. K050), crude oil storage tank sediment from petroleum refining operations (USEPA hazardous waste number K169), clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations (USEPA hazardous waste number K170), spent hydrotreating catalyst (USEPA hazardous waste number K171), and spent hydrorefining catalyst (USEPA hazardous waste number K172);

iv) It is a discarded commercial chemical product or chemical intermediate listed in Section 721.133 arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing;

v) It is wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D of this Part, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater

treatment or pretreatment system or provided that the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation;

vi) It is one or more of the following wastes listed in Section 721.132: wastewaters from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight; or

vii) It is wastewater derived from the treatment of one or more of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K156), provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter.

E) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of this Part. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, ~~by using an analytical method from number SW-846, incorporated by reference at 35 Ill. Adm. Code 720.111,~~ to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of this Part).

i) The rebuttable presumption does not apply to a metalworking oil or fluid containing chlorinated paraffins if it is processed through a tolling arrangement, as described

in 35 Ill. Adm. Code 739.124(c), to reclaim metalworking oils or fluids. The presumption does apply to a metalworking oil or fluid if such an oil or fluid is recycled in any other manner, or disposed.

ii) The rebuttable presumption does not apply to a used oil contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to a used oil contaminated with CFCs that have been mixed with used oil from a source other than a refrigeration unit.

b) A solid waste that is not excluded from regulation under subsection (a)(1) of this Section becomes a hazardous waste when any of the following events occur:

1) In the case of a waste listed in Subpart D of this Part, when the waste first meets the listing description set forth in Subpart D of this Part.

2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D of this Part is first added to the solid waste.

3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C of this Part.

c) Unless and until it meets the criteria of subsection (d) of this Section, a hazardous waste will remain a hazardous waste.

BOARD NOTE: This subsection (c) corresponds with 40 CFR 261.3(c)(1). The Board has codified 40 CFR 261.3(c)(2) at subsection (e) of this Section.

d) Any solid waste described in subsection (e) of this Section is not a hazardous waste if it meets the following criteria:

1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C of this Part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to the requirements of 35 Ill. Adm. Code 728, even if they no longer exhibit a characteristic at the point of land disposal.)

2) In the case of a waste that is a listed waste under Subpart D of this Part, a waste that contains a waste listed under Subpart D of this Part, or a waste that is derived from a waste listed in Subpart D of this Part, it also has been excluded from subsection (e) of this Section under 35 Ill. Adm. Code 720.120 and 720.122.

e) Specific inclusions and exclusions.

1) Except as otherwise provided in subsection (e)(2), (g), or (h) of this Section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

2) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:

A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

B) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(C) and (a)(3)(D).

C) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061, K062, or F006 waste in the units identified in this subsection (e)(2) that are disposed of in non-hazardous waste units, provided that these residues meet the generic exclusion levels identified in the tables in this subsection (e)(2)(C) for all constituents and the residues exhibit no characteristics of hazardous waste. The types of units identified are rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations, or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces); and other furnaces designated by the Agency pursuant to that definition.

i) Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and when the process or operation generating the waste changes.

ii) Persons claiming this exclusion in an enforcement action

will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements. The generic exclusion levels are the following:

Generic exclusion levels for K061 and K062 nonwastewater HTMR residues:

Constituent	Maximum for any single composite sample (~~mg/L~~mg/ℓ)
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Vanadium	1.26
Zinc	70

Generic exclusion levels for F006 nonwastewater HTMR residues:

Constituent	Maximum for any single composite sample (~~mg/L~~mg/ℓ)
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

iii) A one-time notification and certification must be placed in the facility's files and sent to the Agency (or, for out-of-State shipments, to the appropriate Regional Administrator of USEPA or the state agency authorized to implement federal 40 CFR 268 requirements) for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents, which do not exhibit any characteristics, and which are sent to RCRA Subtitle D (municipal solid waste landfill) units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes or if the RCRA Subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Agency on an annual basis if such changes occur. Such notification and certification should be sent to the Agency by the end of the calendar year, but no later than December 31. The notification must include the following information: the name and address of the nonhazardous waste management unit receiving the waste shipment; the USEPA hazardous waste number and treatability group at the initial point of generation; and the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows:

> "I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

D) Biological treatment sludge from the treatment of one of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K156) and wastewaters from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K157).

E) Catalyst inert support media separated from one of the following wastes listed in Section 721.132: spent hydrotreating catalyst (USEPA hazardous waste number K171) and spent hydrorefining catalyst (USEPA hazardous waste number K172).

BOARD NOTE: This subsection (e) would normally correspond with 40 CFR 261.3(e), a subsection that has been deleted and marked "reserved" by USEPA. Rather, this subsection (e) corresponds with 40 CFR 261.3(c)(2), which the Board codified here to comport with codification requirements and to enhance clarity.

f) Notwithstanding subsections (a) through (e) of this Section and provided the debris, as defined in 35 Ill. Adm. Code 728.102, does not exhibit a characteristic identified at Subpart C of this Part, the following materials are not subject to regulation under 35 Ill. Adm. Code 702, 703, 720, 721 to 726, or 728:

1) Hazardous debris as defined in 35 Ill. Adm. Code 728.102 that has been treated using one of the required extraction or destruction technologies specified in Table F to 35 Ill. Adm. Code 728; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

2) Debris, as defined in 35 Ill. Adm. Code 728.102, that the Agency, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

g) Exclusion of certain wastes listed in Subpart D of this Part solely because they exhibit a characteristic of ignitability, corrosivity, or reactivity.

1) A hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more characteristics of ignitability, as defined under Section 721.121; corrosivity, as defined under Section 721.122; or reactivity, as defined under Section 721.123 is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste identified in Subpart C of this Part.

2) The exclusion described in subsection (g)(1) of this Section also pertains to the following:

A) Any mixture of a solid waste and a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D) of this Section; and

B) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (e)(1) of this Section.

3) Wastes excluded under this ~~subection~~ subsection (g) are subject to 35 Ill.

Adm. Code 728 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

h) Eligible radioactive mixed waste.

1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of Subpart N of 35 Ill. Adm. Code 726 (i.e., it is "eligible radioactive mixed waste").

2) The exemption described in subsection (h)(1) of this Section also pertains to the following:

A) Any mixture of a solid waste and an eligible radioactive mixed waste; and

B) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

3) Waste exempted under this subsection (h) must meet the eligibility criteria and specified conditions in 35 Ill. Adm. Code 726.325 and 726.330 (for storage and treatment) and in 35 Ill. Adm. Code 726.410 and 726.415 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.104 Exclusions

a) Materials that are not solid wastes. The following materials are not solid wastes for the purpose of this Part:

1) Sewage.

A) Domestic sewage (untreated sanitary wastes that pass through a sewer system); and

B) Any mixture of domestic sewage and other waste that passes through a sewer system to publicly-owned treatment works for treatment.

2) Industrial wastewater discharges that are point source discharges with National Pollutant Discharge Elimination System (NPDES) permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309.

BOARD NOTE: This exclusion applies only to the actual point source

discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

3) Irrigation return flows.

4) Source, by-product, or special nuclear material, as defined by section 11 of the Atomic Energy Act of 1954, as amended (42 USC ~~2011 et seq.~~ 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

5) Materials subjected to in-situ mining techniques that are not removed from the ground as part of the extraction process.

6) Pulping liquors (i.e., black liquors) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively, as defined in Section 721.101(c).

7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively, as defined in Section 721.101(c).

8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated, where they are reused in the production process, provided that the following is true:

   A) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

   B) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);

   C) The secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

   D) The reclaimed material is not used to produce a fuel or used to produce products that are used in a manner constituting disposal.

9) Wood preserving wastes.

   A) Spent wood preserving solutions that have been used and which are reclaimed and reused for their original intended purpose;

   B) Wastewaters from the wood preserving process that have been reclaimed and which are reused to treat wood; and

   C) Prior to reuse, the wood preserving wastewaters and spent wood

preserving solutions described in subsections (a)(9)(A) and (a)(9)(B) of this Section, so long as they meet all of the following conditions:

i) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water-borne plants in the production process for their original intended purpose;

ii) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

iii) Any unit used to manage wastewaters or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

iv) Any drip pad used to manage the wastewaters or spent wood preserving solutions prior to reuse complies with the standards in Subpart W of 35 Ill. Adm. Code 725, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

v) Prior to operating pursuant to this exclusion, the plant owner or operator submits a one-time notification to the Agency stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Agency for reinstatement. The Agency must reinstate the exclusion in writing if it finds that the plant has returned to compliance with all conditions and that violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. The applicant under this subsection (a)(9)(C)(v) may appeal the Agency's determination to deny the reinstatement, to grant the

reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

10) Hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the toxicity characteristic specified in Section 721.124, when subsequent to generation these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the waste from the point it is generated to the point it is recycled to coke ovens, to tar recovery, to the tar refining processes, or prior to when it is mixed with coal.

11) Nonwastewater splash condenser dross residue from the treatment of hazardous waste number K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

12) Certain oil-bearing hazardous secondary materials and recovered oil, as follows:

A) Oil-bearing hazardous secondary materials (i.e., sludges, by-products, or spent materials) that are generated at a petroleum refinery (standard industrial classification (SIC code 2911) and are inserted into the petroleum refining process (SIC code 2911: including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)), unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this subsection (a)(12), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in subsection (a)(12)(B) of this Section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this Section. Residuals generated from processing or recycling materials excluded under this subsection (a)(12)(A), where such materials as generated would have otherwise met a listing under Subpart D of this Part, are designated as USEPA hazardous waste number F037 listed wastes when disposed of or intended for disposal.

B) Recovered oil that is recycled in the same manner and with the same conditions as described in subsection (a)(12)(A) of this Section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in Subpart D of this Part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil, as defined in 35 Ill. Adm. Code 739.100.

13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

14) Shredded circuit boards being recycled, provided that they meet the following conditions:

A) The circuit boards are stored in containers sufficient to prevent a release to the environment prior to recovery; and

B) The circuit boards are free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries.

15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with federal Clean Air Act regulation 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

16) Comparable fuels or comparable syngas fuels (i.e., comparable or syngas fuels) that meet the requirements of Section 721.138.

17) Spent materials (as defined in Section 721.101) (other than hazardous wastes listed in Subpart D of this Part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by benefication, provided that the following is true:

A) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values;

B) The spent material is not accumulated speculatively;

C) Except as provided in subsection (a)(17)(D) of this Section, the spent material is stored in tanks, containers, or buildings that meet

the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except that smelter buildings may have partially earthen floors, provided that the spent material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 35 Ill. Adm. Code 720.110), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If a tank or container contains any particulate that may be subject to wind dispersal, the owner or operator must operate the unit in a manner that controls fugitive dust. A tank, container, or building must be designed, constructed, and operated to prevent significant releases to the environment of these materials.

D) The Agency must allow by permit that solid mineral processing spent materials only may be placed on pads, rather than in tanks, containers, or buildings if the facility owner or operator can demonstrate the following: the solid mineral processing secondary materials do not contain any free liquid; the pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment; and the pads provide the same degree of containment afforded by the non-RCRA tanks, containers, and buildings eligible for exclusion.

i) The Agency must also consider whether storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, and air exposure pathways must include the following: the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

ii) Pads must meet the following minimum standards: they must be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material; they must be capable of withstanding physical stresses associated with placement and removal; they must have runon and runoff controls; they must be operated in a

manner that controls fugitive dust; and they must have integrity assurance through inspections and maintenance programs.

iii) Before making a determination under this subsection (a)(17)(D), the Agency must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

BOARD NOTE: See Subpart D of 35 Ill. Adm. Code 703 for the RCRA Subtitle C permit public notice requirements.

E) The owner or operator provides a notice to the Agency, providing the following information: the types of materials to be recycled, the type and location of the storage units and recycling processes, and the annual quantities expected to be placed in non-land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

F) For purposes of subsection (b)(7) of this Section, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided that both of the following conditions are true of the oil:

A) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in Section 721.121) or toxicity for benzene (Section 721.124, USEPA hazardous waste code D018);

B) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An “associated organic chemical manufacturing facility” is a facility for which all of the following is true: its primary SIC code is 2869, but its operations may also include SIC codes 2821, 2822, and 2865; it is physically co-located with a petroleum refinery; and the petroleum

refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid, unless the material is placed on the land or accumulated speculatively, as defined in Section 721.101(c).

20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions are satisfied:

A) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in Section 721.101(c)(8).

B) A generator or intermediate handler of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must fulfill the following conditions:

i) It must submit a one-time notice to the Agency that contains the name, address, and USEPA identification number of the generator or intermediate handler facility, that provides a brief description of the secondary material that will be subject to the exclusion, and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

ii) It must store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way which prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and it must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. A tank used for this purpose must be structurally sound and, if outdoors, it must have a roof or cover that prevents contact with wind and rain. A container used for this purpose must be kept closed, except when it is necessary to add or remove material, and it must be in sound condition. Containers that

are stored outdoors must be managed within storage areas that fulfill the conditions of subsection (a)(20)(F) of this Section:

iii) With each off-site shipment of excluded hazardous secondary materials, it must provide written notice to the receiving facility that the material is subject to the conditions of this subsection (a)(20).

iv) It must maintain records at the generator's or intermediate handler's facility for no less than three years of all shipments of excluded hazardous secondary materials. For each shipment these records must, at a minimum, contain the information specified in subsection (a)(20)(G) of this Section.

C) A manufacturer of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must fulfill the following conditions:

i) It must store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subsection (a)(20)(B)(ii) of this Section.

ii) It must submit a one-time notification to the Agency that, at a minimum, specifies the name, address, and USEPA identification number of the manufacturing facility and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

iii) It must maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, the name of transporter, and the date on which the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

iv) It must submit an annual report to the Agency that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year,

the name and address of each generating facility, and the industrial processes from which the hazardous secondary materials were generated.

D) Nothing in this Section preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person who generates a solid waste to determine if that waste is a hazardous waste.

E) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in subsection (a)(20)(B)(i) of this Section, and that afterward will be used only to store hazardous secondary materials excluded under this subsection (a)(20), are not subject to the closure requirements of 35 Ill. Adm. Code 724 and 725.

F) A container used to store excluded secondary material must fulfill the following conditions:

i) It must have containment structures or systems sufficiently impervious to contain leaks, spills, and accumulated precipitation;

ii) It must provide for effective drainage and removal of leaks, spills, and accumulated precipitation; and

iii) It must prevent run-on into the containment system.

BOARD NOTE: Subsections (a)(20)(F)(i) through (a)(20)(F)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(B)(*1*) through (a)(20)(ii)(B)(*3*). The Board added the preamble to these federal paragraphs as subsection (a)(20)(F) to comport with Illinois Administrative Code codification requirements.

G) Required records of shipments of excluded hazardous secondary materials must, at a minimum, contain the following information:

i) The name of the transporter and date of the shipment;

ii) The name and address of the facility that received the excluded material, along with documentation confirming receipt of the shipment; and

iii) The type and quantity of excluded secondary material in each shipment.

BOARD NOTE: Subsections (a)(20)(G)(i) through (a)(20)(G)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(D)(*1*) through (a)(20)(ii)(D)(*3*). The Board added the preamble to these federal paragraphs as subsection (a)(20)(G) to comport with Illinois Administrative Code codification requirements.

21) Zinc fertilizers made from hazardous wastes or hazardous secondary materials that are excluded under subsection (a)(20) of this Section, provided that the following conditions are fulfilled:

A) The fertilizers meet the following contaminant limits:

i) For metal contaminants:

Constituent	Maximum Allowable Total Concentration in Fertilizer, per Unit (1%) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

ii) For dioxin contaminants, the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

B) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less frequently than once every six months, and for dioxins no less frequently than once every 12 months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the products introduced into commerce.

C) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of subsection (a)(21)(B) of this Section. Such records must at a minimum include the following:

i) The dates and times product samples were taken, and the dates the samples were analyzed;

ii) The names and qualifications of the persons taking the samples;

iii) A description of the methods and equipment used to take the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any cleanup and sample preparation methods; and

vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (a)(21).

b) Solid wastes that are not hazardous wastes. The following solid wastes are not hazardous wastes:

1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste must not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this Part, if the following describe the facility:

A) The facility receives and burns only the following waste:

i) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); or

ii) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

B) The facility does not accept hazardous waste and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

BOARD NOTE: The U.S. Supreme Court determined, in City of Chicago v. Environmental Defense Fund, Inc., 511 U.S. 328, 114 S. Ct. 1588, 128 L. Ed. 2d 302 (1994), that this exclusion and RCRA section 3001(i) (42 USC 6921(i)) do not exclude the ash from facilities covered by this subsection (b)(1) from regulation as a hazardous waste. At 59 Fed. Reg. 29372 (June 7, 1994), USEPA granted facilities managing ash from such facilities that is determined a hazardous waste under Subpart C of this Part until December 7, 1994 to file a Part A permit application pursuant to 35 Ill. Adm. Code 703.181. At 60 Fed. Reg. 6666 (Feb. 3, 1995), USEPA stated that it interpreted that the point at which ash becomes subject to RCRA Subtitle C regulation is when that material leaves the combustion building (including connected air pollution control equipment).

2) Solid wastes generated by any of the following that are returned to the soil as fertilizers:

A) The growing and harvesting of agricultural crops, or

B) The raising of animals, including animal manures.

3) Mining overburden returned to the mine site.

4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided in 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

6) Chromium wastes.

A) Wastes that fail the test for the toxicity characteristic (Section 721.124 and Appendix B to this Part) because chromium is present or which are listed in Subpart D of this Part due to the presence of chromium, that do not fail the test for the toxicity characteristic for any other constituent or which are not listed due to the presence of any other constituent, and that do not fail the test for any other characteristic, if the waste generator shows the following:

i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;

ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and

the process does not generate hexavalent chromium; and

iii) The waste is typically and frequently managed in non-oxidizing environments.

B) The following are specific wastes that meet the standard in subsection (b)(6)(A) of this Section (so long as they do not fail the test for the toxicity characteristic for any other constituent and do not exhibit any other characteristic):

i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue;

iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;

vii) Waste scrap leather from the leather tanning industry, the

shoe manufacturing industry, and other leather product manufacturing industries; and

viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.

7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

A) For purposes of this subsection (b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting; autoclaving or chlorination in preparation for leaching (except where the roasting (or autoclaving or chlorination) and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; floatation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat tank, and in situ leaching.

B) For the purposes of this subsection (b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:

i) Slag from primary copper processing;

ii) Slag from primary lead processing;

iii) Red and brown muds from bauxite refining;

iv) Phosphogypsum from phosphoric acid production;

v) Slag from elemental phosphorus production;

vi) Gasifier ash from coal gasification;

vii) Process wastewater from coal gasification;

viii) Calcium sulfate wastewater treatment plant sludge from primary copper processing;

ix) Slag tailings from primary copper processing;

x) Fluorogypsum from hydrofluoric acid production;

xi) Process wastewater from hydrofluoric acid production;

xii) Air pollution control dust or sludge from iron blast furnaces;

xiii) Iron blast furnace slag;

xiv) Treated residue from roasting and leaching of chrome ore;

xv) Process wastewater from primary magnesium processing by the anhydrous process;

xvi) Process wastewater from phosphoric acid production;

xvii) Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production;

xviii) Basic oxygen furnace and open hearth furnace slag from carbon steel production;

xix) Chloride processing waste solids from titanium tetrachloride production; and

xx) Slag from primary zinc production.

C) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under this subsection (b) if the following conditions are fulfilled:

i) The owner or operator processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and

ii) The owner or operator legitimately reclaims the secondary mineral processing materials.

8) Cement kiln dust waste, except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

9) Solid waste that consists of discarded arsenical-treated wood or wood products that fails the test for the toxicity characteristic for hazardous

waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons that utilize the arsenical-treated wood and wood products for these materials' intended end use.

10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of Section 721.124 (hazardous waste codes D018 through D043 only) and which are subject to corrective action regulations under 35 Ill. Adm. Code 731.

11) This subsection (b)(11) corresponds with 40 CFR 261.4(b)(11), which expired by its own terms on January 25, 1993. This statement maintains structural parity with USEPA regulations.

12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems, that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

13) Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this Part, if these oil filters have been gravity hot-drained using one of the following methods:

A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;

B) Hot-draining and crushing;

C) Dismantling and hot-draining; or

D) Any other equivalent hot-draining method that will remove used oil.

14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed of, under the following circumstances:

A) The following conditions must be fulfilled:

i) The solid wastes disposed of would meet one or more of the listing descriptions for the following USEPA hazardous waste numbers that are generated after the effective date

listed for the waste:

USEPA Hazardous Waste Numbers	Listing Effective Date
K169, K170, K171, and K172	February 8, 1999
K174 and K175	May 7, 2001
K176, K177, and K178	May 20, 2002
K181	August 23, 2005

ii) The solid wastes described in subsection (b)(15)(A)(i) of this Section were disposed of prior to the effective date of the listing (as set forth in that subsection);

iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor is derived from any other listed hazardous waste; and

iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under section 307(b) or 402 of the federal Clean Water Act.

B) Leachate or gas condensate derived from K169, K170, K171, ~~or~~ K172, ~~waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from~~ K176, K177, or K178 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subsection (b)(15) ~~of this Section~~ after the emergency ends.

c) Hazardous wastes that are exempted from certain regulations. A hazardous waste that is generated in a product or raw material storage tank, a product or raw

material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit, or an associated non-waste-treatment manufacturing unit, is not subject to regulation under 35 Ill. Adm. Code 702, 703, 722 through 725, and 728 or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing or for storage or transportation of product or raw materials.

d) Samples.

1) Except as provided in subsection (d)(2) of this Section, a sample of solid waste or a sample of water, soil, or air that is collected for the sole purpose of testing to determine its characteristics or composition is not subject to any requirements of this Part or 35 Ill. Adm. Code 702, 703, 722 through 726, and 728. The sample qualifies when it fulfills one of the following conditions:

A) The sample is being transported to a laboratory for the purpose of testing;

B) The sample is being transported back to the sample collector after testing;

C) The sample is being stored by the sample collector before transport to a laboratory for testing;

D) The sample is being stored in a laboratory before testing;

E) The sample is being stored in a laboratory for testing but before it is returned to the sample collector; or

F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

2) In order to qualify for the exemption in subsection (d)(1)(A) or (d)(1)(B) of this Section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must do the following:

A) Comply with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

B) Comply with the following requirements if the sample collector

determines that USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

i) Assure that the following information accompanies the sample: The sample collector's name, mailing address, and telephone number; the laboratory's name, mailing address, and telephone number; the quantity of the sample; the date of the shipment; and a description of the sample; and

ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.

3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1) of this Section.

e) Treatability study samples.

1) Except as is provided in subsection (e)(2) of this Section, a person that generates or collects samples for the purpose of conducting treatability studies, as defined in 35 Ill. Adm. Code 720.110, are not subject to any requirement of 35 Ill. Adm. Code 721 through 723 or to the notification requirements of section 3010 of the Resource Conservation and Recovery Act. Nor are such samples included in the quantity determinations of Section 721.105 and 35 Ill. Adm. Code 722.134(d) when:

A) The sample is being collected and prepared for transportation by the generator or sample collector;

B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

2) The exemption in subsection (e)(1) of this Section is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that the following conditions are fulfilled:

A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, ~~1000~~ 1,000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, or ~~2500~~ 2,500 kg of media contaminated with acute hazardous waste

for each process being evaluated for each generated waste stream;

B) The mass of each shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include ~~2500~~ 2,500 kg of media contaminated with acute hazardous waste, ~~1000~~ 1,000 kg of hazardous waste, and 1 kg of acute hazardous waste;

C) The sample must be packaged so that it does not leak, spill, or vaporize from its packaging during shipment and the requirements of ~~subsections~~ subsection (e)(2)(C)(i) or (e)(2)(C)(ii) of this Section are met.

i) The transportation of each sample shipment complies with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

ii) If the USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number;

D) The sample is shipped to a laboratory or testing facility that is exempt under subsection (f) of this Section, or has an appropriate RCRA permit or interim status;

E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

i) Copies of the shipping documents;

ii) A copy of the contract with the facility conducting the treatability study; and

iii) Documentation showing the following: The amount of waste shipped under this exemption; the name, address, and USEPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and whether or not unused samples and residues

were returned to the generator; and

F) The generator reports the information required in subsection (e)(2)(E)(iii) of this Section in its report under 35 Ill. Adm. Code 722.141.

3) The Agency may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsections (e)(2)(A), (e)(2)(B), and (f)(4) of this Section, for up to an additional ~~5000~~ 5,000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, ~~2500~~ 2,500 kg of media contaminated with acute hazardous waste, and 1 kg of acute hazardous waste under the circumstances set forth in either subsection (e)(3)(A) or (e)(3)(B) of this Section, subject to the limitations of subsection (e)(3)(C) of this Section:

A) In response to requests for authorization to ship, store, and conduct further treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), the size of the unit undergoing testing (particularly in relation to scale-up considerations), the time or quantity of material required to reach steady-state operating conditions, or test design considerations, such as mass balance calculations.

B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies when the following occurs: There has been an equipment or mechanical failure during the conduct of the treatability study, there is need to verify the results of a previously-conducted treatability study, there is a need to study and analyze alternative techniques within a previously-evaluated treatment process, or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

C) The additional quantities allowed and timeframes allowed in subsections (e)(3)(A) and (e)(3)(B) of this Section are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (e)(2)(F) of this Section. The generator or sample collector must apply to the Agency and provide in writing the following information:

i) The reason why the generator or sample collector requires additional time or quantity of sample for the treatability

study evaluation and the additional time or quantity needed;

ii) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies, including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

iii) A description of the technical modifications or change in specifications that will be evaluated and the expected results;

iv) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

v) Such other information as the Agency determines is necessary.

4) Final Agency determinations pursuant to this subsection (e) may be appealed to the Board.

f) Samples undergoing treatability studies at laboratories or testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 722 through 726, and 728 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act, provided that the requirements of subsections (f)(1) through (f)(11) of this Section are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11) of this Section. Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11) of this Section apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

1) No less than 45 days before conducting treatability studies, the facility notifies the Agency in writing that it intends to conduct treatability studies under this subsection (f).

2) The laboratory or testing facility conducting the treatability study has a

USEPA identification number.

3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, ~~2500~~ 2,500 kg of media contaminated with acute hazardous waste, or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, ~~2500~~ 2,500 kg of media contaminated with acute hazardous waste, ~~1000~~ 1,000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including non-hazardous solid waste) added to "as received" hazardous waste.

5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

   A) The name, address, and USEPA identification number of the generator or sample collector of each waste sample;

   B) The date the shipment was received;

   C) The quantity of waste accepted;

   D) The quantity of "as received" waste in storage each day;

   E) The date the treatment study was initiated and the amount of "as

received" waste introduced to treatment each day;

F) The date the treatability study was concluded;

G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.

8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

9) The facility prepares and submits a report to the Agency by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:

A) The name, address, and USEPA identification number of the facility conducting the treatability studies;

B) The types (by process) of treatability studies conducted;

C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);

D) The total quantity of waste in storage each day;

E) The quantity and types of waste subjected to treatability studies;

F) When each treatability study was conducted; and

G) The final disposition of residues and unused sample from each treatability study.

10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703, and 721 through 728, unless the residues and unused samples are returned to the sample originator under the exemption of subsection (e) of this Section.

11) The facility notifies the Agency by letter when the facility is no longer planning to conduct any treatability studies at the site.

g) Dredged material that is not a hazardous waste. Dredged material that is subject to

the requirements of a permit that has been issued under section 404 of the Federal Water Pollution Control Act (33 USC 1344) is not a hazardous waste. For the purposes of this subsection (g), the following definitions apply:

"Dredged material" has the ~~same~~ meaning ~~as~~ ascribed it in 40 CFR 232.2 (Definitions), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

"Permit" means any of the following:

A permit issued by the U.S. Army Corps of Engineers (Army Corps) under section 404 of the Federal Water Pollution Control Act (33 USC 1344);

A permit issued by the Army Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 USC 1413); or

In the case of Army Corps civil works projects, the administrative equivalent of the permits referred to in the preceding two paragraphs of this definition, as provided for in Army Corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.105 Special Requirements for Hazardous Waste Generated by Small Quantity Generators

a) A generator is a conditionally exempt small quantity generator in a calendar month if it generates no more than 100 kilograms of hazardous waste in that month.

b) Except for those wastes identified in subsections (e), (f), (g), and (j) of this Section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under 35 Ill. Adm. Code 702, 703, 722 through 726, and 728, and the notification requirements of section 3010 of Resource Conservation and Recovery Act, provided the generator complies with the requirements of subsections (f), (g), and (j) of this Section.

c) When making the quantity determinations of this Part and 35 Ill. Adm. Code 722, the generator must include all hazardous waste that it generates, except the following hazardous waste:

1) Hazardous waste that is exempt from regulation under Section 721.104(c) through (f), 721.106(a)(3), 721.107(a)(1), or 721.108;

2) Hazardous waste that is managed immediately upon generation only in on-site elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities, as defined in 35 Ill. Adm. Code 720.110;

3) Hazardous waste that is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under Section 721.106(c)(2);

4) Hazardous waste that is used oil managed under the requirements of Section 721.106(a)(4) and 35 Ill. Adm. Code 739;

5) Hazardous waste that is spent lead-acid batteries managed under the requirements of Subpart G of 35 Ill. Adm. Code 726; and

6) Hazardous waste that is universal waste managed under Section 721.109 and 35 Ill. Adm. Code 733.

d) In determining the quantity of hazardous waste it generates, a generator need not include the following:

1) Hazardous waste when it is removed from on-site storage;

2) Hazardous waste produced by on-site treatment (including reclamation) of its hazardous waste so long as the hazardous waste that is treated was counted once;

3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

e) If a generator generates acute hazardous waste in a calendar month in quantities greater than those set forth in subsections (e)(1) and (e)(2) of this Section, all quantities of that acute hazardous waste are subject to full regulation under 35 Ill. Adm. Code 702, 703, 722 through 726, and 728, and the notification requirements of section 3010 of the Resource Conservation and Recovery Act.

1) A total of one kilogram of one or more of the acute hazardous wastes listed in Section 721.131, 721.132, or 721.133(e); or

2) A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any one or more of the acute hazardous wastes listed in Section 721.131, 721.132, or 721.133(e).

BOARD NOTE: "Full regulation" means those regulations applicable to generators of greater than ~~1000~~ 1,000 kg of non-acute hazardous waste in a calendar month.

f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in subsection (e)(1) or (e)(2) of this Section to be excluded from full regulation under this Section, the generator must comply with the following requirements:

1) 35 Ill. Adm. Code 722.111.

2) The generator may accumulate acute hazardous waste on-site. If the generator accumulates at any time acute hazardous wastes in quantities greater than set forth in subsection (e)(1) or (e)(2) of this Section, all of those accumulated wastes are subject to regulation under 35 Ill. Adm. Code 702, 703, 722 through 726, and 728, and the applicable notification requirements of section 3010 of the Resource Conservation and Recovery Act. The time period of 35 Ill. Adm. Code 722.134(a), for accumulation of wastes on-site, begins when the accumulated wastes exceed the applicable exclusion limit.

3) A conditionally exempt small quantity generator may either treat or dispose of its acute hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, any of which, if located in the United States, meets any of the following conditions:

A) The facility is permitted under 35 Ill. Adm. Code 702 and 703;

B) The facility has interim status under 35 Ill. Adm. Code 702, 703, and 725;

C) The facility is authorized to manage hazardous waste by a state with a hazardous waste management program approved by USEPA pursuant to 40 CFR 271;

D) The facility is permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill facility, the landfill is subject to 35 Ill. Adm. Code 810 through 814 or federal 40 CFR 258;

E) The facility is permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, the unit is subject to the requirements of federal 40 CFR 257.5 through 257.30;

BOARD NOTE: The Illinois non-hazardous waste landfill regulations, 35 Ill. Adm. Code 810 through 814, do not allow the

disposal of hazardous waste in a landfill regulated under those rules. The Board intends that subsections (f)(3)(D) and (f)(3)(E) of this Section impose a federal requirement on the hazardous waste generator. The Board specifically does not intend that these subsections authorize any disposal of conditionally-exempt small quantity generator waste in a landfill not specifically permitted to accept the particular hazardous waste.

F) The facility is one that fulfills one of the following conditions:

i) It beneficially uses or reuses or legitimately recycles or reclaims its waste; or

ii) It treats its waste prior to beneficial use or reuse or legitimate recycling or reclamation; or

G) For universal waste managed under 35 Ill. Adm. Code 733 or federal 40 CFR 273, the facility is a universal waste handler or destination facility subject to the requirements of 35 Ill. Adm. Code 733 or federal 40 CFR 273.

g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this Section, the generator must comply with the following requirements:

1) 35 Ill. Adm. Code 722.111;

2) The conditionally exempt small quantity generator may accumulate hazardous waste on-site. If it accumulates at any time more than a total of ~~1000~~ 1,000 kilograms of the generator's hazardous waste, all of those accumulated wastes are subject to regulation under the special provisions of 35 Ill. Adm. Code 722 applicable to generators of between 100 kg and ~~1000~~ 1,000 kg of hazardous waste in a calendar month, as well as the requirements of 35 Ill. Adm. Code 702, 703, 723 through 726, and 728, and the applicable notification requirements of Section 3010 of the Resource Conservation and Recovery Act. The time period of 35 Ill. Adm. Code 722.134(d) for accumulation of wastes on-site begins for a small quantity generator when the accumulated wastes exceed ~~1000~~ 1,000 kilograms;

3) A conditionally exempt small quantity generator may either treat or dispose of its hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, any of which, if located in the United States, meets any of the following conditions:

A) The facility is permitted under 35 Ill. Adm. Code 702 and 703;

B) The facility has interim status under 35 Ill. Adm. Code 702, 703, and 725;

C) The facility is authorized to manage hazardous waste by a state with a hazardous waste management program approved by USEPA ~~under~~ pursuant to 40 CFR 271 ~~(2002)~~;

D) The facility is permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill facility, the landfill is subject to 35 Ill. Adm. Code 810 through 814 or federal 40 CFR 258;

E) The facility is permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, the unit is subject to the requirements of federal 40 CFR 257.5 through 257.30;

BOARD NOTE: The Illinois non-hazardous waste landfill regulations, 35 Ill. Adm. Code 810 through 814, do not allow the disposal of hazardous waste in a landfill regulated under those rules. The Board intends that subsections (g)(3)(D) and (g)(3)(E) of this Section impose a federal requirement on the hazardous waste generator. The Board specifically does not intend that these subsections authorize any disposal of conditionally-exempt small quantity generator waste in a landfill not specifically permitted to accept the particular hazardous waste.

F) The facility is one that fulfills the following conditions:

i) It beneficially uses or re-uses, or legitimately recycles or reclaims the small quantity generator's waste; or

ii) It treats its waste prior to beneficial use or re-use or legitimate recycling or reclamation; or

G) For universal waste managed under 35 Ill. Adm. Code 733 or federal 40 CFR 273, the facility is a universal waste handler or destination facility subject to the requirements of 35 Ill. Adm. Code 733 or federal 40 CFR 273.

h) Hazardous waste subject to the reduced requirements of this Section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations

identified in this Section, unless the mixture meets any of the characteristics of hazardous wastes identified in Subpart C of this Part.

i) If a small quantity generator mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this Section, the mixture is subject to full regulation.

j) If a conditionally exempt small quantity generator's hazardous wastes are mixed with used oil, the mixture is subject to 35 Ill. Adm. Code 739. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.107 Residues of Hazardous Waste in Empty Containers

a) Applicability of rules.

1) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in subsection (b) of this Section, is not subject to regulation under 35 Ill. Adm. Code 702, 703, 721 through 725, or 728, or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

2) Any hazardous waste in either a container that is not empty or an inner liner that is removed from a container that is not empty, as defined in subsection (b) of this Section, is subject to regulations under 35 Ill. Adm. Code 702, 703, 721 through 725, and 728 and to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

b) Definition of "empty":

1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Sections 721.131, 721.132, or 721.133(e), is empty if the conditions of subsections (b)(1)(A) and (b)(1)(B) of this Section exist, subject to the limitations of subsection (b)(1)(C) of this Section:

A) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and

B) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

C) Weight limits.

i) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons (416 liters) in size, until September 5, 2006, or 119 gallons (450 liters) in size, effective September 5, 2006; or

ii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons (416 liters) in size, until September 5, 2006, or 119 gallons (450 liters) in size, effective September 5, 2006.

2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches ambient atmospheric pressure.

3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in ~~Sections~~ Section 721.131, 721.132, or 721.133(e) is empty if any of the following occurs:

A) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

B) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.108 PCB Wastes Regulated under TSCA

Polychlorinatedbiphenyl-(PCB-)containing dielectric fluid and electric equipment containing such fluid ~~that are authorized for use and regulated under 40 CFR 761 and which are hazardous only because they fail the test for toxicity characteristic (hazardous waste codes D018 through D043 only),~~ are exempt from regulation under 35 Ill. Adm. Code 702, 703, 721 through 725, and 728, and from the notification requirements of Section 3010 of the Resource Conservation and Recovery Act~~.~~ if the following conditions are fulfilled with regard to the fluid:

a) The fluid is authorized for use and regulated pursuant to federal 40 CFR 761; and

b) The fluid is hazardous only because it fails the test for toxicity characteristic (hazardous waste codes D018 through D043 only).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES

Section 721.110 Criteria for Identifying the Characteristics of Hazardous Waste

a) USEPA stated in corresponding federal 40 CFR 261.10 that it identifies and defines a characteristic of hazardous waste in Subpart C of this Part only upon determining the following:

1) That a solid waste that exhibits the characteristic may do either of the following:

A) It could cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

B) It could pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and

2) That the characteristic can be as follows:

A) It can be measured by an available standardized test method that is reasonable within the capability of generators of solid waste or private sector laboratories that are available to serve generators of solid waste; or

B) It can reasonably be detected by generators of solid waste through their knowledge of their waste.

b) Delisting procedures are contained in 35 Ill. Adm. Code 720.122.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.111 Criteria for Listing Hazardous Waste

a) USEPA stated in corresponding federal 40 CFR 261.11 that it lists a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:

1) The solid waste exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part; or

2) Acute hazardous waste. The solid waste has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 mg/kg, an inhalation LC 50 toxicity (rat) of less than 2 ~~mg/L~~mg/ℓ, or a dermal LD 50 toxicity (rabbit) of less than 200 mg/kg or is otherwise capable of causing or significantly contributing to an increase in serious irreversible or incapacitating reversible, illness.

   BOARD NOTE: Waste listed in accordance with these criteria are designated Acute Hazardous Waste.

3) Toxic waste. The solid waste contains any of the toxic constituents listed in Appendix H of this Part and, after considering the following factors, USEPA concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed:

   BOARD NOTE: Substances are listed in Appendix H of this Part only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms.

   A) The nature of the toxicity presented by the constituent;

   B) The concentration of the constituent in the waste;

   C) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in subsection (a)(3)(G) of this Section;

   D) The persistence of the constituent or any toxic degradation product of the constituent;

   E) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation;

   F) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems;

   G) The plausible types of improper management to which the waste could be subjected;

H) The quantities of the waste generated at individual generation sites or on a regional or national basis;

I) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of the wastes containing the constituent;

J) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent; and

K) Such other factors as may be appropriate.

BOARD NOTE: Wastes listed in accordance with these criteria are designated toxic wastes.

b) USEPA stated in corresponding federal 40 CFR 261.11(b) that it may list classes or types of solid waste as hazardous waste if USEPA has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 1004(5) of the federal Resource Conservation and Recovery Act (42 USC 6904(5)).

c) USEPA will use the criteria for listing specified in this Section to establish the exclusion limits referred to in Section 721.105(c).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

Section 721.121 Characteristic of Ignitability

a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM ~~D 93~~D 93-85 (Standard Test Methods for Flash Point by Pensky-Martens Closed Tester), ~~incorporated by reference in 35 Ill. Adm. Code 720.111,~~ or a Setaflash Closed Cup Tester, using the test method specified in ASTM ~~Standard D 3828~~ D 3828-87, (Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester), each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a)~~, or as determined by an equivalent test method approved by the Board (35 Ill. Adm. Code 720.120)~~.

2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

3) It is ~~an ignitable compressed~~ a flammable gas, as defined in federal 49 CFR ~~173.300~~ 173.115 (Class 2, Divisions 2.1, 2.2, and 2.3--Definitions), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), and as determined by the test methods described in that regulation or equivalent test methods approved by the Board (35 Ill. Adm. Code 720.120).

BOARD NOTE: Corresponding 40 CFR 261.21(a)(3) cites to 49 CFR 173.300 for a definition of "ignitable compressed gas." That provision has been removed by USDOT, and it is marked "reserved." 49 CFR 173.115 now defines a "flammable gas" as a Division 2.1 material. The Board has updated the Illinois provision to correspond with the current USDOT regulations.

4) It is an oxidizer, as defined in federal 49 CFR ~~173.151~~ 173.127 (Class 5, Division 5.1--Definition and Assignment of Packaging Groups), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

BOARD NOTE: Corresponding 40 CFR 261.21 cites to 49 CFR 173.151 for a definition of "oxidizer." 49 CFR 173.127 classifies an oxidizer as a Division 5.1 material. The Board has updated the Illinois provision to correspond with the current USDOT regulations.

b) A solid waste that exhibits the characteristic of ignitability has the USEPA hazardous waste number of D001.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.122 Characteristic of Corrosivity

a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method ~~9040~~ 9040C (pH Electrometric Measurement) in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55° C (130° F), as determined by ~~the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in~~ Method 1110A (Corrosivity Toward Steel) in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

BOARD NOTE: The corrosivity characteristic determination currently does not apply to non-liquid wastes, as discussed by USEPA at 45 Fed. Reg. 33109, May 19, 1980 and at 55 Fed. Reg. 22549, June 1, 1990.

b) A solid waste that exhibits the characteristic of corrosivity has the USEPA hazardous waste number of D002.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.123 Characteristic of Reactivity

a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

1) It is normally unstable and readily undergoes violent change without detonating.

2) It reacts violently with water.

3) It forms potentially explosive mixtures with water.

4) When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.

6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

8) It is a forbidden explosive, as defined in federal 49 CFR ~~173.51,~~ 173.54 (Forbidden Explosives) or a ~~Class A~~ Division 1.1, 1.2, or 1.3 explosive, as

defined in 49 CFR ~~173.53~~ 173.50 (Class 1--Definitions), ~~or a Class B explosive, as defined in 49 CFR 173.88,~~ each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

BOARD NOTE: Corresponding 40 CFR 261.23 cites to 49 CFR 173.51 for a definition of "forbidden explosive," to 49 CFR 173.53 for a definition of "Class A explosive," and to 49 CFR 173.88 for a definition of "Class B explosive." 49 CFR 173.54 now sets forth the definition of "forbidden explosive," and 49 CFR 173.53 explains that what were once Class A explosives and Class B explosives are now classified as Division 1.1, Division 1.2, and Division 1.3 materials. The Board has updated the Illinois provision to correspond with the current USDOT regulations.

b) A solid waste that exhibits the characteristic of reactivity has the USEPA hazardous waste number of D003.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.124 Toxicity Characteristic

a) A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using ~~the Toxicity Characteristic Leaching Procedure (TCLP), test~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, as incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), the extract from a representative sample of the waste contains any of the contaminants listed in the table in subsection (b) of this Section at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this Section.

BOARD NOTE: The reference to the "EP toxicity test" in 35 Ill. Adm. Code 808.410(b)(4) is to be understood as referencing the test required by this Section.

b) A solid waste that exhibits the characteristic of toxicity has the USEPA hazardous waste number specified in the following table that corresponds to the toxic contaminant causing it to be hazardous.

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR
THE TOXICITY CHARACTERISTIC

USEPA Hazardous Waste No.	Contaminant	CAS Number	Note	Regulatory Level (~~mg/L~~mg/ℓ)
D004	Arsenic	7440-38-2		5.0
D005	Barium	7440-39-3		100.0
D018	Benzene	71-43-2		0.5
D006	Cadmium	7440-43-9		1.0
D019	Carbon tetrachloride	56-23-5		0.5
D020	Chlordane	57-74-9		0.03
D021	Chlorobenzene	108-90-7		100.0
D022	Chloroform	67-66-3		6.0
D007	Chromium	7440-47-3		5.0
D023	o-Cresol	95-48-7	2	200.0
D024	m-Cresol	108-39-4	2	200.0
D025	p-Cresol	106-44-5	2	200.0
D026	Cresol		2	200.0
D016	2,4-D	94-75-7		10.0
D027	1,4-Dichlorobenzene	106-46-7		7.5
D028	1,2-Dichloroethane	107-06-2		0.5
D029	1,1-Dichloroethylene	75-35-4		0.7
D030	2,4-Dinitrotoluene	121-14-2	1	0.13
D012	Endrin	72-20-8		0.02
D031	Heptachlor (and its epoxide)	76-44-8		0.008
D032	Hexachlorobenzene	118-74-1	1	0.13
D033	Hexachlorobutadiene	87-68-3		0.5
D034	Hexachloroethane	67-72-1		3.0
D008	Lead	7439-92-1		5.0
D013	Lindane	58-89-9		0.4
D009	Mercury	7439-97-6		0.2
D014	Methoxychlor	72-43-5		10.0
D035	Methyl ethyl ketone	78-93-3		200.0
D036	Nitrobenzene	98-95-3		2.0
D037	Pentachlorophenol	87-86-5		100.0
D038	Pyridine	110-86-1	1	5.0
D010	Selenium	7782-49-2		1.0
D011	Silver	7440-22-4		5.0
D039	Tetrachloroethylene	127-18-4		0.7
D015	Toxaphene	8001-35-2		0.5
D040	Trichloroethylene	79-01-6		0.5
D041	2,4,5-Trichlorophenol	95-95-4		400.0
D042	2,4,6-Trichlorophenol	88-06-2		2.0

D017	2,4,5-TP (Silvex)	93-72-1	1.0
D043	Vinyl chloride	75-01-4	0.2

Notes to Table:

1 Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.

2 If o-, m-, p-cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200.0 ~~mg/L~~mg/ℓ.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.130 General

a) A solid waste is a hazardous waste if it is listed in this Subpart D, unless it has been excluded from this list ~~under~~ pursuant to 35 Ill. Adm. Code 720.120 and 720.122.

b) The basis for listing the classes or types of wastes listed in this Subpart D is indicated by employing one or more of the following hazard codes:

1) Hazard Codes.

A)	Ignitable waste	(I)
B)	Corrosive waste	(C)
C)	Reactive waste	(R)
D)	Toxicity Characteristic waste	(E)
E)	Acute hazardous waste	(H)
F)	Toxic waste	(T)

2) Appendix G of this Part identifies the constituent that caused the Administrator to list the waste as a toxicity characteristic waste (E) or toxic waste (T) in Sections 721.131 and 721.132.

c) Each hazardous waste listed in this Subpart D is assigned ~~an~~ a USEPA hazardous waste number that precedes the name of the waste. This number must be used in complying with the federal notification requirements of ~~Section~~ section 3010 of

RCRA (42 USC 6910) and certain recordkeeping and reporting requirements under 35 Ill. Adm. Code 702, 703, 722 through 725, and 728 and federal 40 CFR 122.

d) The following hazardous wastes listed in Section 721.131 or 721.132 are subject to the exclusion limits for acute hazardous wastes established in Section 721.105: hazardous wastes numbers F020, F021, F022, F023, F026, and F027.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.132 Hazardous Waste from Specific Sources

a) The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under 35 Ill. Adm. Code 720.120 and 720.122 and listed in Appendix I of this Part.

USEPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
	Wood Preservation Process Wastes:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
	Inorganic Pigments Production Wastes:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)

K008	Oven residue from the production of chrome oxide green pigments.	(T)

Organic Chemicals Production Wastes:

K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)

K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene di-isocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K095	Distillation bottoms from the production of 1,1,1-tri-chloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)

K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(C, T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I, T)
K109	Spent filter cartridges from the product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product wastewaters from the production of dinitrotoluene via nitration of toluene.	(C, T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)

K118	Spent adsorbent solids from purification of ethylene di-bromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K159	Organics from the treatment of thiocarbamate wastes.	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R, T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (1) the sludges are disposed of in a RCRA Subtitle C (42 USC 6921-6939e) or non-hazardous landfill licensed or permitted by a state or the federal government; (2) the sludges are not otherwise placed on the land prior to final disposal; and (3) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a	(T)

written commitment to dispose of the waste in an off-site landfill. Upon a showing by the government that a respondent in any enforcement action brought to enforce the requirements of Subtitle C of this Part managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, the respondent must demonstrate that it meets the conditions of the exclusion that are set forth above. In doing so, the respondent must provide appropriate documentation that the terms of the exclusion were met (e.g., contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.).

K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)

Inorganic Chemicals Production Wastes:

K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed of, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	(T)
<u>K181</u>	<u>Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of</u>	<u>(T)</u>

generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (c) of this Section that are equal to or greater than the corresponding subsection (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are managed in one of the following ways:

1) They are disposed of in a municipal solid waste landfill unit that is subject to the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402;

2) They are disposed of in a hazardous waste landfill unit that is subject to either 35 Ill. Adm. Code 724.401 or 725.401;

3) They are disposed of in other municipal solid waste landfill units that meet the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402, 35 Ill. Adm. Code 724.401, or 35 Ill. Adm. Code 725.401; or

4) They are treated in a combustion unit that is permitted under 415 ILCS 5/39(d), or an onsite combustion unit that is permitted under 415 ILCS 5/39.5.

For the purposes of this listing, dyes or pigments production is defined in subsection (b)(1) of this Section. Subsection (d) of this Section describes the process for demonstrating that a facility's nonwastewaters are not K181 waste. This listing does not apply to wastes that are otherwise identified as hazardous under Sections 721.121 through 721.124 and 721.131 through 721.133 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met, as set forth in subsection (c) of this Section.

Pesticides Production Wastes:

K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)

K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdi-thiocarbamic acid and its salts.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
	Explosives Production Wastes:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
	Petroleum Refining Wastes:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)

K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations.	(T)
K170	Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations.	(T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)

Iron and Steel Production Wastes:

K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332) (as defined in 35 Ill. Adm. Code 720.110).	(C, T)

Primary Aluminum Production Wastes:

K088	Spent potliners from primary aluminum reduction.	(T)

Secondary Lead Production Wastes:

K069	Emission control dust/sludge from secondary lead smelting.	(T)

BOARD NOTE: This listing is administratively stayed for sludge generated

from secondary acid scrubber systems. The stay will remain in effect until this note is removed.

K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)

Veterinary Pharmaceuticals Production Wastes:

K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)

Ink Formulation Wastes:

K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, dryers, soaps and stabilizers containing chromium and lead.	(T)

Coke Production Wastes:

K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)

K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	(T)
K149	Distillation bottoms from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

b) Listing-specific definition: For the purposes of the K181 hazardous waste listing in subsection (a) of this Section, "dyes or pigments production" includes manufacture of the following product classes: dyes, pigments, and FDA-certified colors that are in the azo, triarylmethane, perylene, and anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes or pigments

manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes or pigments, are not included in the K181 listing.

c) K181 listing levels. Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 hazardous waste listing in subsection (a) of this Section, unless the conditions in the K181 hazardous waste listing are met:

Constituent		Chemical Abstracts No.		Mass Levels (kg/yr)
Aniline		62-53-3		9,300
o-Anisidine		90-04-0		110
4-Chloroaniline		106-47-8		4,800
p-Cresidine		120-71-8		660
2,4-Dimethylaniline		95-68-1		100
1,2-Phenylenediamine		95-54-5		710
1,3-Phenylenediamine		108-45-2		1,200

d) Procedures for demonstrating that dyes or pigments nonwastewaters are not K181 waste. The procedures described in subsections (d)(1) through (d)(3) and (d)(5) of this Section establish when nonwastewaters from the production of dyes or pigments would not be hazardous. (These procedures apply to wastes that are not disposed of in landfill units or treated in combustion units, as specified in subsection (a) of this Section). If the nonwastewaters are disposed of in landfill units or treated in combustion units as described in subsection (a) of this Section, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 waste listing description, the generator must maintain documentation as described in subsection (d)(4) of this Section.

1) Determination based on no K181 waste constituents. A generator that has knowledge (e.g., knowledge of constituents in wastes based on prior sampling and analysis data or information about raw materials used, production processes used, and reaction and degradation products formed) that its waste contains none of the K181 waste constituents (see subsection (c) of this Section) can use its knowledge to determine that its waste is not K181 waste. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

2) Determination for generated quantities of 1,000 tonnes (1,000 metric tons) per year or less for wastes that contain K181 waste constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is 1,000 tonnes or less, the generator can use knowledge of the wastes (e.g., knowledge of constituents in wastes based on prior analytical data or

information about raw materials used, production processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of subsection (c) of this Section. To make this determination, the generator must fulfill the following conditions:

A) Each year, the generator must document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 tonnes;

B) The generator must track the actual quantity of nonwastewaters generated from January 1 through December 31 of each calendar year. If, at any time within the year, the actual waste quantity exceeds 1,000 tonnes, the generator must comply with the requirements of subsection (d)(3) of this Section for the remainder of that calendar year;

C) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year; and

D) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations were made:

i) The quantity of dyes or pigments nonwastewaters generated;

ii) The relevant process information used; and

iii) The calculations performed to determine annual total mass loadings for each K181 waste constituent in the nonwastewaters during the year.

3) Determination for generated quantities greater than 1,000 tonnes per year for wastes that contain K181 constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is greater than 1,000 tonnes, the generator must perform each of the following steps in order to make a determination that its waste is not K181 waste:

A) The generator must determine which K181 waste constituents (see subsection (c) of this Section) are reasonably expected to be present in the wastes based on knowledge of the wastes (e.g., based on prior sampling and analysis data or information about raw materials used, production processes used, and reaction and degradation products formed);

B) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge of the wastes or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge of the wastes, the generator must comply with the procedures for using knowledge of the wastes described in subsection (d)(2) of this Section and keep the records described in subsection (d)(2)(D) of this Section. For determinations based on sampling and analysis, the generator must comply with the sampling and analysis and recordkeeping requirements described in subsection (d)(3)(C) of this Section;

C) The generator must develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 waste constituents reasonably expected to be present in the wastes. At a minimum, the plan must include the following elements:

i) A discussion of the number of samples needed to characterize the wastes fully;

ii) The planned sample collection method to obtain representative waste samples;

iii) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes; and

iv) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods;

D) The generator must collect and analyze samples in accordance with the waste sampling and analysis plan, and the plan must fulfill the following requirements:

i) The sampling and analysis must be unbiased, precise, and representative of the wastes; and

ii) The analytical measurements must be sufficiently sensitive, accurate, and precise to support any claim that the constituent mass loadings are below the listing levels of subsection (c) of this Section;

E) The generator must record the analytical results;

F) The generator must record the waste quantity represented by the sampling and analysis results;

G) The genrator must calculate constituent-specific mass loadings (product of concentrations and waste quantity);

H) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year;

I) The generator must determine whether the mass of any of the K181 waste constituents listed in subsection (c) of this Section generated between January 1 and December 31 of any calendar year is below the K181 waste listing levels;

J) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

i) The sampling and analysis plan;

ii) The sampling and analysis results (including quality assurance or quality control data);

iii) The quantity of dyes or pigments nonwastewaters generated; and

iv) The calculations performed to determine annual mass loadings; and

K) The generator must conduct non-hazardous waste determinations annually to verify that the wastes remain non-hazardous.

i) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are non-hazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

ii) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

iii) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a non-hazardous determination. If testing is reinstated, the generator must retain a description of the process change.

4) Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 waste listing description in subsection (a) of this Section, the generator must maintain on-site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or which meets the landfill design standards set out in the listing description or that the waste was treated in combustion units, as specified in the listing description in subsection (a) of this Section.

5) Waste holding and handling. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator must store the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the hazardous waste storage requirements of 35 Ill. Adm. Code 722.134 during the interim period, the generator could be subject to an enforcement action for improper hazardous waste management.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.135 Wood Preserving Wastes

a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (b) and (c) of this Section. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

b) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.

1) Generators must do one of the following:

A) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this Section; or

B) Prepare and follow an equipment replacement plan and replace equipment in accordance with this Section; or

C) Document cleaning and replacement in accordance with this Section, carried out after termination of use of chlorophenolic

preservatives.

2) Cleaning requirements.

A) The generator must prepare and sign a written equipment cleaning plan that describes the following:

i) The equipment to be cleaned;

ii) How the equipment will be cleaned;

iii) The solvent to be used in cleaning;

iv) How solvent rinses will be tested; and

v) How cleaning residues will be disposed of.

B) Equipment must be cleaned as follows:

i) Remove all visible residues from process equipment; and

ii) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

C) Analytical requirements.

i) Rinses must be tested ~~in accordance with SW-846, Method 8290, incorporated by reference in 35 Ill. Adm. Code 720.111~~ by using an appropriate method.

ii) "Not detected" means at or below the following lower method calibration ~~limit (MCL) in Method 8290, Table 1~~ limit (MCL): the 2,3,7,8-TCDD-based MCL is 0.01 parts per trillion (ppt), using a sample weight of 1000 g, an IS spiking level of 1 ppt, and a final extraction volume of 10 to 50 µℓ. For other congeners, multiply the values by 1 for TCDF, PeCDD, or PeCDF; by 2.5 for HxCDD, HxCDF, HpCDD, or HpCDF; or by 5 for OCDD or OCDF.

D) The generator must manage all residues from the cleaning process as F032 waste.

3) Replacement requirements.

A) Prepare and sign a written equipment replacement plan that

describes the following:

i) The equipment to be replaced;

ii) How the equipment will be replaced; and

iii) How the equipment will be disposed of.

B) The generator must manage the discarded equipment as F032 waste.

4) Documentation requirements. Document that previous equipment cleaning and replacement was performed in accordance with this Section and ocurred after cessation of use of chlorophenolic preservatives.

c) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

1) The name and address of the facility;

2) Formulations previously used and the date on which their use ceased in each process at the plant;

3) Formulations currently used in each process at the plant;

4) The equipment cleaning or replacement plan;

5) The name and address of any persons who conducted the cleaning and replacement;

6) The dates on which cleaning and replacement were accomplished;

7) The dates of sampling and testing;

8) A description of the sample handling and preparation techniques used for extraction, containerization, preservation and chain-of-custody of the samples;

9) A description of the tests performed, the date the tests were performed and the results of the tests;

10) The name and model numbers of the instruments used in performing the tests;

11) QA/QC documentation; and

12) The following statement signed by the generator or the generator's authorized representative:

> I certify under penalty of law that all process equipment required to be cleaned or replaced under 35 Ill. Adm. Code 721.135 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.138 Comparable or Syngas Fuel Exclusion

Wastes that meet the following comparable or syngas fuel requirements are not solid wastes:

a) Comparable fuel specifications.

1) Physical specifications.

A) Heating value. The heating value must exceed 5,000 Btu/lb (11,500 J/g).

B) Viscosity. The viscosity must not exceed 50 cs, as fired.

2) Constituent specifications. For the compounds listed, the constituent specification levels and minimum required detection limits (where non-detect is the constituent specification) are set forth in the table at subsection (d) of this Section.

b) Synthesis gas fuel specification. Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must fulfill the following requirements:

1) It must have a minimum Btu value of 100 Btu/Scf;

2) It must contain less than 1 ppmv of total halogen;

3) It must contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N_2);

4) It must contain less than 200 ppmv of hydrogen sulfide; and

5) It must contain less than 1 ppmv of each hazardous constituent in the target list of constituents listed in Appendix H of this Part.

c) Implementation. Waste that meets the comparable or syngas fuel specifications

provided by subsection (a) or (b) of this Section (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in subsection (c)(3) or (c)(4) of this Section) is excluded from the definition of solid waste provided that the following requirements are met:

1) Notices. For purposes of this Section, the person claiming and qualifying for the exclusion is called the comparable or syngas fuel generator and the person burning the comparable or syngas fuel is called the comparable or syngas burner. The person that generates the comparable fuel or syngas fuel must claim and certify to the exclusion.

   A) Notice to the Agency.

      i) The generator must submit a one-time notice to the Agency, certifying compliance with the conditions of the exclusion and providing documentation, as required by subsection (c)(1)(A)(iii) of this Section;

      ii) If the generator is a company that generates comparable or syngas fuel at more than one facility, the generator must specify at which sites the comparable or syngas fuel will be generated;

      iii) A comparable or syngas fuel generator's notification to the Agency must contain the items listed in subsection (c)(1)(C) of this Section.

   B) Public notice. Prior to burning an excluded comparable or syngas fuel, the burner must publish in a major newspaper of general circulation, local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable or Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

      i) The name, address, and USEPA identification number of the generating facility;

      ii) The name and address of the units that will burn the comparable or syngas fuel;

      iii) A brief, general description of the manufacturing, treatment, or other process generating the comparable or syngas fuel;

      iv) An estimate of the average and maximum monthly and

annual quantity of the waste claimed to be excluded; and

v) The name and mailing address of the Agency office to which the claim was submitted.

C) Required content of comparable or syngas notification to the Agency.

i) The name, address, and USEPA identification number of the person or facility claiming the exclusion;

ii) The applicable USEPA hazardous waste codes for the hazardous waste;

iii) The name and address of the units that meet the requirements of subsection (c)(2) of this Section that will burn the comparable or syngas fuel; and

iv) The following statement, signed and submitted by the person claiming the exclusion or its authorized representative:

> Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 35 Ill. Adm. Code 721.138 have been met for all waste identified in this notification. Copies of the records and information required by 35 Ill. Adm. Code 721.138(c)(10) are available at the comparable or syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BOARD NOTE: Subsections (c)(1)(C)(i) through (c)(1)(C)(iv) are derived from 40 CFR 261.138(c)(1)(i)(C)(*1*) and (c)(1)(i)(C)(*4*), which the Board has codified here to comport with Illinois Administrative Code format requirements.

2) Burning. The comparable or syngas fuel exclusion for fuels that meet the requirements of subsections (a) or (b) and (c)(1) of this Section applies

only if the fuel is burned in the following units that also must be subject to federal, State, and local air emission requirements, including all applicable federal Clean Air Act (CAA) maximum achievable control technology (MACT) requirements:

A) Industrial furnaces, as defined in 35 Ill. Adm. Code 720.110;

B) Boilers, as defined in 35 Ill. Adm. Code 720.110, that are further defined as follows:

i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

C) Hazardous waste incinerators subject to regulation under Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or applicable CAA MACT standards.

D) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

3) Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification must fulfill the following requirements:

A) As generated and prior to any blending, manipulation, or processing, the waste must meet the constituent and heating value specifications of subsections (a)(1)(A) and (a)(2) of this Section;

B) The waste must be blended at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134; and

C) The waste must not violate the dilution prohibition of subsection (c)(6) of this Section.

4) Treatment to meet the comparable fuel exclusion specifications.

A) A hazardous waste may be treated to meet the exclusion specifications of subsections (a)(1) and (a)(2) of this Section provided the treatment fulfills the following requirements:

i) The treatment destroys or removes the constituent listed in

the specification or raises the heating value by removing or destroying hazardous constituents or materials;

ii) The treatment is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134; and

iii) The treatment does not violate the dilution prohibition of subsection (c)(6) of this Section.

B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a comparable fuel remain a hazardous waste.

5) Generation of a syngas fuel.

A) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of subsection (b) of this Section provided the processing fulfills the following requirements:

i) The processing destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;

ii) The processing is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134 or is an exempt recycling unit pursuant to Section 721.106(c); and

iii) The processing does not violate the dilution prohibition of subsection (c)(6) of this Section.

B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a syngas fuel remain a hazardous waste.

6) Dilution prohibition for comparable and syngas fuels. No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must in any way dilute a hazardous waste to meet the exclusion specifications of subsection (a)(1)(A), (a)(2), or (b) of this Section.

7) Waste analysis plans. The generator of a comparable or syngas fuel must develop and follow a written waste analysis plan that describes the procedures for sampling and analysis of the hazardous waste to be

excluded. ~~The waste analysis plan must be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846).~~ The plan must be followed and retained at the facility excluding the waste.

A) At a minimum, the plan must specify the following:

i) The parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;

ii) The test methods that will be used to test for these parameters;

iii) The sampling method that will be used to obtain a representative sample of the waste to be analyzed;

iv) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

v) If process knowledge is used in the waste determination, any information prepared by the generator in making such determination.

B) The waste analysis plan must also contain records of the following:

i) The dates and times waste samples were obtained, and the dates the samples were analyzed;

ii) The names and qualifications of the persons who obtained the samples;

iii) A description of the temporal and spatial locations of the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any clean-up and sample preparation methods;

vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from

analytical methods written in the plan or from any other activity written in the plan that occurred;

vii) All laboratory results demonstrating that the exclusion specifications have been met for the waste; and

viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (c)(11) of this Section and also provides for the availability of the documentation to the claimant upon request.

C) Syngas fuel generators must submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of subsection (c)(7)(A) of this Section to the Agency. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.

8) Comparable fuel sampling and analysis.

A) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents on Appendix H of this Part, except those that the generator determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. The generator may not determine that any of the following categories of constituents should not be present:

i) A constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in 35 Ill. Adm. Code 728.140;

ii) A constituent detected in previous analysis of the waste;

iii) Constituents introduced into the process that generates the waste; or

iv) Constituents that are byproducts or side reactions to the

process that generates the waste.

B) For each waste for which the exclusion is claimed where the generator of the comparable or syngas fuel is not the original generator of the hazardous waste, the generator of the comparable or syngas fuel may not use process knowledge pursuant to subsection (c)(8)(A) of this Section and must test to determine that all of the constituent specifications of subsections (a)(2) and (b) of this Section have been met.

C) The comparable or syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate the following:

i) That each constituent of concern is not present in the waste above the specification level at the 95 percent upper confidence limit around the mean; and

ii) That the analysis could have detected the presence of the constituent at or below the specification level at the 95 percent upper confidence limit around the mean.

D) Nothing in this subsection (c)(8) preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person that generates a solid waste to determine if that waste is a hazardous waste.

E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification must be on the generator claiming the exclusion.

F) The generator must conduct sampling and analysis in accordance with its waste analysis plan developed under subsection (c)(7) of this Section.

G) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications must be analyzed as generated.

H) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator must undertake the following actions:

i) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and

ii) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable or syngas fuel specifications.

I) Excluded comparable or syngas fuel must be retested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

~~Note to subsection (c)(8):~~ BOARD NOTE: Any claim under this Section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

9) Speculative accumulation. Any persons handling a comparable or syngas fuel are subject to the speculative accumulation test under Section 721.102(c)(4).

10) Records. The generator must maintain records of the following information on-site:

A) All information required to be submitted to the implementing authority as part of the notification of the claim:

i) The owner or operator name, address, and RCRA facility USEPA identification number of the person claiming the exclusion;

ii) The applicable USEPA hazardous waste codes for each hazardous waste excluded as a fuel; and

iii) The certification signed by the person claiming the exclusion or his authorized representative;

B) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;

C) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;

D) Documentation for any claim that a constituent is not present in the hazardous waste, as required under subsection (c)(8)(A) of this

Section;

E) The results of all analyses and all detection limits achieved, as required under subsection (c)(8) of this Section;

F) If the excluded waste was generated through treatment or blending, documentation, as required under subsection (c)(3) or (c)(4) of this Section;

G) If the waste is to be shipped off-site, a certification from the burner, as required under subsection (c)(12) of this Section;

H) A waste analysis plan and the results of the sampling and analysis that include the following:

i) The dates and times waste samples were obtained, and the dates the samples were analyzed;

ii) The names and qualifications of the persons that obtained the samples;

iii) A description of the temporal and spatial locations of the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any clean-up and sample preparation methods;

vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;

vii) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and

viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (c)(11) of this Section and also provides for the availability of the documentation to the claimant upon request; and

I) If the generator ships comparable or syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:

i) The name and address of the facility receiving the comparable or syngas fuel for burning;

ii) The quantity of comparable or syngas fuel shipped and delivered;

iii) The date of shipment or delivery;

iv) A cross-reference to the record of comparable or syngas fuel analysis or other information used to make the determination that the comparable or syngas fuel meets the specifications, as required under subsection (c)(8) of this Section; and

v) A one-time certification by the burner, as required under subsection (c)(12) of this Section.

11) Records retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three-year period.

12) Burner certification. Prior to submitting a notification to the Agency, a comparable or syngas fuel generator that intends to ship its fuel off-site for burning must obtain a one-time written, signed statement from the burner that includes the following:

A) A certification that the comparable or syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under subsection (c)(2) of this Section;

B) Identification of the name and address of the units that will burn the comparable or syngas fuel; and

C) A certification that the state in which the burner is located is authorized to exclude wastes as comparable or syngas fuel under the provisions of this Section.

13) Ineligible waste codes. Wastes that are listed because of presence of dioxins or furans, as set out in Appendix G of this Part, are not eligible for this exclusion, and any fuel produced from or otherwise containing these

wastes remains a hazardous waste subject to full RCRA hazardous waste management requirements.

d) Table Y of this Part sets forth the table of detection and detection limit values for comparable fuel specification.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix A Representative Sampling Methods

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling protocols listed below, for sampling waste with properties similar to the indicated materials, are considered by USEPA to be representative of the waste.

Extremely viscous liquid: ASTM Standard D140–70~~,~~ (Standard Practice for Sampling Bituminous Materials), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

Crushed or powdered material: ASTM Standard D346–75~~,~~ (Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

Soil or rock-like material: ASTM Standard D420–69~~,~~ (Guide to Site Characterization for Engineering, Design, and Construction Purposes), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

~~Soillike~~ Soil-like material: ASTM Standard D1452–65~~,~~ (Standard Practice for Soil Investigation and Sampling by Auger Borings), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

Fly ~~Ash-like~~ ash-like material: ASTM Standard D2234–76~~,~~ (Standard Practice for Collection of a Gross Sample of Coal), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

Containerized liquid wastes: "Composite Liquid Waste Sampler (COLIWASA)." ~~described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.~~
~~BOARD NOTE: This method is also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2–80–018, January 1980.~~

Liquid waste in pits, ponds, lagoons, and similar reservoirs: "Pond Sampler~~,~~." ~~described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.~~
~~BOARD NOTE: This manual also contains additional information on application of these protocols. This method is also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2–80–018, January 1980, incorporated by reference in 35 Ill. Adm. Code 720.111..~~

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix B Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) (Repealed)

~~NOTE: The TCLP (Method 1311) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.~~

(Source: Repealed at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix C Chemical Analysis Test Methods (Repealed)

~~NOTE: Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure," found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.~~

(Source: Repealed at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix G Basis for Listing Hazardous Wastes

USEPA hazardous waste No.	Hazardous constituents for which listed
F001	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichlorethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).

F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their clorophenoxy derivative acids, esters, ethers, amines, and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F023	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetra- chlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorochylopentadiene, hexachlorocylohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
F025	Chloromethane, dicloromethane, trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene; pentachloroethane; hexachloroethane; allyl chloride (3-chloropropene); dichloropropane; dichloropropene; 2-chloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F032	Benz(a)anthracene; benzo(a)pyrene; dibenz(a,h)anthracene; indeno(1,2,3-cd)pyrene; pentachlorophenol; arsenic; chromium; tetra-, penta-, hexa-, and heptachlorordibenzo-p-dioxins; tetra-, penta-, hexa-, and heptachlorodibenzofurans.
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.
F035	Arsenic, chromium, lead.

F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F038	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and ~~non-wastewaters~~ nonwastewaters) under Table B to 35 Ill. Adm. Code 728 (Constituent Concentrations in Waste).
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenol, 2,4- dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4- dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a) anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead.
K003	Hexavalent chromium, lead.
K004	Hexavalent chromium.
K005	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers (bis(chloromethyl) ether and bis- (2-chloroethyl) ethers), trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloro-ethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoguinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2,4-diamine.

K028	1,1,1-trichloroethane, vinyl chloride.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene, benzo(b) fluoranthene, benzo(a)-pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K064	Lead, cadmium.
K065	Lead, cadmium.
K066	Lead, cadmium.
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K088	Cyanide (complexes).

K090	Chromium.
K091	Chromium.
K093	Phthalic anhydride, maleic anhydride.
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phynylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.
K111	2,4-Dinitrotoluene.
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K115	2,4-Toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K117	Ethylene dibromide.
K118	Ethylene dibromide.
K123	Ethylene thiourea.
K124	Ethylene thiourea.
K125	Ethylene thiourea.
K126	Ethylene thiourea.
K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene.
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene.
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene.
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.

K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine.
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine.
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride.
K159	Benzene, butylate, EPTC, molinate, pebulate, vernolate.
K161	Antimony, arsenic, metam-sodium, ziram.
K169	Benzene.
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo (a) anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene.
K171	Benzene, arsenic.
K172	Benzene, arsenic.
K174	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), all hexachlorodibenzo-p-dioxins (HxCDDs), all hexachlorodibenzofurans (HxCDFs), all pentachlorodibenzo-p-dioxins (PeCDDs), 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD), 1,2,3,4,6,7,8,9- octachlorodibenzofuran (OCDF), all pentachlorodibenzofurans (PeCDFs), all tetrachlorodibenzo-p-dioxins (TCDDs), all tetrachlorodibenzofurans (TCDFs).
K175	Mercury.
K176	Arsenic, lead.
K177	Antimony.
K178	Thallium.
<u>K181</u>	<u>Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine.</u>

N.A.--Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity, or reactivity.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix H Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number (CAS No.)	USEPA Hazard-ous Waste Number
A2213	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, ~~O-[(methylamino)carbonyl]oxime~~ O-((methylamino)carbonyl)-oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2- (methyl-sulfonyl)-, ~~O-[(methylamino)-carbonyl]oxime~~ O-((methylamino)carbonyl)oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1-α,4-α,4a-β,5-α,8-α,8a-β)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro-	107-18-6	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	~~[1,1'-Biphenyl]-4-amine~~ (1,1'-Biphenyl)-4-amine	92-67-1	
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(amino-methyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	U119
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90–04–0	
Antimony	Same	7440-36-0	

Antimony compounds, N.O.S. (not otherwise specified)			
Aramite	Sulfurous acid, 2-chloroethyl-, ~~2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl~~ 2-(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester	140-57-8	
Arsenic	Arsenic	7440-38-2	
Arsenic compounds, N.O.S.			
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine,~~-4,4'-carbonimidoylbis[N, N-dimethyl-~~ 4,4'-carbonimidoylbis(N, N-dimethyl-	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S.			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol-2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol-2,2-dimethyl-,	22961-82-6	U364
Benomyl	Carbamic acid, ~~[1-[(butylamino)-carbonyl]-1H-benzimidazol-2-yl]-~~ (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	17804-35-2	U271
~~Benz[c]acridine~~Benz(c)acridine	Same	225-51-4	U016
~~Benz[a]anthracene~~Benz(a)anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U018
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	~~[1,1'-Biphenyl]-4,4'-diamine~~ (1,1'-Biphenyl)-4,4'-diamine	92-87-5	U021
~~Benzo[b]fluoranthene~~ Benzo(b)fluoranthene	~~Benz[e]acephenanthrylene~~ Benz(e)acephenanthrylene	205-99-2	
~~Benzo[j]fluoranthene~~ Benzo(j)fluoranthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
~~Benzo[a]pyrene~~Benzo(a)pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023

Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.			
Bis(pentamethylene)thiuram tetrasulfide	Piperidine, 1,1'-(tetrathio-dicarbonothioyl)-bis-	120-54-7	
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butylate	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008-41-5	
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Cacodylic acid	Arsenic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.			
Calcium chromate	Chromic acid H_2CrO_4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide $Ca(CN)_2$	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbosulfan	Carbamic acid, ~~[(dibutylamino)-thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl~~ ((dibutylamino)thio)methyl-2,3-dihydro-2,2-dimethyl-7-benzo-furanyl ester	55285-14-8	P189
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difuoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, ~~4[bis-(2-chloroethyl)amino]-~~ 4(bis-(2-chloroethyl)amino)-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane, α and γ isomers			U036
Chlorinated benzenes, N.O.S.			
Chlorinated ethane, N.O.S.			

Chlorinated fluorocarbons, N.O.S.			
Chlorinated naphthalene, N.O.S.			
Chlorinated phenol, N.O.S.			
Chlornaphazine	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, ~~1-[(2,5-dimethoxyphenyl)azo]-~~ 1-((2,5-dimethoxyphenyl)azo)-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamo-dithioato-S,S')-,	137-29-1	
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120–71–8	
Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202
Cyanides (soluble salts and complexes), N.O.S.			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	β-D-glucopyranoside, (methyl-ONN-azoxy)methyl-	14901-08-7	

Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, ~~N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide~~ N,N-bis(2-chloroethyl)tetrahydro-2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters		U240
Daunomycin	5, 12-Naphthacenedione, ~~8-acetyl-10-[(3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-l-methoxy-, 8S-cis)-~~ 8-acetyl-10-((3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-l-methoxy-, 8S-cis)-	20830-81-3	U059
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	
DDD	Benzene, ~~1,1'-(2,2-dichloroethylidene)bis[4-chloro-~~ 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	72-54-8	U060
DDE	Benzene, ~~1,1'-(dichloroethenylidene)bis[4-chloro-~~ 1,1'-(dichloroethenylidene)bis(4-chloro-	72-55-9	
DDT	Benzene, ~~1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-~~ 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
~~Dibenz[a,h]acridine~~ Dibenz(a,h)acridine	Same	226-36-8	
~~Dibenz[a,j]acridine~~ Dibenz(a,j)acridine	Same	224-42-0	
~~Dibenz[a,h]anthracene~~ Dibenz(a,h)anthracene	Same	53-70-3	U063

~~7H-Dibenzo[c,g]carbazole~~ 7H-Dibenzo(c,g)carbazole	Same	194-59-2	
~~Dibenzo[a,e]pyrene~~ Dibenzo(a,e)pyrene	~~Naphtho[1,2,3,4-def]chrysene~~ Naphtho(1,2,3,4-def)chrysene	192-65-4	
~~Dibenzo[a,h]pyrene~~ Dibenzo(a,h)pyrene	~~Dibenzo[b,def]chrysene~~Dibenzo(b,def)chrysene	189-64-0	
~~Dibenzo[a,i]pyrene~~ Dibenzo(a,i)pyrene	~~Benzo[rst]pentaphene~~ Benzo(rst)pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	~~[1,1'-Biphenyl]-4,4'-diamine,~~ (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane,~~ 1,1'-oxybis[2-chloro-~~ 1,1'-oxybis(2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane,~~ 2,2'-oxybis[2-chloro-~~ 2,2'-oxybis(2-chloro-	108-60-1	U027
Dichloromethoxyethane	Ethane,~~ 1,1'-[methylenebis(oxy)-bis[2-chloro-~~ 1,1'-(methylenebis-(oxy)bis(2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane,~~ oxybis[chloro-~~ oxybis(chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	~~2,7:3,6-Dimethanonaphth[2, 3-b]-oxirene,~~ 2,7:3,6-Dimethanonaphth(2, 3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085

Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl-S-methyl dithio-phosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitro-phenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, ~~O,O-dimethyl S-[2-(methylamino)-2-oxoethyl]~~ O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	60-51-5	P044
~~Dimetilan~~	~~Carbamic acid, dimethyl-, 1-[(dimethylamino) carbonyl]-5-methyl-1H-pyrazol-3-yl ester~~	~~644-64-4~~	~~P191~~
3,3'-Dimethoxybenzidine	~~[1,1'-Biphenyl]-4,4'-diamine,~~ (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95–68–1	
~~7,12-Dimethylbenz[a]anthracene~~	~~Benz[a]anthracene,~~	57-97-6	U094
7,12-Dimethylbenz(a)anthracene	Benz(a)anthracene, 7,12-dimethyl-		
3,3'-Dimethylbenzidine	~~[1,1'-Biphenyl]-4,4'-diamine,~~ (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
α,α-Dimethylphenethylamine	Benzeneethanamine, α, α-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101

Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1-((dimethylamino) carbonyl)-5-methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl ~~S-[2-(ethylthio)ethyl]~~ S-(2-(ethylthio)ethyl) ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide ~~[(H$_2$N)C(S)]$_2$NH~~((H$_2$N)C(S))$_2$NH	541-53-7	P049
Endosulfan	6, 9-Methano-2,4,3-benzodioxa-thiepen,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,	115-29-7	P050
Endothal	~~7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid~~ 7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	~~2,7:3,6-Dimethanonaphth[2,3-b]-oxirene,~~ 2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a α,2β,2aβ,3α,6α,6aβ,7β,7aα)-,	72-20-8	P051
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041

Epinephrine	1,2-Benzenediol, ~~4-[1-hydroxy-2-(methylamino)ethyl]-~~, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-	51-43-4	P042
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidine dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Ethyl Ziram	Zinc, bis(diethylcarbamo-dithioato-S,S')-	14324-55-1	U407
Famphur	Phosphorothioc acid, ~~O-[4-[(dimethylamino)sulfonyl]-phenyl]~~ O-(4-((dimethylamino)sulfonyl)-phenyl) O,O-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamo-dithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, ~~N,N-dimethyl-N'-[3-[[(methylamino)-carbonyl]oxy]phenyl]-~~ N,N-dimethyl-N'-(3-(((methylamino)-carbonyl)oxy)phenyl)-, mono-hydrochloride	23422-53-9	P198
Formic acid	Same	64-18-16	U123

Formparanate	Methanimidamide, ~~N,N-dimethyl-N'-[2-methyl-4-[[(methylamino)carbonyl]oxy]-phenyl]-~~ N,N-dimethyl-N'-(2-methyl-4-(((methylamino)-carbonyl)oxy)phenyl)-	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxaldehyde	765-34-4	U126
Halomethanes, N.O.S.			
Heptachlor	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	~~2,5-Methano-2H-indeno[1,2b]oxirene,~~ 2,5-Methano-2H-indeno(1, 2b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-	1024-57-3	
Heptachlor epoxide (α, β, and γ isomers)			
Heptachlorodibenzofurans			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexa-chloro-	87-68-3	U128
Hexachlorocyclo-pentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, ~~2,2'-methylenebis[3,4,6-trichloro-~~ 2,2'-methylene-bis(3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H_2S	7783-06-4	U135
~~Indeno[1,2,3-cd]pyrene~~	Same	193-39-5	U137
Indeno(1,2,3-cd)pyrene			
3-Iodo-2-propynyl-n-butyl-carbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140

Isodrin	1,4:5,8-Dimethanonaph-thalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-,	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	~~1,3,4-Metheno-2H-cyclobuta[cd]-pentalen-2-one,~~ 1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-,	143-50-0	U142
Lasiocarpine	2-Butenoic acid,~~ 2-methyl-, 7-[[2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1-α(Z),7(2S*,3R*),7aα]]-~~ 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-l-yl ester, (1S-(1-α(Z),7(2S*,3R*),7aα))-	303-34-1	U143
Lead	Same	7439-92-1	
Lead and compounds, N.O.S.			
Lead acetate	Acetic acid, lead (2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead (2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetra-hydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexa-chloro-, 1α,2α,3β,4α,5α,6β)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithio-carbamate	Manganese, bis(dimethyl-carbamodithioato-S,S')-,	15339-36-3	P196
Melphalan	L-Phenylalanine,~~ 4-[bis(2-chloro-ethyl)amino]-~~ 4-(bis(2-chloro-ethyl)amino)-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.			

Mercury fulminate	Fulminic acid, mercury (2+) salt	628-86-4	P065
Metam Sodium	Carbamodithioic acid, methyl-, monosodium salt	137-42-8	
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155
Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7	P199
Metholmyl	Ethanimidothioic acid, ~~N-[[(methylamino)carbonyl]oxy]-~~, N-(((methyl-amino)carbonyl)oxy)-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, ~~1,1'-(2,2,2-trichloro-ethylidene)bis[4-methoxy-~~ 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methylchlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	~~Benz[j]aceanthrylene,~~ Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis(2-chloro-aniline)	Benzenamine, ~~4,4'-methylene-bis[2-chloro-~~ 4,4'-methylene-bis(2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164

Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	~~Azirino[2', 3':3, 4]pyrrolo[1, 2-a]indole-4, 7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1a-S-(1aα,8β,8aα,8bα)]-~~,Azirino(2', 3':3, 4)pyrrolo(1, 2-a)indole-4, 7-dione, 6-amino-8-(((amino-carbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-,	50-07-7	U010
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas	Ethane,~~1,1'-thiobis[2-chloro-~~ 1,1'-thiobis(2-chloro-	505-60-2	U165
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
α-Naphthylamine	1-Naphthalenamine	134-32-7	U167
β-Naphthylamine	2-Naphthalenamine	91-59-8	U168
α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S.			
Nickel carbonyl	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide $Ni(CN)_2$	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	P078
Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	

Nitrogen mustard, N-oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.		35576-91-1	
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin.	3268-87-9	
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachloro-dibenzofuran.	39001-02-0	
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO_4, (T-4)	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, ~~2-(dimethylamino)-N-[[(methylamino)carbonyl]oxy]-2-oxo-~~, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofurans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184

Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
1,2-Phenylenediamine	1,2-Benzenediamine	95–54–5	
1,3-Phenylenediamine	1,3-Benzenediamine	108–45–2	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] O,O-diethyl S-((ethylthio)methyl) ester	298-02-2	P094
Phthalic acid esters, N.O.S.			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-ol, Pyrrolo-(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.			
Potassium cyanide	Same	151-50-8	P098
Potassium dimethyldithio-carbamate	Carbamodithioc acid, dimethyl, potassium salt	128-03-0	
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioc acid, (hydroxy-methyl)methyl-, monopotassium salt	51026-28-9	
Potassium n-methyldithio-carbamate	Carbamodithioc acid, methyl-monopotassium salt	137-41-7	
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium)	506-61-6	P099
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None

Promecarb	Phenol, 3-methyl-5-(1-methyl-ethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, ~~11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-,~~ 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S.			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS_2	7488-56-4	U205
Selenium, tetrakis(dimethyl-dithiocarbamate	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with ortho-thioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.			
Silver cyanide	Silver cyanide AgCN	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide NaCN	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl-, sodium salt	136-30-1	

Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, ~~2-deoxy-2-[[(methyl-nitrosoamino)carbonyl]amino]-~~ 2-deoxy-2-(((methylnitroso-amino)carbonyl)amino)-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	~~Dibenzo[b,e][1,4]dioxin,~~ Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans			
Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol, potassium salt	Same	53535276	None
2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567559	None
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium (I) acetate	Acetic acid, thallium (1+) salt	563-68-8	U214
Thallium (I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium (I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium (I) nitrate	Nitric acid, thallium (1+) salt	10102-45-1	U217

Thallium selenite	Selenious acid, dithallium (1+) salt	12039-52-0	P114
Thallium (I) sulfate	Sulfuric acid, dithallium (1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, ~~N,N'-[thiobis[(methylimino)-carbonyloxy]]-bis-,~~ N,N'-(thiobis((methylimino)-carbonyloxy))-bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-,~~ O-[(methylamino)carbonyl]oxime~~ O-((methylamino)carbonyl)-oxime	39196-18-4	P045
Thiophanate-methyl	Carbamic acid, ~~[1,2-phyenylenebis(iminocarbono-thioyl)]-bis-,~~ (1,2-phyenylenebis(iminocarbono-thioyl))-bis-, dimethyl ester	23564-05-8	U409
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	P219
Thiram	Thioperoxydicarbonic diamide ~~$[(H_2N)C(S)]_2S_2$,~~ $((H_2N)C(S))_2S_2$, tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,~~ O-[(methylamino)-carbonyl] oxime~~ O-((methyl-amino)carbonyl)oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanato-methyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzeneamine, 2-methyl-, hydro-chloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389

1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichloro-phenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(l-aziridinyl)phosphine sulfide	Aziridine, 1,1',1”-phosphino-thioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, ~~3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)-bis(azo)]bis[5-amino-4-hydroxy],~~ 3,3'-((3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)-bis(azo))bis(5-amino-4-hydroxy)-, tetrasodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, ~~5-[bis(2-chloroethyl)amino]~~ 5-(bis(2-chloroethyl)amino)-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vernolate	Carbamothioc acid, dipropyl-, S-propyl ester	1929-77-7	
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, when present at concentrations less than 0.3 percent	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, when present at concentrations greater than 0.3 percent	81-81-2	P001

Warfarin salts, when present at concentrations less than 0.3 percent			U248
Warfarin salts, when present at concentrations greater than 0.3 percent			P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations greater than 10 percent	1314-84-7	P122
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations of 10 percent or less	1314-84-7	U249
Ziram	Zinc, bis(dimethylcarbamo-dithioato-S,S')- (T-4)-	137-30-4	P205

Note: The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class that are not specifically listed by name in this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded by Administrative Action

Table A Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Non-Specific Sources

Facility Address	Waste Description

(None excluded from an Illinois source at this time)

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded by Administrative Action

Table B Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Specific Sources

Facility Address	Waste Description
Amoco Oil Company Wood River, Illinois	150 million gallons of DAF float from petroleum refining contained in four surge ponds after treatment with the Chemfix stabilization process. This waste contains USEPA hazardous waste number K048. This exclusion applies to

the 150 million gallons of waste after chemical stabilization as long as the mixing ratios of the reagent with the waste are monitored continuously and do not vary outside of the limits presented in the demonstration samples and one grab sample is taken each hour from each treatment unit, composited, and TCLP tests performed on each sample. If the levels of lead or total chromium exceed 0.5 ppm in the EP extract, then the waste that was processed during the compositing period is considered hazardous; the treatment residue must be pumped into bermed cells to ensure that the waste is identifiable in the event that removal is necessary.

Conversion Systems, Inc.
Horsham, Pennsylvania
(Sterling, Illinois operations)

Chemically stabilized electric arc furnace dust (CSEAFD) that is generated by Conversion Systems, Inc. (CSI) (using the Super Detox® treatment process, as modified by CSI to treat electric arc furnace dust (EAFD) (USEPA hazardous waste no. K061)), at the following site and which is disposed of in a RCRA Subtitle D municipal solid waste landfill (MSWLF): Northwestern Steel, Sterling, Illinois.

CSI must implement a testing program for each site that meets the following conditions:

1. Verification testing requirements: Sample collection and analyses, including quality control procedures, must be performed according to ~~according to SW-846 methodologies,~~ using appropriate methods. As applicable to the method-defined parameters of concern, analyses requiring the use of methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), must be used without substitution. As applicable, the EPA-530/SW-846 methods might include Methods 0010, 0011, 0020, 0023A, 0030, 0031, 0040, 0050, 0051, 0060, 0061, 1010A, 1020B, 1110A, 1310B, 1311, 1312, 1320, 1330A, 9010C, 9012B, 9040C, 9045D, 9060A, 9070A (uses USEPA Method 1664, Rev. A), 9071B, and 9095B.

A. Initial verification testing: During the first 20 days of full-scale operation of a newly-constructed Super Detox® treatment facility, CSI must analyze a minimum of four composite samples of CSEAFD representative of the full 20-day period. Composite

samples must be composed of representative samples collected from every batch generated. The CSEAFD samples must be analyzed for the constituents listed in condition 3 below. CSI must report the operational and analytical test data, including quality control information, obtained during this initial period no later than 60 days after the generation of the first batch of CSEAFD.

B. Addition of new Super Detox® treatment facilities to the exclusion:

Option 1: If USEPA approves additional facilities, CSI may petition the Board for identical-in substance amendment of this exclusion pursuant to Section 22.4 for the Act and 35 Ill. Adm. Code 102 and 720.120(a), or

Option 2: If USEPA has not approved such amendment, CSI may petition the Board for amendment pursuant to the general rulemaking procedures of Section 27 of the Act and 35 Ill. Adm. Code 102 and 720.120(b); or

Option 3: Alternatively to options 1 or 2 above, CSI may petition the Board for a hazardous waste delisting pursuant to Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 104 and 35 Ill. Adm. Code 720.122.

If CSI pursues general rulemaking (option 2 above) or hazardous waste delisting (option 3 above), it must demonstrate that the CSEAFD generated by a specific Super Detox® treatment facility consistently meets the delisting levels specified in condition 3 below.

C. Subsequent verification testing: For the approved facility, CSI must collect and analyze at least one composite sample of CSEAFD each month. The composite samples must be composed of representative samples collected from all batches treated in each month. These monthly representative samples must be analyzed, prior to the disposal of the CSEAFD, for the constituents listed in condition 3 below. CSI may, at its

discretion, analyze composite samples gathered more frequently to demonstrate that smaller batches of waste are nonhazardous.

2. Waste holding and handling: CSI must store as hazardous all CSEAFD generated until verification testing, as specified in condition 1A or 1C above, as appropriate, is completed and valid analyses demonstrate that condition 3 below is satisfied. If the levels of constituents measured in the samples of CSEAFD do not exceed the levels set forth in condition 3, then the CSEAFD is nonhazardous and may be disposed of in a RCRA Subtitle D municipal solid waste landfill. If constituent levels in a sample exceed any of the delisting levels set forth in condition 3 below, the CSEAFD generated during the time period corresponding to this sample must be retreated until it meets these levels or managed and disposed of as hazardous waste, in accordance with 35 Ill. Adm. Code 702 through 705, 720 through 726, 728, and 733. CSEAFD generated by a new CSI treatment facility must be managed as a hazardous waste prior to the addition of the name and location of the facility to this exclusion pursuant to condition 1C above. After addition of the new facility to the exclusion pursuant to condition 1B above, CSEAFD generated during the verification testing in condition 1A is also non-hazardous if the delisting levels in condition 3 are satisfied.

3. Delisting levels: All leachable concentrations for metals must not exceed the following levels (in parts per million (ppm)): antimony--0.06; arsenic--0.50; barium--7.6; beryllium--0.010; cadmium--0.050; chromium--0.33; lead--0.15; mercury--0.009; nickel--1; selenium--0.16; silver--0.30; thallium--0.020; vanadium--2; and zinc--70. Metal concentrations must be measured in the waste leachate by the method specified in Section 721.124.

4. Changes in operating conditions: After initiating subsequent testing, as described in condition 1C, if CSI significantly changes the stabilization process established under condition 1 (e.g., use of new stabilization reagents), CSI must seek amendment of this exclusion using one of the options set forth in condition 1B above. After written amendment of this exclusion, CSI may manage CSEAFD wastes generated from the new process as nonhazardous if the wastes meet the delisting levels set forth in condition 3 above.

5. Data submittals: At least one month prior to operation of a new Super Detox® treatment facility, CSI must notify the Agency in writing when the Super Detox® treatment facility is scheduled to be on-line. The data obtained through condition 1A must be submitted to the Agency within the time period specified. Records of operating conditions and analytical data from condition 1 must be compiled, summarized, and maintained on site for a minimum of five years. These records and data must be furnished to the Agency upon request and made available for inspection. Failure to submit the required data within the specified time period or to maintain the required records on site for the specified time will be considered a violation of the Act and Board regulations. All data submitted must be accompanied by a signed copy of the following certification statement to attest to the truth and accuracy of the data submitted:

"Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete.

"As to (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

"In the event that any of this information is determined by the Board or a court of law to be false, inaccurate, or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of waste will be void as if it never had effect or to the extent directed by the Board or court and that the company will be liable for any actions taken in contravention of the company's obligations under the federal RCRA and Comprehensive Environmental Response, Compensation and Liability Act (42 ~~U.S.C. §§~~ USC 9601 et seq.) and corresponding provisions of the Act premised upon the company's reliance on the void exclusion."

BOARD NOTE: The obligations of this exclusion are

derived from but also distinct from the obligations under the corresponding federally-granted exclusion of table 2 of appendix IX to 40 CFR 261~~, Appendix IX, Table 2~~.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded by Administrative Action

Table C Wastes Excluded by USEPA ~~under~~ pursuant to 40 CFR 260.20 and 260.22 from Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof

Facility Address	Waste Description

(None excluded from an Illinois source at this time)

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 721.Appendix Y Table to Section 721.138

Chemical name	CAS No	Composite value (mg/kg)	Heating value (BTU/lb)	Concentration limit (mg/kg at 10,000 Btu/lb)	Minimum required detection limit (mg/kg)
Total Nitrogen as N	NA	~~9000~~9,000	~~18400~~ 18,400	~~4900~~4,900	
Total Halogens as Cl	NA	~~1000~~1,000	~~18400~~ 18,400	540	
Total Organic Halogens as Cl	NA	--	--	(Note 1)	
Polychlorinated biphenyls, total (Arocolors, total)	1336-36-3	ND	--	ND	1.4
Cyanide, total	57-12-5	ND	--	ND	1.0
Metals:					
Antimony, total	7440-36-0	ND	--	12	
Arsenic, total	7440-38-2	ND	--	0.23	
Barium, total	7440-39-3	ND	--	23	
Beryllium, total	7440-41-7	ND	--	1.2	
Cadmium, total	7440-43-9	--	ND		1.2
Chromium, total	7440-47-3	ND	--	2.3	
Cobalt	7440-48-4	ND	--	4.6	
Lead, total	7439-92-1	57	~~18100~~ 18,100	31	

Manganese	7439-96-5	ND	--	1.2	
Mercury, total	7439-97-6	ND	--	0.25	
Nickel, total	7440-02-0	106	~~18400~~ 18,400	58	
Selenium, total	7782-49-2	ND	--	0.23	
Silver, total	7440-22-4	ND	--	2.3	
Thallium, total	7440-28-0	ND	--	23	
Hydrocarbons:					
Benzo(a)anthracene	56-55-3	ND	--	~~2400~~2,400	
Benzene	71-43-2	~~8000~~8,000	~~19600~~ 19,600	~~4100~~4,100	
Benzo(b)fluoranthene	205-99-2	ND	--	~~2400~~2,400	
Benzo(k)fluoranthene	207-08-9	ND	--	~~2400~~2,400	
Benzo(a)pyrene	50-32-8	ND	--	~~2400~~2,400	
Chrysene	218-01-9	ND	--	~~2400~~2,400	
Dibenzo(a,h)anthracene	53-70-3	ND	--	~~2400~~2,400	
7,12-Dimethylbenz(a)-anthracene	57-97-6	ND	--	~~2400~~2,400	
Fluoranthene	206-44-0	ND	--	~~2400~~2,400	
Indeno(1,2,3-cd)pyrene	193-39-5	ND	--	~~2400~~2,400	
3-Methylcholanthrene	56-49-5	ND	--	~~2400~~2,400	
Naphthalene	91-20-3	~~6200~~6,200	~~19400~~ 19,400	~~3200~~3,200	
Toluene	108-88-3	~~69000~~ 69,000	~~19400~~ 19,400	~~36000~~ 36,000	
Oxygenates:					
Acetophenone	98-86-2	ND	--	~~2400~~2,400	
Acrolein	107-02-8	ND	--	39	
Allyl alcohol	107-18-6	ND	--	30	
Bis(2-ethylhexyl)-phthalate (Di-2-ethyl-hexyl phthalate)	117-81-7	ND	--	~~2400~~2,400	
Butyl benzyl phthalate	85-68-7	ND	--	~~2400~~2,400	
o-Cresol (2-Methyl phenol)	95-48-7	ND	--	~~2400~~2,400	
m-Cresol (3-M ethyl phenol)	108-39-4	ND	--	~~2400~~2,400	
p-Cresol (4-Methyl phenol)	106-44-5	ND	--	~~2400~~2,400	
Di-n-butyl phthalate	84-74-2	ND	--	~~2400~~2,400	
Diethyl phthalate	84-66-2	ND	--	~~2400~~2,400	
2,4-Dimethylphenol	105-67-9	ND	--	~~2400~~2,400	
Dimethyl phthalate	131-11-3	ND	--	~~2400~~2,400	
Di-n-octyl phthalate	117-84-0	ND	--	~~2400~~2,400	

Endothall	145-73-3	ND	--	100	
Ethyl methacrylate	97-63-2	ND	--	39	
2-Ethoxyethanol (Ethylene glycol monoethyl ether)	110-80-5	ND	--	100	
Isobutyl alcohol	78-83-1	ND	--	39	
Isosafrole	120-58-1	ND	--	~~2400~~2,400	
Methyl ethyl ketone (2-Butanone)	78-93-3	ND	--	39	
Methyl methacrylate	80-62-6	ND	--	39	
1,4-Naphthoquinone	130-15-4	ND	--	~~2400~~2,400	
Phenol	108-95-2	ND	--	~~2400~~2,400	
Propargyl alcohol (2-Propyn-l-ol)	107-19-7	ND	--	30.	
Safrole	94-59-7	ND	--	~~2400~~2,400	
Sulfonated Organics:					
Carbon disulfide	75-15-0	ND	--	ND	39
Disulfoton	298-04-4	ND	--	ND	~~2400~~2,400
Ethyl methanesulfonate	62-50-0	ND	--	ND	~~2400~~2,400
Methyl methane-sulfonate	66-27-3	ND	--	ND	~~2400~~2,400
Phorate	298-02-2	ND	--	ND	~~2400~~2,400
1,3-Propane sultone	1120-71-4	ND	--	ND	100
Tetraethyldithiopyro-phosphate (Sulfotepp)	3689-24-5	ND	--	ND	~~2400~~2,400
Thiophenol (Benzene-thiol)	108-98-5	ND	--	ND	30
O,O,O-Triethyl phosphorothioate	126-68-1	ND	--	ND	~~2400~~2,400
Nitrogenated Organics:					
Acetonitrile (Methyl cyanide)	75-05-8	ND	--	ND	39
2-Acetylaminofluorene (2-AAF)	53-96-3	ND	--	ND	~~2400~~2,400
Acrylonitrile	107-13-1	ND	--	ND	39
4-Aminobiphenyl	92-67-1	ND	--	ND	~~2400~~2,400
4-Aminopyridine	504-24-5	ND	--	ND	100
Aniline	62-53-3	ND	--	ND	~~2400~~2,400
Benzidine	92-87-5	ND	--	ND	~~2400~~2,400
Dibenz(a,j)acridine	224-42-0	ND	--	ND	~~2400~~2,400
O,O-Diethyl O-pyrazinyl phophoro-thioate (Thionazin)	297-97-2	ND	--	ND	~~2400~~2,400
Dimethoate	60-51-5	ND	--	ND	~~2400~~2,400

p-(Dimethylamino)azo-benzene (4-Dimethyl-aminoazobenzene)	60-11-7	ND	--	ND	~~2400~~2,400
3,3'-Dimethylbenzidine	119-93-7	ND	--	ND	~~2400~~2,400
a,a-Dimethylphenethyl-amine	122-09-8	ND	--	ND	~~2400~~2,400
3,3'-Dimethoxy-benzidine	119-90-4	ND	--	ND	100
1,3-Dinitrobenzene (m-Dinitrobenzene)	99-65-0	ND	--	ND	~~2400~~2,400
4,6-Dinitro-o-cresol	534-52-1	ND	--	ND	~~2400~~2,400
2,4-Dinitrophenol	51-28-5	ND	--	ND	~~2400~~2,400
2,4-Dinitrotoluene	121-14-2	ND	--	ND	~~2400~~2,400
2,6-Dinitrotoluene	606-20-2	ND	--	ND	~~2400~~2,400
Dinoseb (2-sec-Butyl-4,6-dinitrophenol)	88-85-7	ND	--	ND	~~2400~~2,400
Diphenylamine	122-39-4	ND	--	ND	~~2400~~2,400
Ethyl carbamate (Urethane)	51-79-6	ND	--	ND	100
Ethylenethiourea (2-Imidazolidinethione)	96-45-7	ND	--	ND	110
Famphur	52-85-7	ND	--	ND	~~2400~~2,400
Methacrylonitrile	126-98-7	ND	--	ND	39
Methapyrilene	91-80-5	ND	--	ND	~~2400~~2,400
Methomyl	16752-77-5	ND	--	ND	57
2-Methyllactonitrile (Acetone cyanohydrin)	75-86-5	ND	--	ND	100
Methyl parathion	298-00-0	ND	--	ND	~~2400~~2,400
MNNG (N-Metyl-N-nitroso-N'-nitro-guanidine)	70-25-7	ND	--	ND	110
1-Naphthylamine (α-Naphthylamine]	134-32-7	ND	--	ND	~~2400~~2,400
2-Naphthylamine (β-Naphthylamine)	91-59-8	ND	--	ND	~~2400~~2,400
Nicotine	54-11-5	ND	--	ND	100
4-Nitroaniline (p-Nitroaniline)	100-01-6	ND	--	ND	~~2400~~2,400
Nitrobenzene	98-95-3	ND	--	ND	~~2400~~2,400
p-Nitrophenol (p-Nitro-phenol)	100-02-7	ND	--	ND	~~2400~~2,400
5-Nitro-o-toluidine	99-55-8	ND	--	ND	~~2400~~2,400
N-Nitrosodi-n-butyl-amine	924-16-3	ND	--	ND	~~2400~~2,400

N-Nitrosodiethylamine	55-18-5	ND	--	ND	~~2400~~2,400
N-Nitrosodiphenyl-amine (Diphenylnitros-amine)	86-30-6	ND	--	ND	~~2400~~2,400
N-Nitroso-N-methyl-ethylamine	10595-95-6	ND	--	ND	~~2400~~2,400
N-Nitrosomorpholine	59-89-2	ND	--	ND	~~2400~~2,400
N-Nitrosopiperidine	100-75-4	ND	--	ND	~~2400~~2,400
N-Nitrosopyrrolidine	930-55-2	ND	--	ND	~~2400~~2,400
2-Nitropropane	79-46-9	ND	--	ND	30
Parathion	56-38-2	ND	--	ND	~~2400~~2,400
Phenacetin	62-44-2	ND	--	ND	~~2400~~2,400
1,4-Phenylene diamine, (p-Phenylenediamine)	106-50-3	ND	--	ND	~~2400~~2,400
N-Phenylthiourea	103-85-5	ND	--	ND	57
2-Picoline (alpha-Picoline)	109-06-8	ND	--	ND	~~2400~~2,400
Propythioracil (6-Propyl-2-thiouracil)	51-52-5	ND	--	ND	100
Pyridine	110-86-1	ND	--	ND	~~2400~~2,400
Strychnine	57-24-9	ND	--	ND	100
Thioacetamide	62-55-5	ND	--	ND	57
Thiofanox	39196-18-4	ND	--	ND	100
Thiourea	62-56-6	ND	--	ND	57
Toluene-2,4-diamine (2,4-Diaminotoluene)	95-80-7	ND	--	ND	57
Toluene-2,6-diamine (2,6-Diaminotoluene)	823-40-5	ND	--	ND	57
o-Toluidine	95-53-4	ND	--	ND	~~2400~~2,400
p-Toluidine	106-49-0	ND	--	ND	100
~~1,3,5-Trinitrobenzne,~~ 1,3,5-Trinitrobenzene, (sym-Trinitrobenzene)	99-35-4	ND	--	ND	~~2400~~2,400
Halogenated Organics:					
Allyl chloride	107-05-1	ND	--	ND	39
Aramite	140-57-8	ND	--	ND	~~2400~~2,400
Benzal chloride (Di-chloromethyl benzene)	98-87-3	ND	--	ND	100
Benzyl chloride	100-44-77	ND	--	ND	100
Bis(2-chloroethyl)ether (Dichloroethyl ether)	111-44-4	ND	--	ND	~~2400~~2,400
Bromoform (Tribromo-methane)	75-25-2	ND	--	ND	39

Bromomethane (Methyl bromide)	74-83-9	ND	--	ND	39
4-Bromophenyl phenyl ether (p-Bromodi-phenyl ether)	101-55-3	ND	--	ND	~~2400~~2,400
Carbon tetrachloride	56-23-5	ND	--	ND	39
Chlordane	57-74-9	ND	--	ND	14
p-Chloroaniline	106-47-8	ND	--	ND	~~2400~~2,400
Chlorobenzene	108-90-7	ND	--	ND	39
Chlorobenzilate	510-15-6	ND	--	ND	~~2400~~2,400
p-Chloro-m-cresol	59-50-7	ND	--	ND	~~2400~~2,400
2-Chloroethyl vinyl ether	110-75-8	ND	--	ND	39
Chloroform	67-66-3	ND	--	ND	39
Chloromethane (Methyl chloride)	74-87-3	ND	--	ND	39
2-Chloronaphthalene (β-Chlorophthalene)	91-58-7	ND	--	ND	~~2400~~2,400
2-Chlorophenol (o-Chlorophenol)	95-57-8	ND	--	ND	~~2400~~2,400
Chloroprene (2-Chloro-1,3-butadiene)	1126-99-8	ND	--	ND	39
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	ND	--	ND	7.0
Diallate	2303-16-4	ND	--	ND	~~2400~~2,400
1,2-Dibromo-3-chloro-propane	96-12-8	ND	--	ND	39
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	ND	--	ND	~~2400~~2,400
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	ND	--	ND	~~2400~~2,400
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	ND	--	ND	~~2400~~2,400
3,3'-Dichlorobenzidine	91-94-1	ND	--	ND	~~2400~~2,400
Dichlorodifluoro-methane (CFC-12)	75-71-8	ND	--	ND	39
1,2-Dichloroethane (Ethylene dichloride)	107-06-2	ND	--	ND	39
1,1-Dichloroethylene (Vinylidene chloride)	75-35-4	ND	--	ND	39
Dichloromethoxy ethane (Bis(2-chloro-ethoxy)methane)	111-91-1	ND	--	ND	~~2400~~2,400
2,4-Dichlorophenol	120-83-2	ND	--	ND	~~2400~~2,400

2,6-Dichlorophenol	87-65-0	ND	--	ND	~~2400~~2,400
1,2-Dichloropropane (Propylene dichloride)	78-87-5	ND	--	ND	39
cis-1,3-Dichloro-propylene	10061-01-5	ND	--	ND	39
trans-1,3-Dichloro-propylene	10061-02-6	ND	--	ND	39
1,3-Dichloro-2-propanol	96-23-1	ND	--	ND	30
Endosulfan I	959-98-8	ND	--	ND	1.4
Endosulfan II	33213-65-9	ND	--	ND	1.4
Endrin	72-20-8	ND	--	ND	1.4
Endrin aldehyde	7421-93-4	ND	--	ND	1.4
Endrin Ketone	53494-70-5	ND	--	ND	1.4
Epichlorohydrin (1-Chloro-2,3-epoxy propane)	106-89-8	ND	--	ND	30
Ethylidene dichloride (1,1-Dichloroethane)	75-34-3	ND	--	ND	39
2-Fluoroacetamide	640-19-7	ND	--	ND	100
Heptachlor	76-44-8	ND	--	ND	1.4
Heptachlor epoxide	1024-57-3	ND	--	ND	2.8
Hexachlorobenzene	118-74-1	ND	--	ND	~~2400~~2,400
Hexachloro-1,3-buta-diene (Hexachlorobuta-diene)	87-68-3	ND	--	ND	~~2400~~2,400
Hexachlorocyclopenta-diene	77-47-4	ND	--	ND	~~2400~~2,400
Hexachloroethane	67-72-1	ND	--	ND	~~2400~~2,400
Hexachlorophene	70-30-4	ND	--	ND	~~59000~~ 59,000
Hexachloropropene (Hexachloropropylene)	1888-71-7	ND	--	ND	~~2400~~2,400
Isodrin	465-73-6	ND	--	ND	~~2400~~2,400
Kepone (Chlordecone)	143-50-0	ND	--	ND	~~4700~~4,700
Lindane (gamma-Hexa-chlorocyclohexane) (γ-BHC)	58-89-9	ND	--	ND	1.4
Methylene chloride (Dichloromethane)	75-09-2	ND	--	ND	39
4,4'-methylene-bis(2-chloroaniline)	101-14-4	ND	--	ND	100
Methyl iodide (Iodo-methane)	74-88-4	ND	--	ND	39

Pentachlorobenzene	608-93-5	ND	--	ND	~~2400~~2,400
Pentachloroethane	76-01-7	ND	--	ND	39
Pentachloronitro-benzene (PCNB) (Quintobenzene) (Quintozene)	82-68-8	ND	--	ND	~~2400~~2,400
Pentachlorophenol	87-86-5	ND	--	ND	~~2400~~2,400
Pronamide	23950-58-5	ND	--	ND	~~2400~~2,400
Silvex (2,4,5-Trichloro-phenoxypropionic acid)	93-72-1	ND	--	ND	7.0
2,3,7,8-Tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD)	1746-01-6	ND	--	ND	30
1,2,4,5-Tetrachloro-benzene	95-94-3	ND	--	ND	~~2400~~2,400
1,1,2,2-Tetrachloro-ethane	79-34-5	ND	--	ND	39
Tetrachloroethylene (Perchloroethylene)	127-18-4	ND	--	ND	39
2,3,4,6-Tetrachloro-phenol	58-90-2	ND	--	ND	~~2400~~2,400
1,2,4-Trichlorobenzene	120-82-1	ND	--	ND	~~2400~~2,400
1,1,1-Trichloroethane (Methyl chloroform)	71-55-6	ND	--	ND	39
1,1,2-Trichloroethane (Vinyl trichloride)	79-00-5	ND	--	ND	39
Trichloroethylene	79-01-6	ND	--	ND	39
Trichlorofluoro-methane (Trichloro-monofluoromethane)	75-69-4	ND	--	ND	39
2,4,5-Trichlorophenol	95-95-4	ND	--	ND	~~2400~~2,400
2,4,6-Trichlorophenol	88-06-2	ND	--	ND	~~2400~~2,400
1,2,3-Trichloropropane	96-18-4	ND	--	ND	39
Vinyl Chloride	75-01-4	ND	--	ND	39

NA means not applicable.
ND means nondetect.
Note 1: 25 (mg/kg at 10,000 Btu/lb) as organic halogen or as the individual halogenated organics listed in the table at the levels indicated.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

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722.Appendix A Hazardous Waste Manifest

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R84-9 at 9 Ill. Reg. 11950, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1131, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14112, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20709, effective December 2, 1986; amended in R86-46 at 11 Ill. Reg. 13555, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19392, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13129, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 452, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18523, effective November 13, 1989; amended in R90-10 at 14 Ill. Reg. 16653, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9644, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14562, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17696, effective November 6, 1992; amended in R93-4 at 17 Ill. Reg. 20822, effective November 22, 1993; amended in R95-6 at 19 Ill. Reg. 9935, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11236, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 603, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17950, effective September 28, 1998; amended in R00-5 at 24 Ill. Reg.

1136, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9822, effective June 20, 2000; expedited correction at 25 Ill. Reg. 5105, effective June 20, 2000; amended in R05-2 at 29 Ill. Reg. 6312, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART B: THE MANIFEST

Section 722.120 General Requirements

a) Manifest use.

1) A generator that transports hazardous waste or offers a hazardous waste for transportation for off-site treatment, storage, or disposal or, effective September 5, 2006, a treatment, storage, or disposal facility that offers for transport a rejected load of hazardous waste must prepare a manifest ~~before transporting the waste off-site~~ on USEPA Form 8700-22 (and, if necessary, on USEPA Form 8700-22A) according to the instructions included in the appendix to 40 CFR 262 (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22a and Their Instructions)), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) Manifest amendments effective dates.

A) The revised manifest form and procedures in 35 Ill. Adm. Code 720.110 and 721.107, this Section, and Sections 722.121, 722.127, 722.132 through 722.134, 722.154 and in Appendix A to this Part, as amended at 70 Fed. Reg. 10776 (March 4, 2005), will not apply until September 5, 2006.

B) The existing manifest form and procedures in 35 Ill. Adm. Code 720.110 and 721.107, this Section, and Sections 722.121, 722.127, 722.132 through 722.134, 722.154 and in Appendix A to this Part (2004) will apply until September 5, 2006.

b) A generator must designate on the manifest one receiving facility that is permitted to handle the waste described on the manifest.

c) A generator may also designate on the manifest one alternate receiving facility that is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.

d) If the transporter is unable to deliver the hazardous waste to the designated receiving facility or the alternate facility, the generator must either designate another receiving facility or instruct the transporter to return the waste.

e) The requirements of this Subpart B do not apply to hazardous waste produced by

generators of greater than 100 kg but less than 1,000 kg in a calendar month where the following conditions are fulfilled:

1) The waste is reclaimed under a contractual agreement that specifies the type of waste and frequency of shipments;

2) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and

3) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.

f) The requirements of this Subpart B and Section 722.132(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding 35 Ill. Adm. Code 723.110(a), the generator or transporter must comply with the requirements for transporters set forth in 35 Ill. Adm. Code 723.130 and 723.131 in the event of a discharge of hazardous waste on a public or private right-of-way.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.121 ~~Acquisition of~~ Manifest Tracking Numbers, Manifest Printing, and Obtaining Manifests

a) The following requirements apply until September 5, 2006:

~~a~~1) If the State of Illinois is the state to which the shipment is manifested (designated receiving state), the generator must use the manifest supplied by the Agency.

~~b~~2) If the State of Illinois is not the designated receiving state, the generator must use the manifest required by the designated receiving state. If the designated receiving state does not supply and require the manifest, then the generator must use the manifest supplied by the Agency.

b) The following requirements apply effective September 5, 2006:

1) USEPA approval of manifest.

A) A registrant may not print the manifest or have the manifest printed for use or distribution, unless it has received approval from the USEPA Director of the Office of Solid Waste to do so pursuant

to 40 CFR 262.21(c) and (e), as described in subsections (b)(3) and (b)(5) of this Section.

B) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of 40 CFR 262.21, as described in this subsection (b). The registrant is responsible for assigning manifest tracking numbers to its manifests.

2) A registrant must submit an initial application to the USEPA Director of the Office of Solid Waste that contains the following information:

A) The name and mailing address of registrant;

B) The name, telephone number, and email address of contact person;

C) A brief description of registrant's government or business activity;

D) The USEPA identification number of the registrant, if applicable;

E) A description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including the following:

i) A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house (i.e., using its own printing establishments) or through a separate (i.e., unaffiliated) printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application must identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries (e.g., prime and subcontractor relationships), the role of each must be discussed. The application must provide the name and mailing address of each company. It also must provide the name and telephone number of the contact person at each company;

ii) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of 40 CFR 262.21, as described in this subsection (b). The application must discuss how the registrant will ensure that a unique manifest tracking number will be preprinted on each manifest. The

application must describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application must describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain, track, or assign numbers, these should be indicated. The application must also indicate how the printer will pre-print a unique number on each form (e.g., crash or press numbering). The application also must explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time; and

iii) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public (e.g., for purchase);

F) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so (e.g., corporate brochures, product samples, customer references, documentation of ISO certification), so long as such information pertains to the establishments or company being proposed to print the manifest;

G) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant must use this suffix to pre-print a unique manifest tracking number on each manifest; and

H) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of 40 CFR 262.21, as described in this subsection (b) and that it will notify the Agency and the USEPA Director of the Office of Solid Waste of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.

3) USEPA will review the application submitted under subsection (b)(2) of this Section and either approve it or request additional information or modification before approving it.

4) Submission of document samples.

A) Upon USEPA approval of the application pursuant to 40 CFR 262.21(c), as described in subsection (b)(3) of this Section, USEPA will provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in 40 CFR 262.21(d)(3), as described in subsection (b)(4)(C) of this Section. The registrant's samples must meet all of the specifications in 40 CFR 262.21(f), as described in subsection (b)(6) of this Section, and be printed by the company that will print the manifest as identified in the application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3) of this Section.

B) The registrant must submit a description of the manifest samples as follows:

i) The paper type (i.e., manufacturer and grade of the manifest paper);

ii) The paper weight of each copy;

iii) The ink color of the manifest's instructions. If screening of the ink was used, the registrant must indicate the extent of the screening; and

iv) The method of binding the copies.

C) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.

5) USEPA will evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until USEPA approves them. An approved registrant must print the manifest and continuation sheet according to its application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3) of this Section and the manifest specifications in 40 CFR 262.21(f), as described in subsection (b)(6) of this Section. It also must print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.

6) Paper manifests and continuation sheets must be printed according to the following specifications:

A) The manifest and continuation sheet must be printed with the exact format and appearance as USEPA Forms 8700-22 and 8700-22A, respectively. However, information required to complete the manifest may be preprinted on the manifest form.

B) A unique manifest tracking number assigned in accordance with a numbering system approved by USEPA must be pre-printed in Item 4 of the manifest. The tracking number must consist of a unique three-letter suffix following nine digits.

C) The manifest and continuation sheet must be printed on 8½ x 11-inch white paper, excluding common stubs (*e.g.*, top- or side-bound stubs). The paper must be durable enough to withstand normal use.

D) The manifest and continuation sheet must be printed in black ink that can be legibly photocopied, scanned, and faxed, except that the marginal words indicating copy distribution must be in red ink.

E) The manifest and continuation sheet must be printed as six-copy forms. Copy-to-copy registration must be exact within 1⁄32 inch. Handwritten and typed impressions on the form must be legible on all six copies. Copies must be bound together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.

F) Each copy of the manifest and continuation sheet must indicate how the copy must be distributed, as follows:

i) Page 1 (top copy): "Designated facility to destination State (if required)."

ii) Page 2: "Designated facility to generator State (if required)."

iii) Page 3: "Designated facility to generator."

iv) Page 4: "Designated facility's copy."

v) Page 5: "Transporter's copy."

vi) Page 6 (bottom copy): "Generator's initial copy."

G) The instructions in the appendix to 40 CFR 262 (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22a and Their Instructions)), incorporated by reference in 35 Ill. Adm. Code 720.111(b), must appear legibly on the back of the copies of the manifest and continuation sheet as provided in 40 CFR 262.21(f), as described in this subsection (b)(6) and subsection (b)(14) of this Section. The instructions must not be visible through the front of the copies when photocopied or faxed.

BOARD NOTE: Subsection (b)(6)(G) corresponds with 40 CFR 262.21(f)(7) (2004), as amended at 70 Fed. Reg. 10776 (March 4, 2005). The Board has moved 40 CFR 262.21(f)(7)(i) and (f)(7)(ii) to appear as subsections (b)(14)(A) and (b)(14)(B) to comport with Illinois Administrative Code codification requirements.

7) Use of approved manifests.

A) A generator may use manifests printed by any source so long as the source of the printed form has received approval from USEPA to print the manifest pursuant to 40 CFR 262.21(c) and (e), as described in subsections (b)(3) and (b)(5) of this Section. A registered source may be any of the following:

i) A state agency;

ii) A commercial printer;

iii) A hazardous waste generator, transporter, or treatment, storage, or disposal facility; or

iv) A hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.

B) The waste generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under these states' authorized programs. The generator must also determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.

8) Manifest revisions.

A) If an approved registrant would like to update any of the information provided in its application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3) of this Section (e.g., to update a company phone number or name of contact person), the registrant must revise the application and submit it to the USEPA Director of the Office of Solid Waste, along with an indication or explanation of the update, as soon as practicable after the change occurs. The USEPA will either approve or deny the revision. If USEPA denies the revision, it will explain the reasons for the denial, and it will contact the registrant and request further modification before approval.

B) If the registrant would like a new tracking number suffix, the registrant must submit a proposed suffix to the USEPA Director of the Office of Solid Waste, along with the reason for requesting it. USEPA will either approve the suffix or deny the suffix and provide an explanation why it is not acceptable.

C) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval by USEPA pursuant to 40 CFR 262.21(e), as described in this subsection (b)(5) of this Section, then the registrant must submit three samples of the revised form for USEPA review and approval. If the approved registrant would like to use a new printer, the registrant must submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. USEPA will evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its revised forms until USEPA approves them.

9) If, subsequent to its approval by USEPA pursuant to 40 CFR 262.21(e), as described in subsection (b)(5) of this Section, a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by USEPA, it must submit three samples of the manifest or continuation sheet to the registry for approval. USEPA will evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its typeset forms until USEPA approves them.

10) USEPA may exempt a registrant from the requirement to submit form samples pursuant to 40 CFR 262.21(d) or (h)(3), as described in subsection (b)(4) or (b)(8)(C) of this Section, if USEPA is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision (e.g., a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions, and binding method of the form samples approved for some other registrant). A registrant may request an exemption from USEPA by indicating why an exemption is warranted.

11) An approved registrant must notify USEPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.

12) If, subsequent to approval of a registrant by USEPA pursuant to 40 CFR 262.21(e), as described in subsection (b)(5) of this Section, USEPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or binding method of the registrant's form is unsatisfactory, USEPA will contact the registrant and require modifications to the form.

13) Effects of non-compliance.

A) USEPA may suspend and, if necessary, revoke printing privileges if we find that the registrant has done either of the following:

i) The registrant has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or

ii) The registrant exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.

B) USEPA will send a warning letter to the registrant that specifies the date by which it must come into compliance with the requirements. If the registrant does not come in compliance by the specified date, USEPA will send a second letter notifying the registrant that USEPA has suspended or revoked its printing privileges. An approved registrant must provide information on its printing activities to the Agency and USEPA if requested.

14) Required manifest instructions.

A) Manifest Form 8700-22.

i) The "Instructions for Generators" on Copy 6;

ii) The "Instructions for International Shipment Block" and "Instructions for Transporters" on Copy 5; and

iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

B) Manifest Form 8700-22A.

i) The "Instructions for Generators" on Copy 6;

ii) The "Instructions for Transporters" on Copy 5; and

iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

BOARD NOTE: Subsection (b)(14)(A) and (b)(14)(B) are derived from 40 CFR 262.21(f)(7)(i) and (f)(7)(ii) (2004), as amended at 70 Fed. Reg. 10776 (March 4, 2005). These provisions would normally correspond with subsections (b)(6)(G)(i) and (b)(6)(G)(ii) of this Section. The Board has moved 40 CFR 262.21(f)(7)(i) and (f)(7)(ii) to appear as subsections (b)(14)(A) and (b)(14)(B) of this Section to comport with Illinois Administrative Code codification requirements.

BOARD NOTE: Subsection (a) is derived from 40 CFR 262.21 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 262.21 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.127 Waste Minimization Certification

Effective September 5, 2006, a generator that initiates a shipment of hazardous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest:

a) "I am a large quantity generator. I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment"; or

b) "I am a small quantity generator. I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

BOARD NOTE: 35 Ill. Adm. Code 720.110 defines a "small quantity generator" as a generator that generates less than 1,000 kilograms of hazardous waste in any calendar month. There is no corresponding definition of "large quantity generator" in the federal regulations, but the Board interprets the term to mean a hazardous waste generator that is not a small quantity generator.

(Source: Added at 30 Ill. Reg. _____, effective _____)

SUBPART C: PRE-TRANSPORT REQUIREMENTS

Section 722.130 Packaging

Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable U.S. Department of Transportation (USDOT) regulations on packaging under 49 CFR 173 (Shippers—General Requirements for Shipments and Packages), 178 (Specifications for Packagings), and 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.131 Labeling

Before transporting or offering hazardous waste for transportation off-site, a generator must label each package in accordance with the applicable USDOT regulations on hazardous materials under 49 CFR 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.132 Marking

a) Before transporting or offering hazardous waste for transportation off-site, a generator must mark each package of hazardous waste in accordance with the applicable USDOT regulations on hazardous materials under 49 CFR 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

b) Marking small containers.

1) ~~Before~~ Until September 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 416 liters (110 gallons) or less that is used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304 (Marking

Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b):

HAZARDOUS WASTE -- Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address _____.

Manifest Document Number _____.

2) Effective September 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 450 liters (110 gallons) or less that is used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304 (Marking Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b):

HAZARDOUS WASTE--Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name and Address _____.

Generator's USEPA Identification Number _____.

Manifest Tracking Number _____.

BOARD NOTE: Subsection (b)(1) is derived from 40 CFR 262.32(b) (2004), effective until September 5, 2006. Subsection (b)(2) is derived from 40 CFR 262.32(b) (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.133 Placarding

a) ~~Before~~ Until September 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to ~~Department of Transportation~~ USDOT regulations for hazardous materials under subpart F of 49 CFR 172 (Placarding), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) Effective September 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to USDOT regulations for

hazardous materials under subpart F of 49 CFR 172 (Placarding), incorporated by reference in 35 Ill. Adm. Code 720.111(b). If placards are not required, a generator must mark each motor vehicle according to 49 CFR 171.3(b)(1) (Hazardous Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

BOARD NOTE: Subsection (a) is derived from 40 CFR 262.33 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 262.33 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.134 Accumulation Time

a) Except as provided in subsection (d), (e), (f), (g), (h), or (i) of this Section, a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214, and may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that the following conditions are fulfilled:

1) The waste is placed in or on one of the following types of units, and the generator complies with the applicable requirements:

A) In containers, and the generator complies with Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725;

B) In tanks, and the generator complies with Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.297(c) and 725.300;

C) On drip pads, and the generator complies with Subpart W of 35 Ill. Adm. Code 725 and maintains the following records at the facility:

i) A description of the procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and

ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; or

D) In containment buildings, and the generator complies with Subpart DD of 35 Ill. Adm. Code 725 (has placed its Professional Engineer (PE) certification that the building complies with the design standards specified in 35 Ill. Adm. Code 725.1101 in the facility's operating record prior to the date of initial operation of the unit).

The owner or operator must maintain the following records at the facility:

i) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respect to the 90 day limit, and documentation that the procedures are complied with; or

ii) Documentation that the unit is emptied at least once every 90 days;

BOARD NOTE: The Board placed the "in addition" hanging subsection that appears in the ~~Federal~~ federal rules after 40 CFR 262.34(a)(1)(iv)(B) in the introduction to subsection (a) of this Section.

2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste"; and

4) The generator complies with the requirements for owners or operators in Subparts C and D of 35 Ill. Adm. Code 725 and with 35 Ill. Adm. Code 725.116 and 728.107(a)(5).

b) A generator that accumulates hazardous waste for more than 90 days is an operator of a storage facility. Such a generator is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702, 703, and 705, unless the generator has been granted an extension of the 90-day period. If hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of a variance or provisional variance, pursuant to Sections 35(b), 36(c), and 37(b) of the Environmental Protection Act [415 ILCS 5/35(b), 36(c), and 37(b)] and 35 Ill. Adm. Code 180 (Agency procedural regulations).

c) Accumulation near the point of generation.

1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in containers at or near any point of generation where wastes initially accumulate that is under the control of the operator of the process generating the waste without a permit or interim status and without complying with subsection (a) of this Section, provided the generator does

the following:

A) The generator complies with 35 Ill. Adm. Code 725.271, 725.272, and 725.273(a); and

B) The generator marks the containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

2) A generator that accumulates either hazardous waste or acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in excess of the amounts listed in subsection (c)(1) of this Section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with subsection (a) of this Section or other applicable provisions of this Chapter. During the three day period the generator must continue to comply with subsection (c)(1) of this Section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

d) A generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that the following conditions are fulfilled:

1) The quantity of waste accumulated on-site never exceeds 6,000 kilograms;

2) The generator complies with the requirements of Subpart I of 35 Ill. Adm. Code 725 (except 35 Ill. Adm. Code 725.276 and 725.278);

3) The generator complies with the requirements of 35 Ill. Adm. Code 725.301;

4) The generator complies with the requirements of subsections (a)(2) and (a)(3) of this Section, Subpart C of 35 Ill. Adm. Code 725, and 35 Ill. Adm. Code 728.107(a)(5); and

5) The generator complies with the following requirements:

A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in subsection (d)(5)(D) of this Section. The employee is the emergency coordinator.

B) The generator must post the following information next to the

telephone:

i) The name and telephone number of the emergency coordinator;

ii) Location of fire extinguishers and spill control material and, if present, fire alarm; and

iii) The telephone number of the fire department, unless the facility has a direct alarm.

C) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

D) The emergency coordinator or designee must respond to any emergencies that arise. The following are applicable responses:

i) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

ii) In the event of a spill, contain the flow of hazardous waste to the extent possible and, as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil; and

iii) In the event of a fire, explosion, or other release that could threaten human health outside the facility, or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using its 24-hour toll free number 800-424-8802).

E) A report to the National Response Center pursuant to subsection (d)(5)(D)(iii) of this Section must include the following information:

i) The name, address, and USEPA identification number (Section 722.112 of this Part) of the generator;

ii) The date, time, and type of incident (e.g., spill or fire);

iii) The quantity and type of hazardous waste involved in the incident; the extent of injuries, if any; and

iv) The estimated quantity and disposition of recoverable materials, if any.

BOARD NOTE: The Board has codified 40 CFR 262.34(d)(5)(iv)(C)(1) through (d)(5)(iv)(C)(5) as subsections (d)(5)(E)(i) through (d)(5)(E)(iv) because Illinois Administrative Code codification requirements do not allow the use of a fifth level of subsection indents.

e) A generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month and that must transport the waste or offer the waste for transportation over a distance of 200 miles or more for off-site treatment, storage, or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status, provided that the generator complies with the requirements of subsection (d) of this Section.

f) A generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month and that accumulates hazardous waste in quantities exceeding 6,000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if the generator must transport the waste or offer the waste for transportation over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 703, unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period. If hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of variance or provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Environmental Protection Act [415 ILCS 5/35(b), 36(c), and 37(b)].

g) A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, may accumulate F006 waste on-site for more than 90 days, but not more than 180 days, without a permit or without having interim status provided that the generator fulfills the following conditions:

1) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants entering F006 or otherwise released to the environment prior to its recycling;

2) The F006 waste is legitimately recycled through metals recovery;

3) No more than 20,000 kilograms of F006 waste is accumulated on-site at any one time; and

4) The F006 waste is managed in accordance with the following conditions:

A) The F006 waste is placed in one of the following containing devices:

i) In containers and the generator complies with the applicable requirements of Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725;

ii) In tanks and the generator complies with the applicable requirements of Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.297(c) and 725.300; or

iii) In containment buildings, and the generator complies with Subpart DD of 35 Ill. Adm. Code 725 and has placed its professional engineer certification that the building complies with the design standards specified in 35 Ill. Adm. Code 725.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the records listed in subsection (g)(4)(F) of this Section at the facility~~.~~;

B) In addition, such a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214;

C) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

D) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and

E) The generator complies with the requirements for owners or operators in Subparts C and D of 35 Ill. Adm. Code 725, with 35 Ill. Adm. Code 725.116, and with 35 Ill. Adm. Code 728.107(a)(5).

F) Required records for a containment building:

i) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a written description of the waste generation and management practices for the facility showing that they are

consistent with the 180-day limit, and documentation that the generator is complying with the procedures; or

ii) Documentation that the unit is emptied at least once every 180 days.

BOARD NOTE: The Board has codified 40 CFR 262.34(g)(4)(i)(C)(*1*) and (g)(4)(i)(C)(*2*) as subsections (g)(4)(F)(i) and (g)(4)(F)(ii) because Illinois Administrative Code codification requirements do not allow the use of a fifth level of subsection indents.

h) A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month, which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, and which must transport this waste or offer this waste for transportation over a distance of 200 miles or more for off-site metals recovery may accumulate F006 waste on-site for more than 90 days, but not more than 270 days, without a permit or without having interim status if the generator complies with the requirements of subsections (g)(1) through (g)(4) of this Section.

i) A generator accumulating F006 in accordance with subsections (g) and (h) of this Section that accumulates F006 waste on-site for more than 180 days (or for more than 270 days if the generator must transport this waste or offer this waste for transportation over a distance of 200 miles or more) or which accumulates more than 20,000 kilograms of F006 waste on-site is an operator of a storage facility, and such a generator is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702 and 703, unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period or an exception to the 20,000 kilogram accumulation limit.

1) On a case-by-case basis, the Agency must grant a provisional variance that allows an extension of the accumulation time up to an additional 30 days pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)] if it finds that the F006 waste must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances.

2) On a case-by-case basis, the Agency must grant a provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)] that allows an exception to the 20,000 kilogram accumulation limit if the Agency finds that more than 20,000 kilograms of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances.

3) A generator must follow the procedure of 35 Ill. Adm. Code 180 (Agency

procedural rules) when seeking a provisional variance under subsection (i)(1) or (i)(2) of this Section.

j) A member of the federal National Environmental Performance Track program that generates 1,000 kg or greater of hazardous waste per month (or one kilogram or more of acute hazardous waste) may accumulate hazardous waste on-site without a permit or interim status for an extended period of time, provided that the following conditions are fulfilled:

1) The generator accumulates the hazardous waste for no more than 180 days, or for no more than 270 days if the generator must transport the waste (or offer the waste for transport) more than 200 miles from the generating facility;

2) The generator first notifies USEPA Region 5 and the Agency in writing of its intent to begin accumulation of hazardous waste for extended time periods under the provisions of this Section. Such advance notice must include the following information:

A) The name and USEPA ID number of the facility and specification of when the facility will begin accumulation of hazardous wastes for extended periods of time in accordance with this Section;

B) A description of the types of hazardous wastes that will be accumulated for extended periods of time and the units that will be used for such extended accumulation;

C) A statement that the facility has made all changes to its operations; procedures, including emergency preparedness procedures; and equipment, including equipment needed for emergency preparedness, that will be necessary to accommodate extended time periods for accumulating hazardous wastes; and

D) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under 35 Ill. Adm. Code 702 and 703, federal 40 CFR 270, or the corresponding regulations of a sister state to receive these wastes is not available within 200 miles of the generating facility;

3) The waste is managed in the following types of units:

A) Containers, in accordance with the applicable requirements of Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725 and 35 Ill. Adm. Code 724.275;

B) Tanks, in accordance with the requirements of Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except for Sections 725.297(c) and Section 725.300;

C) Drip pads, in accordance with Subpart W of 35 Ill. Adm. Code 725; or

D) Containment buildings, in accordance with Subpart DD of 35 Ill. Adm. Code 725;

4) The quantity of hazardous waste that is accumulated for extended time periods at the facility does not exceed 30,000 kg;

5) The generator maintains the following records at the facility for each unit used for extended accumulation times:

A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 180 days (or 270 days, as applicable), a description of the waste generation and management practices at the facility showing that they are consistent with the extended accumulation time limit, and documentation that the procedures are complied with; or

B) Documentation that the unit is emptied at least once every 180 days (or 270 days, if applicable);

6) Each container or tank that is used for extended accumulation time periods is labeled or marked clearly with the words "Hazardous Waste," and for each container the date upon which each period of accumulation begins is clearly marked and visible for inspection;

7) The generator complies with the requirements for owners and operators in Subparts C and D of 35 Ill. Adm. Code 725, 35 Ill. Adm. Code 725.116, and 35 Ill. Adm. Code 728.107(a)(5). In addition, such a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214;

8) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants released to the environment prior to its recycling, treatment, or disposal; and

9) The generator includes the following information with its federal National Environmental Performance Track Annual Performance Report, which must be submitted to the USEPA Region 5 and the Agency:

A) Information on the total quantity of each hazardous waste generated at the facility that has been managed in the previous year according to extended accumulation time periods;

B) Information for the previous year on the number of off-site shipments of hazardous wastes generated at the facility, the types and locations of destination facilities, how the wastes were managed at the destination facilities (e.g., recycling, treatment, storage, or disposal), and what changes in on-site or off-site waste management practices have occurred as a result of extended accumulation times or other pollution prevention provisions of this Section;

C) Information for the previous year on any hazardous waste spills or accidents occurring at extended accumulation units at the facility, or during off-site transport of accumulated wastes; and

D) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under 35 Ill. Adm. Code 702 and 703, federal 40 CFR 270, or the corresponding regulations of a sister state to receive these wastes is not available within 200 miles of the generating facility.

BOARD NOTE: The National Environmental Performance Track program is operated exclusively by USEPA. USEPA established the program in 2000 (see 65 Fed. Reg. 41655 (July 6, 2000)) and amended it in 2004 (see 69 Fed. Reg. 27922 (May 17, 2004)). USEPA confers membership in the program on application of interested and eligible entities. Information about the program is available from a website maintained by USEPA: www.epa.gov/performancetrack.

k) If the Agency finds that hazardous wastes must remain on-site at a federal National Environmental Performance Track member facility for longer than the 180 days (or 270 days, if applicable) allowed under subsection (j) of this Section due to unforeseen, temporary, and uncontrollable circumstances, it must grant an extension to the extended accumulation time period of up to 30 days on a case-by-case basis by a provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)].

1) If a generator that is a member of the federal National Environmental Performance Track program withdraws from the National Environmental Performance Track program or if USEPA Region 5 terminates a generator's membership, the generator must return to compliance with all otherwise applicable hazardous waste regulations as soon as possible, but no later than six months after the date of withdrawal or termination.

m) Effective September 5, 2006, a generator that sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and which later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 35 Ill. Adm. Code 724.172 or 725.172 may accumulate the returned waste on-site in accordance with subsections (a) and (b) or (d), (e), and (f) of this Section, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must sign the appropriate of the following:

1) Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or

2) Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: EXPORTS OF HAZARDOUS WASTE

Section 722.153 Notification of Intent to Export

a) A primary exporter of hazardous waste must notify USEPA in accordance with federal 40 CFR 262.53 (Notification of Intent to Export), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) The primary exporter must send the Agency a copy of each notice sent to USEPA pursuant to subsection ~~(b)~~ (a) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.154 Special Manifest Requirements

a) A primary exporter must comply with the manifest requirements as specified in federal 40 CFR 262.54 (Special Manifest Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) The primary exporter must send a copy of the manifest to the Agency.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.155 Exception Report

a) In lieu of the requirements of Section 722.142, a primary exporter must file an exception report with USEPA as provided by federal 40 CFR 262.55 (Exception

Reports), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) The primary exporter must send a copy of the exception report to the Agency.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.156 Annual Reports

a) Primary exporters of hazardous waste must file with USEPA, no later than March 1 of each year, a report as specified in federal 40 CFR 262.56 (Annual Reports), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) The primary exporter must send the Agency a copy of each report sent to USEPA.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.157 Recordkeeping

For all exports a primary exporter must comply with the recordkeeping requirements of federal 40 CFR 262.57 (Recordkeeping), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART F: IMPORTS OF HAZARDOUS WASTE

Section 722.160 Imports of Hazardous Waste

a) Any person that imports hazardous waste from a foreign country into the United States must comply with the requirements of this Part and the special requirements of this Subpart F.

b) When importing hazardous waste, a person must meet all the requirements of Section 722.120(a) for the manifest, except that the following information items are substituted:

1) In place of the generator's name, address, and USEPA identification number, the name and address of the foreign generator and the importer's name, address, and USEPA identification number must be used.

2) In place of the generator's signature on the certification statement, the United States importer or the importer's agent must sign and date the certification and obtain the signature of the initial transporter.

c) A person that imports hazardous waste must obtain the manifest form~~,~~ as provided in Section 722.121(a) or (b)(7).

d) Effective September 5, 2006, in the International Shipments block of the manifest, the importer must check the import box and enter the point of entry (city and State) into the United States.

e) Effective September 5, 2006, the importer must provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to USEPA in accordance with 35 Ill. Adm. Code 724.171(a)(2)(C) or 725.171(a)(2)(C).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: TRANSFRONTIER SHIPMENTS OF HAZARDOUS WASTE FOR RECOVERY WITHIN THE OECD

Section 722.181 Definitions

The following definitions apply to this Subpart H:

"Amber-list controls" means the controls listed in ~~Section~~ section IV of the ~~Annex~~ annex to the OECD Council Decision C(92)39/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"Amber-list waste" means a waste listed in the OECD "Amber List of Wastes," Appendix 4 to the OECD Council Decision C(92)39/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"Competent authorities" means the regulatory authorities of concerned countries having jurisdiction over transfrontier movements of wastes destined for recovery operations.

"Concerned countries" means the exporting and importing OECD member countries and any OECD member countries of transit.

"Consignee" means the person to whom possession or other form of legal control of the waste is assigned at the time the waste is received in the importing country.

"Country of transit" means any designated OECD country in Section 722.158(a)(1) and (a)(2) other than the exporting or importing country across which a transfrontier movement of wastes is planned or takes place.

"Exporting country" means any designated OECD member country in Section 722.158(a)(1) from which a transfrontier movement of wastes is planned or has commenced.

"Green-list controls" means the controls listed in ~~Section~~ section III of the ~~Annex~~ annex to the OECD Council Decision C(92)39/FINAL, incorporated by reference

in 35 Ill. Adm. Code 720.111(a).

"Green-list waste" means a waste listed in the OECD "Green List of Wastes," Appendix 3 to the OECD Council Decision C(92)39/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"Importing country" means any designated OECD country in Section 722.158(a)(1) to which a transfrontier movement of wastes is planned or takes place for the purpose of submitting the wastes to recovery operations therein.

"Notifier" means the person under the jurisdiction of the exporting country that has, or will have at the time the planned transfrontier movement commences, possession or other forms of legal control of the wastes and that proposes their transfrontier movement for the ultimate purpose of submitting them to recovery operations. When the United States (U.S.) is the exporting country, notifier is interpreted to mean a person domiciled in the U.S.

"OECD area" means all land or marine areas under the national jurisdiction of any designated OECD member country in Section 722.158. When the regulations refer to shipments to or from an OECD country, this means OECD area.

"Recognized trader" means a person that, with appropriate authorization of concerned countries, acts in the role of principal to purchase and subsequently sell wastes; this person has legal control of such wastes from time of purchase to time of sale; such a person may act to arrange and facilitate transfrontier movements of wastes destined for recovery operations.

"Recovery facility" means an entity that, under applicable domestic law, is operating or is authorized to operate in the importing country to receive wastes and to perform recovery operations on them.

"Recovery operations" means activities leading to resource recovery, recycling, reclamation, direct re-use, or alternative uses, as listed in Table 2.B of the ~~Annex~~ annex of OECD Council Decision C(88)90(Final), incorporated by reference in 35 Ill. Adm. Code 720.111(a), which include the following activities:

R1 Use as a fuel (other than in direct incineration) or other means to generate energy,

R2 Solvent reclamation or regeneration,

R3 Recycling or reclamation of organic substances that are not used as solvents,

R4 Recycling or reclamation of metals and metal compounds,

R5 Recycling or reclamation of other inorganic materials,

R6 Regeneration of acids or bases,

R7 Recovery of components used for pollution control,

R8 Recovery of components from catalysts,

R9 Used oil re-refining or other reuses of previously used oil,

R10 Land treatment resulting in benefit to agriculture or ecological improvement,

R11 Uses of residual materials obtained from any of the operations numbered R1 through R10,

R12 Exchange of wastes for submission to any of the operations numbered R1 through R11, and

R13 Accumulation of material intended for any operation in Table 2.B.

"Red-list controls" means the controls listed in ~~Section~~ section V of the ~~Annex~~ annex to the OECD Council Decision C(92)39/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"Red-list waste" means a waste listed in the OECD ~~Green~~ "Red List of Wastes," Appendix 5 to the OECD Council Decision C(92)39/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"Transfrontier movement" means any shipment of wastes destined for recovery operations from an area under the national jurisdiction of one OECD member country to an area under the national jurisdiction of another OECD member country.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.187 Reporting and Recordkeeping

a) Annual reports. For all waste movements subject to this Subpart H, persons (e.g., notifiers, recognized traders, etc.) that meet the definition of primary exporter in Section 722.151 must file an annual report with the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460 and the Illinois Environmental Protection Agency, Bureau of Land, Division of Land Pollution Control, P.O. Box 19276, Springfield, IL 62794, no later than March 1 of each year summarizing the types,

quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter is required to file an annual report for waste exports that are not covered under this Subpart H, the person filing may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD member countries is contained in a separate Section). Such reports must include the following information:

1) The USEPA identification number, name, and mailing and site address of the notifier filing the report;

2) The calendar year covered by the report;

3) The name and site address of each final recovery facility;

4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the USEPA hazardous waste number (from Subpart C or D of 35 Ill. Adm. Code 721); the designation of waste types from the OECD waste list and applicable waste code from the OECD lists, as described in the annex to OECD Council Decision C(88)90/FINAL, as amended by C(94)152/FINAL, incorporated by reference in 35 Ill. Adm. Code 720.111(a), USDOT hazard class; the name and USEPA identification number (where applicable) for each transporter used; the total amount of hazardous waste shipped pursuant to this Subpart H; and number of shipments pursuant to each notification;

5) In even numbered years, for each hazardous waste exported, except for hazardous waste produced by exporters of greater than 100 kilograms (kg) but less than 1,000 kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to Section 722.141:

   A) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and

   B) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and

6) A certification signed by the person acting as primary exporter that states as follows:

   "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is

true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

b) Exception reports. Any person that meets the definition of primary exporter in Section 722.151 must file with USEPA and the Agency an exception report in lieu of the requirements of Section 722.142 if any of the following occurs:

1) The person has not received a copy of the tracking documentation signed by the transporter stating point of departure of the waste from the United States within 45 days from the date it was accepted by the initial transporter;

2) Within 90 days from the date the waste was accepted by the initial transporter, the notifier has not received written confirmation from the recovery facility that the hazardous waste was received; or

3) The waste is returned to the United States.

c) Recordkeeping.

1) Persons that meet the definition of primary exporter in Section 722.151 must keep the following records:

A) A copy of each notification of intent to export and all written consents obtained from the competent authorities of concerned countries, for a period of at least three years from the date the hazardous waste was accepted by the initial transporter;

B) A copy of each annual report, for a period of at least three years from the due date of the report; and

C) A copy of any exception reports and a copy of each confirmation of delivery (i.e., tracking documentation) sent by the recovery facility to the notifier, for at least three years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable.

2) The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by USEPA or the Agency.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 722.Appendix A Hazardous Waste Manifest

The Agency must prepare manifest forms based on the appendix to federal 40 CFR 262~~, Appendix~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~, with such changes as are necessary under Illinois law~~.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 723
STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

SUBPART A: GENERAL

Section
723.110 Scope
723.111 USEPA Identification Number
723.112 Transfer Facility Requirements

SUBPART B: COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

Section
723.120 The Manifest System
723.121 Compliance with the Manifest
723.122 Recordkeeping

SUBPART C: HAZARDOUS WASTE DISCHARGES

Section
723.130 Immediate Action
723.131 Discharge ~~Clean Up~~ Cleanup

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/22.4 and 27].

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22, 45 PCB 17, at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R84-9, at 9 Ill. Reg. 11961, effective July 24, 1985; amended in R86-19, at 10 Ill. Reg. 20718, effective December 2, 1986; amended in R86-46 at 11 Ill. Reg. 13570, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19412, effective November 12, 1987; amended in R95-6 at 19 Ill. Reg. 9945, effective June 27, 1995; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 589, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17965, effective September 28, 1998; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____,

effective _____.

SUBPART A: GENERAL

Section 723.110 Scope

a) These regulations establish standards which apply to persons transporting hazardous waste into, out of or through Illinois if the transportation requires a manifest under 35 Ill. Adm. Code 722.

b) These regulations do not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.

c) A transporter of hazardous waste must also comply with 35 Ill. Adm. Code 722, "Standards Applicable to Generators of Hazardous Waste," if either of the following occurs:

1) Transports It transports hazardous waste into the United States from abroad; or

2) Mixes It mixes hazardous waste of different DOT shipping descriptions by placing them into a single container.

BOARD NOTE: Transporters that store hazardous waste are required to comply with the storage standards in 35 Ill. Adm. Code 724 and 725 and the permit requirements of 40 CFR 122.

d) A transporter of hazardous waste subject to the manifesting requirements of 35 Ill. Adm. Code 722 or the waste management standards of 35 Ill. Adm. Code 733 that is being imported from or exported to any of the countries listed in 35 Ill. Adm. Code 722.158(a)(1) for purposes of recovery is subject to this Subpart and to all other relevant requirements of 35 Ill. Adm. Code 722.Subpart H, including, but not limited to, 35 Ill. Adm. Code 722.184 for tracking documents.

e) The regulations in this Part do not apply to transportation during an explosives or munitions emergency response, conducted in accordance with 35 Ill. Adm. Code 724.101(g)(8)(A)(iv) or (g)(8)(D) or 35 Ill. Adm. Code 725.101(c)(11)(A)(iv) or (c)(11)(D), and 35 Ill. Adm. Code 703.121(a)(4) or (c).

f) 35 Ill. Adm. Code 726.303 identifies how the requirements of this Part apply to military munitions classified as solid waste under 35 Ill. Adm. Code 726.302.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART B: COMPLIANCE WITH THE MANIFEST SYSTEM AND

RECORDKEEPING

Section 723.120 The Manifest System

a) No acceptance without a manifest.

1) The following manifest requirements apply until September 5, 2006:

~~1~~A) A transporter ~~shall~~ may not accept hazardous waste from a generator unless it is accompanied by a manifest signed in accordance with the provisions of 35 Ill. Adm. Code 722.120. In the case of exports other than those subject to 35 Ill. Adm. Code 722.Subpart H, a transporter ~~shall~~ may not accept such waste from a primary exporter or other person:

~~A~~i) If the transporter knows the shipment does not conform with the USEPA Acknowledgement of Consent (as defined in 35 Ill. Adm. Code 722.151); and

~~B~~ii) Unless, in addition to a manifest signed in accordance with 35 Ill. Adm. Code 722.120, the waste is also accompanied by a USEPA Acknowledgement of Consent which, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).

~~2~~B) For exports of hazardous waste subject to the requirements of Subpart H of 35 Ill. Adm. Code 722~~.Subpart H~~, a transporter may not accept hazardous waste without a tracking document that includes all information required by 35 Ill. Adm. Code 722.184.

2) The following manifest requirements apply effective September 5, 2006:

A) Manifest requirement. A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest signed in accordance with the provisions of 35 Ill. Adm. Code 723.123.

B) Exports.

i) In the case of exports other than those subject to Subpart H of 35 Ill. Adm. Code 722, a transporter may not accept such waste from a primary exporter or other person if the transporter knows that the shipment does not conform to the USEPA Acknowledgement of Consent; and unless, in addition to a manifest signed by the generator as provided in this Section, the transporter must also be provided with a

USEPA Acknowledgement of Consent that, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).

ii) For exports of hazardous waste subject to the requirements of Subpart H of 35 Ill. Adm. Code 722, a transporter may not accept hazardous waste without a tracking document that includes all information required by 35 Ill. Adm. Code 722.184.

BOARD NOTE: Subsection (a)(1) corresponds with 40 CFR 263.20(a) (2004), effective until September 5, 2006. Subsection (a)(2) corresponds with 40 CFR 263.20(a) (2005), effective September 5, 2006. The Board omitted 40 CFR 263.20(a)(3) (2005), since that provision merely stated the September 5, 2006 effective date for the newer manifest requirements.

b) Before transporting the hazardous waste, the transporter ~~shall~~ must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter ~~shall~~ must return a signed copy to the generator before leaving the generator's property.

c) The transporter ~~shall~~ must ensure that the manifest accompanies the hazardous waste. In the case of exports, the transporter ~~shall~~ must ensure that a copy of the USEPA Acknowledgement of Consent also accompanies the hazardous waste.

d) A transporter that delivers a hazardous waste to another transporter or to the designated facility ~~shall~~ must do the following:

1) ~~Obtain~~ It must obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest; ~~and~~

2) ~~Retain~~ It must retain one copy of the manifest in accordance with Section 723.122; and

3) ~~Give~~ It must give the remaining copies of the manifest to the accepting transporter or designated facility.

e) The requirements of subsections (c), (d), and (f) do not apply to water (bulk shipment) transporters if all of the following are true:

1) The hazardous waste is delivered by water (bulk shipment) to the designated facility; ~~and~~

2) A shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification and

signatures) accompanies the hazardous waste and, for exports, a USEPA Acknowledgement of Consent accompanies the hazardous waste; ~~and~~

3) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator designated facility on either the manifest or the shipping paper; ~~and~~

4) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and

5) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with Section 723.122.

f) For shipments involving rail transportation, the following requirements apply instead of the requirements of subsections (c), (d), and (e), which do not apply ~~and the following requirements do apply~~:

1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter ~~shall~~ must do the following:

A) ~~Sign~~ It must sign and date the manifest acknowledging acceptance of the hazardous waste;

B) ~~Return~~ It must return a signed copy of the manifest to the non-rail transporter;

C) ~~Forward~~ It must forward at least three copies of the manifest to the following entities:

i) The next non-rail transporter, if any;

ii) The designated facility, if the shipment is delivered to that facility by rail; or

iii) The last rail transporter designated to handle the waste in the United States;

D) ~~Retain~~ It must retain one copy of the manifest and rail shipping paper in accordance with Section 723.122.

2) Rail transporters ~~shall~~ must ensure that a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification and signatures) and, for exports, a USEPA Acknowledgement of Consent accompanies the hazardous waste

at all times.

BOARD NOTE: Intermediate rail transporters are not required to sign either the manifest or shipping paper.

3) When delivering hazardous waste to the designated facility, a rail transporter ~~shall~~ must do the following:

A) ~~Obtain~~ It must obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and

B) ~~Retain~~ It must retain a copy of the manifest or signed shipping paper in accordance with Section 723.122.

4) When delivering hazardous waste to a non-rail transporter a rail transporter ~~shall~~ must do the following:

A) ~~Obtain~~ It must obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and

B) ~~Retain~~ It must retain a copy of the manifest in accordance with Section 723.122.

5) Before accepting hazardous waste from a rail transporter, a non-rail transporter ~~shall~~ must sign and date the manifest and provide a copy to the rail transporter.

g) Transporters that transport hazardous waste out of the United States ~~shall~~ must do the following:

1) Until September 5, 2006:

~~1~~A) Indicate on the manifest the date the hazardous waste left the United States; ~~and~~

~~2~~B) Sign the manifest and retain one copy in accordance with Section 723.122(c); ~~and~~

~~3~~C) Return a signed copy of the manifest to the generator; and

~~4~~D) Give a copy of the manifest to a United States Customs official at the point of departure from the United States.

2) Effective September 5, 2006:

A) Sign and date the manifest in the International Shipments block to indicate the date that the hazardous waste left the United States;

B) Retain one copy in accordance with Section 723.122(d);

C) Return a signed copy of the manifest to the generator; and

D) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

BOARD NOTE: Subsections (g)(1)(A) through (g)(1)(B) correspond with 40 CFR 263.20(g) (2004). Subsections (g)(2)(A) through (g)(2)(B) correspond with 40 CFR 263.20(g) (2005). The Board added subsections (g)(1) and (g)(2), reciting the effective dates, based on 40 CFR 263.20(a)(3) (2005).

h) A transporter transporting hazardous waste from a generator that generates greater than 100 kilograms but less than ~~1000~~ 1,000 kilograms of hazardous waste in a calendar month need not comply with the requirements of this Section or those of Section 723.122 provided that:

1) The waste is being transported pursuant to a reclamation agreement provided for in 35 Ill. Adm. Code 722.120(e);

2) The transporter records, on a log or shipping paper, the following information for each shipment:

A) The name, address and USEPA Identification Number (35 Ill. Adm. Code 722.112) of the generator of the waste;

B) The quantity of waste accepted;

C) All shipping information required by the United States Department of Transportation;

D) The date the waste is accepted; and

3) The transporter carries this record when transporting waste to the reclamation facility; and

4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 723.121 Compliance with the Manifest

a) The transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:

1) The designated facility listed on the manifest; or

2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or

3) The next designated transporter; or

4) The place outside the United States designated by the generator.

b) Non-delivery of the hazardous waste.

~~b~~1) ~~If~~ Until September 5, 2006, if the hazardous waste cannot be delivered in accordance with ~~paragraph~~ subsection (a) of this ~~section~~ Section, the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.

2) Effective September 5, 2006.

A) If the hazardous waste cannot be delivered in accordance with subsection (a) of this Section because of an emergency condition other than rejection of the waste by the designated facility, then the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.

B) If hazardous waste is rejected by the designated facility while the transporter is on the premises of the designated facility, then the transporter must obtain the following, as appropriate:

i) For a partial load rejection or for regulated quantities of container residues: a copy of the original manifest that includes the facility's date and signature, the manifest tracking number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with Section 723.122 and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to

accompany the shipment, and the new manifest must include all of the information required in 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F) or 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F).

ii) For a full load rejection that will be taken back by the transporter: a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and USEPA identification number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with Section 723.122, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F) or 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F).

BOARD NOTE: Subsection (b)(1) is derived from 40 CFR 263.21(b) (2004), effective until September 5, 2006. Subsection (b)(2) is derived from 40 CFR 263.21(b) (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: HAZARDOUS WASTE DISCHARGES

Section 723.130 Immediate Action

a) In the event of a discharge of hazardous waste during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area).

b) If a discharge of hazardous waste occurs during transportation and an official (of state or local government or of a federal agency) acting within the scope of his or her official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters that do not have ~~U.S. EPA~~ USEPA identification numbers and without the preparation of a manifest.

c) An air, rail, highway, or water transporter that has discharged hazardous waste must:

1) Give notice to the National Response Center (800-424-8802 or 202-426-2675), if required by 49 CFR 171.15 (Immediate Notice of Certain Hazardous Materials Incidents), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

2) Report in writing to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, as required by 49 CFR 171.16 (Detailed Hazardous Materials Incident Reports), incorporated by reference in 35 Ill. Adm. Code 720.111(b); and

3) ~~give~~ Give notice to the following State agency:

Illinois Emergency Management Agency
110 East Adams
Springfield, Illinois 62706
217-782-7860

d) A water (bulk shipment) transporter that has discharged hazardous waste must give the same notice as required by 33 CFR 153.203 (Procedure for the Notice of Discharge), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for oil and hazardous substances.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 723.131 Discharge ~~Clean Up~~ Cleanup

A transporter must clean up any hazardous waste discharge that occurs during transportation or take such action as may be required or approved by ~~Federal~~ federal, State, or local officials so that the hazardous waste discharge no longer presents a hazard to human health or the environment.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 724
STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

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724.Appendix I Groundwater Monitoring List

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 Ill. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19397, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 458, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18527, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14511, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16658, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9654, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14572, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17702, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5806, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20830, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6973, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12487, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17601, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9951, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11244, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 636, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7638, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17972, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2186, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9437, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1146, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9833, effective June 20, 2000; expedited correction at 25 Ill. Reg. 5115, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6635, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3725, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6009, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6365, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART B: GENERAL FACILITY STANDARDS

Section 724.118 Location Standards

a) Seismic considerations.

1) Portions of new facilities where treatment, storage or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault that has had displacement in Holocene time.

2) As used in subsection (a)(1) of this Section:

A) "Fault" means a fracture along ~~with~~ which rocks on one side have been displaced with respect to those on the other side.

B) "Displacement" means the relative movement of any two sides of a fault measured in any direction.

C) "Holocene" means the most recent epoch of the Quarternary period, extending from the end of the Pleistocene to the present.

BOARD NOTE: Procedures for demonstrating compliance with this standard in Part B of the permit application are specified in 35 Ill. Adm. Code 703.182. Facilities that are located in political jurisdictions other than those listed in appendix VI to 40 CFR 264~~.Appendix VI~~ (Political Jurisdictions in Which Compliance with § 264.18(a) Must Be Demonstrated), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), are assumed to be in compliance with this requirement.

b) Floodplains.

1) A facility located in a 100 year floodplain must be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate the following to the Agency's satisfaction:

A) That procedures are in effect that will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters; or

B) For existing surface impoundments, waste piles, land treatment units, landfills and miscellaneous units, that no adverse effect on human health or the environment will result if washout occurs, considering the following:

i) The volume and physical and chemical characteristics of the waste in the facility;

ii) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;

iii) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and

iv) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout;

2) As used in subsection (b)(1) of this Section:

A) "100-year floodplain" means any land area that is subject to a one percent or greater chance of flooding in any given year from any source.

B) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.

C) "100-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

BOARD NOTE: Requirements pertaining to other ~~Federal~~ federal laws that affect the location and permitting of facilities are found in 40 CFR 270.3. For details relative to these laws, see EPA's manual for SEA (special environmental area) requirements for hazardous waste facility permits. Though EPA is responsible for complying with these requirements, applicants are advised to consider them in planning the location of a facility to help prevent subsequent project delays. Facilities may be required to obtain from the Illinois Department of Transportation on a permit or certification that a facility is flood-proofed.

c) Salt dome formations, salt bed formations, underground mines and caves. The placement of any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground cave or mine is prohibited.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 724.150 Applicability

The regulations in this Subpart D apply to owners and operators of ~~a11~~ all hazardous waste management facilities, except as Section 724.101 provides otherwise.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.152 Content of Contingency Plan

a) The contingency plan must describe the actions facility personnel must take to comply with Sections 724.151 and 724.156 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

b) If the owner or operator has already prepared a Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with federal 40 CFR ~~Part~~ 112 or 300, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part.

c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services pursuant to Section 724.137.

d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see Section 724.155), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the Agency at the time of certification, rather than at the time of permit application.

e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.

f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.153 Copies of Contingency Plan

A copy of the contingency plan and all revisions to the plan must be:

a) Maintained at the facility; and

b) Submitted to all local police departments, fire departments, hospitals, and ~~state~~ State and local emergency response teams that may be called upon to provide emergency services.

BOARD NOTE: The contingency plan must be submitted to the Agency with Part B of the permit application under 35 Ill. Adm. Code 702 and 703, and, after modification or approval, the

plan will become a condition of any permit issued.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.156 Emergency Procedures

a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) must immediately do the following:

1) ~~Activate~~ He or she must activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

2) ~~Notify~~ He or she must notify appropriate ~~state~~ State or local agencies with designated response roles if their help is needed.

b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, the emergency coordinator must report the findings as follows:

1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and

2) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under federal 40 CFR 300) or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following:

A) Name and telephone number of reporter;

B) Name and address of facility;

C) Time and type of incident (e.g., release, fire);

D) Name and quantity of materials involved, to the extent known;

E) The extent of injuries, if any; and

F) The possible hazards to human health or the environment outside the facility.

e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

BOARD NOTE: Unless the owner or operator can demonstrate, in accordance with 35 Ill. Adm. Code 721.103(d) or (e), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 724.

h) The emergency coordinator must ensure that the following is true in the affected areas of the facility:

1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

i) The owner or operator must notify the Agency and appropriate state and local authorities that the facility is in compliance with subsection (h) of this Section before operations are resumed in the affected areas of the facility.

j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days

after the incident, the owner or operator must submit a written report on the incident to the Agency. The report must include the following:

1) ~~Name,~~ The name, address, and telephone number of the owner or operator;

2) ~~Name,~~ The name, address, and telephone number of the facility;

3) ~~Date,~~ The date, time, and type of incident (e.g., fire, explosion);

4) ~~Name~~ The name and quantity of materials involved;

5) The extent of injuries, if any;

6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

7) ~~Estimated~~ The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 724.170 Applicability

The regulations in this Subpart E apply to owners and operators of both on-site and off-site facilities, except as Section 724.101 provides otherwise. Sections 724.171, 724.172, and 724.176 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources, nor do they apply to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under 35 Ill. Adm. Code 726.303(a). Section 724.173(b) only applies to permittees that treat, store, or dispose of hazardous wastes on-site where such wastes were generated.

BOARD NOTE: This Section corresponds with 40 CFR 264.70(a) (2005), effective September 5, 2006. The Board omitted 40 CFR 264.70(b) (2005), since that provision merely stated the September 5, 2006 effective date for the newer manifest requirements.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.171 Use of Manifest System

a) Receipt of manifested hazardous waste.

~~a~~1) The following requirements apply until September 5, 2006: If a facility receives hazardous waste accompanied by a manifest, the owner or

operator, or the owner or operator's agent, must do the following:

~~1~~A) ~~Sign~~ It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

~~2~~B) ~~Note~~ It must note any significant discrepancies in the manifest (as defined in Section 724.172(a)) on each copy of the manifest;

BOARD NOTE: The Board does not intend that the owner or operator of a facility whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

~~3~~C) ~~Immediately~~ It must immediately give the transporter at least one copy of the signed manifest;

~~4~~D) ~~Within 30 days after the delivery,~~ It must send a copy of the manifest to the generator and to the Agency within 30 days after delivery; and

~~5~~E) ~~Retain~~ It must retain at the facility a copy of each manifest for at least three years ~~from~~ after the date of delivery.

2) The following requirements apply effective September 5, 2006:

A) If a facility receives hazardous waste accompanied by a manifest, the owner, operator, or its agent must sign and date the manifest, as indicated in subsection (a)(2)(B) of this Section to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.

B) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:

i) It must sign and date, by hand, each copy of the manifest;

ii) It must note any discrepancies (as defined in Section 724.172(b)) on each copy of the manifest;

iii) It must immediately give the transporter at least one copy of the manifest;

iv) It must send a copy of the manifest to the generator within 30 days after delivery; and

v) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.

C) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within 30 days after delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

BOARD NOTE: Subsection (a)(1) of this Section corresponds with 40 CFR 264.71(a) (2004), effective until September 5, 2006. Subsection (a)(2) of this Section corresponds with 40 CFR 264.71(a) (2005), effective September 5, 2006.

b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator's certification, and signatures), the owner or operator, or the owner or operator's agent, must do the following:

1) ~~Sign~~ It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

2) ~~Note~~ It must note any significant discrepancies (as defined in Section 724.172(a)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

BOARD NOTE: The Board does not intend that the owner or operator of a facility whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

3) ~~Immediately~~ It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

4) It must forward copies of the manifest as follows:

~~4~~A) ~~Within 30 days after the delivery,~~ Until September 5, 2006: The owner or operator must send a copy of the signed and dated manifest to the generator and to the Agency within 30 days after

the delivery; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or the owner or operator's agent, must send a copy of the shipping paper signed and dated to the generator; ~~and~~ or

B) Effective September 5, 2006: The owner or operator must send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within 30 days after delivery) to the generator within 30 days after the delivery; and

BOARD NOTE: Section 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment). Subsection (b)(4)(A) is derived from 40 CFR 264.74(b)(4) (2004), effective until September 5, 2006. Subsection (b)(4)(B) is derived from 40 CFR 264.74(b)(4) (2005), effective September 5, 2006.

5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.

c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Section 722.134 only apply to owners or operators that are shipping hazardous waste that they generated at that facility.

d) Within three working days ~~of~~ after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier; to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460; to the Bureau of Land, Division of Land Pollution Control, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.172 Manifest Discrepancies

a) The following requirements apply until September 5, 2005:

~~a~~1) Definition of a "manifest discrepancy."

~~1~~A) A manifest discrepancy is a difference between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives;

~~2~~B) A significant discrepancy in quantity is as follows:

~~A~~i) For bulk waste, variations greater than 10 percent in weight; and

~~B~~ii) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload;

~~3~~C) Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

~~b~~2) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

b) The following requirements apply effective September 5, 2005:

1) "Manifest discrepancies" are defined as any one of the following:

A) Significant differences (as defined by subsection (b)(2) of this Section) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;

B) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or

C) Container residues, which are residues that exceed the quantity

limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b).

2) "Significant differences in quantity" are defined as the appropriate of the following: for bulk waste, variations greater than 10 percent in weight; or, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. "Significant differences in type" are defined as obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or as toxic constituents not reported on the manifest or shipping paper.

3) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (*e.g.*, with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

4) Rejection of hazardous waste.

A) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within 60 days after the rejection or the container residue identification.

B) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under subsection (b)(5) or (b)(6) of this Section.

5) Except as provided in subsection (b)(5)(G) of this Section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions:

A) Write the generator's USEPA identification number in Item 1 of

the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.

B) Write the name of the alternate designated facility and the facility's USEPA identification number in the designated facility block (Item 8) of the new manifest.

C) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

D) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).

E) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.

F) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

G) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(5)(A) through (b)(5)(F) of this Section.

6) Except as provided in subsection (b)(6)(G) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions:

A) Write the facility's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address

in the designated space for Item 5.

B) Write the name of the initial generator and the generator's USEPA identification number in the designated facility block (Item 8) of the new manifest.

C) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

D) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).

E) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.

F) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

G) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(6)(A) through (b)(6)(F) of this Section.

7) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

BOARD NOTE: Subsection (a) is derived from 40 CFR 264.72 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 264.72 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.176 Unmanifested Waste Report

a) The following requirements apply until September 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in 35 Ill. Adm. Code 723.120(e)(2), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 721.105, then the owner or operator must prepare and submit a single copy of a report to the Agency within 15 days after receiving the waste. The unmanifested waste report must be submitted on EPA form 8700-13B. Such report must be designated "Unmanifested Waste Report" and include the following information:

~~a~~1) The USEPA identification number, name, and address of the facility;

~~b~~2) The date the facility received the waste;

~~c~~3) The USEPA identification number, name, and address of the generator and the transporter, if available;

~~d~~4) A description and the quantity of each unmanifested hazardous waste and facility received;

~~e~~5) The method of treatment, storage, or disposal for each hazardous waste;

~~f~~6) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative; and

~~g~~7) A brief explanation of why the waste was unmanifested, if known.

b) The following requirements apply effective September 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, as described by 35 Ill. Adm. Code 723.120(e), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 260 through 265, then the owner or operator must prepare and submit a letter to the Agency within 15 days after receiving the waste. The unmanifested waste report must contain the following information:

1) The USEPA identification number, name, and address of the facility;

2) The date the facility received the waste;

3) The USEPA identification number, name, and address of the generator and the transporter, if available;

4) A description and the quantity of each unmanifested hazardous waste the facility received;

5) The method of treatment, storage, or disposal for each hazardous waste;

6) The certification signed by the owner or operator of the facility or its authorized representative; and

7) A brief explanation of why the waste was unmanifested, if known.

BOARD NOTE: Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility receives unmanifested hazardous wastes, ~~the Board suggests~~ USEPA has suggested that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Board ~~the Board suggests~~ USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement. Subsection (a) is derived from 40 CFR 264.76 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 264.76 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

Section 724.193 Hazardous Constituents

a) The Agency must specify in the facility permit the hazardous constituents to which the groundwater protection standard of Section 724.192 applies. Hazardous constituents are constituents identified in Appendix H of 35 Ill. Adm. Code 721 that have been detected in groundwater in the uppermost aquifer underlying a regulated unit and that are reasonably expected to be in or derived from waste contained in a regulated unit, unless the Agency has excluded them under subsection (b) of this Section.

b) The Agency must exclude a ~~35 Ill. Adm. Code 721, Appendix H~~ constituent in Appendix H of 35 Ill. Adm. Code 721 from the list of hazardous constituents specified in the facility permit if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to grant an exemption, the Agency must consider the following:

1) Potential adverse effects on groundwater quality, considering the following:

   A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

   B) The hydrogeological characteristics of the facility and surrounding land;

   C) The quantity of groundwater and the direction of groundwater flow;

   D) The proximity and withdrawal rates of groundwater users;

   E) The current and future uses of groundwater in the area;

   F) The existing quality of groundwater, including other sources of contamination, and their cumulative impact on the groundwater quality;

   G) The potential for health risks caused by human exposure to waste constituents;

   H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

   I) The persistence and permanence of the potential adverse effects; and

2) Potential adverse effects on hydraulically-connected surface water quality, considering the following:

   A) The volume and physical and chemical characteristics of the waste in the regulated unit;

   B) The hydrogeological characteristics of the facility and surrounding land;

   C) The quantity and quality of groundwater and the direction of groundwater flow;

   D) The patterns of rainfall in the region;

   E) The proximity of the regulated unit to surface waters;

   F) The current and future uses of surface waters in the area and any

water quality standards established for those surface waters;

G) The existing quality of surface water, including other sources of contamination, and the cumulative impact on surface water quality;

H) The potential for health risks caused by human exposure to waste constituents;

I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

J) The persistence and permanence of the potential adverse effects.

c) In making any determination under subsection (b) of this Section about the use of groundwater in the area around the facility, the Agency must consider any identification of underground sources of drinking water and exempted aquifers made under 35 Ill. Adm. Code 704.123.

d) The Agency must make specific written findings in granting any exemptions under subsection (b) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.194 Concentration Limits

a) The Agency must specify in the facility permit concentration limits in the groundwater for hazardous constituents established under Section 724.193. The following must be true of the concentration of a hazardous constituent:

1) It must not exceed the background level of that constituent in the groundwater at the time that limit is specified in the permit; or

2) For any of the constituents listed in Table 1, it must not exceed the respective value given in that Table if the background level of the constituent is below the value given in Table 1; or

3) It must not exceed an alternative limit established by the Agency under subsection (b) of this Section.

TABLE 1 -- MAXIMUM CONCENTRATION OF CONSTITUENTS FOR GROUNDWATER PROTECTION

Constituent	Maximum Concentration (~~mg/l~~mg/ℓ)
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-6,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,endo-1,4:5,8-dimethanonaphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclo-hexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2'-bis-(p-methoxyphenyl)ethane)	0.1
Toxaphene (Technical chlorinated camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP (Silvex) (2,4,5-Trichlorophenoxy-propionic acid)	0.01

b) The Agency must establish an alternative concentration limit for a hazardous constituent if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternative concentration limit is not exceeded. In establishing alternate concentration limits, the Agency must consider the following factors:

1) Potential adverse effects on groundwater quality, considering the following:

A) The physical and chemical characteristics of the waste in the regulated unit, including its potential for migration;

B) The hydrogeological characteristics of the facility and surrounding land;

C) The quantity of groundwater and the direction of groundwater flow;

D) The proximity and withdrawal rates of groundwater users;

E) The current and future uses of groundwater in the area;

F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

G) The potential for health risks caused by human exposure to waste constituents;

H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

I) The persistence and permanence of the potential adverse effects; and

2) Potential adverse effects on hydraulically-connected surface-water quality, considering the following:

A) The volume and physical and chemical characteristics of the waste in the regulated unit;

B) The hydrogeological characteristics of the facility and surrounding land;

C) The quantity and quality of groundwater and the direction of groundwater flow;

D) The patterns of rainfall in the region;

E) The proximity of the regulated unit to surface waters;

F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface-water quality;

H) The potential for health risks caused by human exposure to waste constituents;

I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

J) The persistence and permanence of the potential adverse effects.

c) In making any determination under subsection (b) of this Section about the use of groundwater in the area around the facility, the Agency must consider any identification of underground sources of drinking water and exempted aquifers made under 35 Ill. Adm. Code 704.123.

d) The Agency must make specific written findings in setting any alternate concentration limits under subsection (b) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: FINANCIAL REQUIREMENTS

Section 724.243 Financial Assurance for Closure

An owner or operator of each facility must establish financial assurance for closure of the facility. The owner or operator must choose from the options that are specified in subsections (a) through (f) of this Section.

a) Closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the requirements of this subsection (a) and submitting an original signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original signed duplicate of the trust agreement to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

2) The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or

disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

~~Next payment = (CE - CV) / Y~~

$$\text{Next payment} = \frac{(\text{CE} - \text{CV})}{\text{Y}}$$

~~where CE is the current closure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.~~

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
Y = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund as specified in 35 Ill. Adm. Code 725.243(a) and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

~~Next payment = (CE - CV) / Y~~

$$\text{Next payment} = \frac{(\text{CE} - \text{CV})}{\text{Y}}$$

~~where CE is the current closure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.~~

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
Y = the number of years remaining in the pay-in period.

4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.

5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this Section or in 35 Ill. Adm. Code 725.243, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.243, as applicable.

6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate or obtain other financial assurance as specified in this Section to cover the difference.

7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate.

8) If an owner or operator substitutes other financial assurance, as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate covered by the trust fund.

9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.

10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

11) The Agency must agree to termination of the trust when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i).

b) Surety bond guaranteeing payment into a closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on ~~Federal~~ federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet

from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be that specified in Section 724.251.

3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section except as follows:

   A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

   B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

      i) Payments into the trust fund as specified in subsection (a) of this Section;

      ii) Updating of Schedule A of the trust agreement (see ~~40 CFR 264.151(a)~~ 35 Ill. Adm. Code 724.251) to show current closure cost estimates;

      iii) Annual valuations, as required by the trust agreement; and

      iv) Notices of nonpayment as required by the trust agreement.

4) The bond must guarantee that the owner or operator will do one of the following:

   A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;

   B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin final closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or

   C) Provide alternate financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond

obligation when the owner or operator fails to perform as guaranteed by the bond.

6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section.

7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence by the return receipts.

9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this Section.

c) Surety bond guaranteeing performance of closure.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on ~~Federal~~ federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be that specified in Section 724.251.

3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:

   A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

   B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

      i) Payments into the trust fund, as specified in subsection (a) of this Section;

      ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;

      iii) Annual valuations, as required by the trust agreement; and

      iv) Notices of nonpayment, as required by the trust agreement.

4) The bond must guarantee that the owner or operator will do the following:

   A) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or

   B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure, as guaranteed by the bond, or will deposit the amount of the penal sum into the standby trust fund.

6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.

7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance as specified in this Section. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

9) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

10) The surety must not be liable for deficiencies in the performance of closure by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

d) Closure letter of credit.

1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.

2) The wording of the letter of credit must be that specified in Section 724.251.

3) An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:

   A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and

   B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations.

      i) Payments into the trust fund, as specified in subsection (a) of this Section;

      ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;

      iii) Annual valuations, as required by the trust agreement; and

      iv) Notices of nonpayment, as required by the trust agreement.

4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.

6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this

Section.

7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

8) Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Agency may draw on the letter of credit.

9) If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

10) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

e) Closure insurance.

1) An owner or operator may satisfy the requirements of this Section by obtaining closure insurance that conforms to the requirements of this subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.

The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more States.

2) The wording of the certificate of insurance must be that specified in Section 724.251.

3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties, as the Agency specifies.

5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Agency must instruct the insurer to make reimbursement in such amounts, as the Agency specifies in writing, if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, it must withhold reimbursement of such amounts that it deems prudent, until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for closure of the facility. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator, as specified in subsection (e)(10) of this Section. Failure to pay the premium, without substitution of alternative financial assurance, as

specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in the event that on or before the date of expiration one of the following occurs:

   A) The Agency deems the facility abandoned;

   B) The permit is terminated or revoked or a new permit is denied;

   C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;

   D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under ~~Title~~ 11 ~~of the United States Code~~ USC (Bankruptcy); or

   E) The premium due is paid.

9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written

approval by the Agency.

10) The Agency must give written consent to the owner or operator that it may terminate the insurance policy when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

f) Financial test and corporate guarantee for closure.

1) An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test, as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:

A) The owner or operator must have the following:

i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and the current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

B) The owner or operator must have the following:

i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current

plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure estimates and the current plugging and abandonment cost estimates.

2) The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 264.151(f)) (incorporated by reference in~~ see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 144.70(f)), incorporated by reference in~~ see 35 Ill. Adm. Code 704.240).

3) To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:

A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251; and

B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:

i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii) In connection with that procedure, that no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.

4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or

disposal.

5) After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.

6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.

7) The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of such a finding.

8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance.

9) The owner or operator is no longer required to submit the items specified in subsection (f)(3) of this Section when either of the following occurs:

   A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

   B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

10) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(8) of this Section, must comply with the terms of the corporate guarantee, and the wording of the corporate guarantee must be that specified in Section 724.251. The certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:

A) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund, as specified in subsection (a) of this Section, in the name of the owner or operator.

B) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

C) If the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds

guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for closure of the facility.

h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

i) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final approved closure has been accomplished in accordance with the closure plan, the Agency must notify the owner or operator in writing that it is no longer required by this Section to maintain financial assurance for closure of the facility, unless the Agency determines that closure has not been in accordance with the approved closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that closure has not been in accordance with the approved closure plan.

j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):

1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance;

2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.245 Financial Assurance for Post-Closure Care

An owner or operator of a hazardous waste management unit subject to the requirements of Section 724.244 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. The owner or operator must choose from among the following options:

a) Post-closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by establishing a post-closure trust fund that conforms to the requirements of this subsection (a) and submitting an original, signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original, signed duplicate of the trust agreement to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

2) The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

~~Next payment = (CE - CV) / Y~~

$$\text{Next payment} = \frac{(\text{CE} - \text{CV})}{\text{Y}}$$

~~where CE is the current closure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.~~

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
Y = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund, as specified in 35 Ill. Adm. Code 725.245(a), and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

~~Next payment = (CE - CV) / Y~~

$$\text{Next payment} = \frac{(\text{CE} - \text{CV})}{\text{Y}}$$

~~where CE is the current closure cost estimate, CV is the current value of the trust fund and Y is the number of years remaining in the pay-in period.~~

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
Y = the number of years remaining in the pay-in period.

4) The owner or operator may accelerate payments into the trust fund or owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified

in subsection (a)(3) of this Section.

5) If the owner or operator establishes a post-closure trust fund after having used one or more alternative mechanisms specified in this Section or in 35 Ill. Adm. Code 725.245, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.245, as applicable.

6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance, as specified in this Section, to cover the difference.

7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate.

8) If an owner or operator substitutes other financial assurance as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

9) Within 60 days after receiving a request from the owner or operator for release of funds, as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.

10) During the period of post-closure care, the Agency must approve a release of funds if the owner or operator demonstrates to the Agency that the value of the trust fund exceeds the remaining cost of post-closure care.

11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the trustee to make requirements in those amounts that the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the trustee to make

such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

12) The Agency must agree to termination of the trust when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

b) Surety bond guaranteeing payment into a post-closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on ~~Federal~~ federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be that specified in Section 724.251.

3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a)

of this Section;

ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The bond must guarantee that the owner or operator will do one of the following:

A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;

B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or

C) Provide alternative financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.

7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

8) Under the terms of the bond, the surety may cancel the bond by sending

notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence by the return receipts.

9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternative financial assurance, as specified in this Section.

c) Surety bond guaranteeing performance of post-closure care.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on ~~Federal~~ federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be that specified in Section 724.251.

3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required:

i) Payments into the trust fund, as specified in subsection (a) of this Section;

ii) Updating of Schedule A of the trust agreement (as specified

in Section 724.251) to show current post-closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The bond must guarantee that the owner or operator will do either of the following:

A) Perform final post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or

B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.

6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.

7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section. Whenever the current closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

8) During the period of post-closure care, the Agency must approve a decrease in the penal sum if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.

9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

10) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

11) The surety will not be liable for deficiencies in the performance of post-closure care by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

d) Post-closure letter of credit.

1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.

2) The wording of the letter of credit must be that specified in Section 724.251.

3) An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be

submitted to the Agency with the letter of credit; and

B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a) of this Section;

ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.

6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.

7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

8) During the period of post-closure care, the Agency must approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.

9) Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, the Agency may draw on the letter of credit.

10) If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

11) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

e) Post-closure insurance.

1) An owner or operator may satisfy the requirements of this Section by obtaining post-closure insurance that conforms to the requirements of this subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more states.

2) The wording of the certificate of insurance must be that specified in

Section 724.251.

3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of facility whenever the post-closure period begins. The policy must also guarantee that, once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies.

5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator as specified in subsection (e)(11) of this Section. Failure to pay the premium, without substitution of alternative financial assurance as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act [415 ILCS 5]. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a

failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in the event that on or before the date of expiration one of the following occurs:

A) The Agency deems the facility abandoned;

B) The permit is terminated or revoked or a new permit is denied;

C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;

D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under ~~Title~~ 11 ~~of the United States Code~~ USC (Bankruptcy); or

E) The premium due is paid.

9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

11) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

f) Financial test and corporate guarantee for post-closure care.

1) An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:

A) The owner or operator must have the following:

i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

B) The owner or operator must have the following:

i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;

ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90

percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

2) The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 264.151(f), incorporated by reference in~~ see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 144.70(f), incorporated by reference in~~ see 35 Ill. Adm. Code 704.240).

3) To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:

A) A letter signed by the owner's or operator's chief financial officer and worded, as specified in Section 724.251; and

B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:

i) The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii) In connection with that procedure, no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.

4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for disposal.

5) After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This

information must consist of all three items specified in subsection (f)(3) of this Section.

6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements the owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.

7) Based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, the Agency may require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of such a finding.

8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance.

9) During the period of post-closure care, the Agency must approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Agency that the amount of the cost estimate exceeds the remaining cost of post-closure care.

10) The owner or operator is no longer required to submit the items specified in subsection (f)(3) of this Section when either of the following occurs:

A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

11) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(9), and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be that specified in Section 724.251. A certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:

A) That if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section in the name of the owner or operator.

B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

C) That if the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds

guaranteeing payment into a trust fund, letters of credit and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for post-closure care of the facility.

h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

i) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Agency must notify the owner or operator that it is no longer required to maintain financial assurance for post-closure care of that unit, unless the Agency determines that post-closure care has not been in accordance with the approved post-closure plan. The Agency must provide the owner or operator with a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan.

j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):

1) An increase in or a refusal to decrease the amount of a bond, letter of credit, or insurance;

2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.248 Incapacity of Owners or Operators, Guarantors, or Financial Institutions

a) An owner or operator must notify the Agency by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 of the United States Code (Bankruptcy) naming the owners or operators as debtor, within 10 days after commencement of the proceeding. A guarantor of a corporate guarantee, as specified in Sections 724.243(f) and 724.245(f), must make such a notification if he is named as a debtor, as required under the terms of the corporate guarantee (~~40 CFR 264.151(h), incorporated by reference in~~ see Section 724.251).

b) An owner or operator who fulfills the requirements of Sections 724.243, 724.245, or 724.247 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.251 Wording of the Instruments

The Agency must promulgate standardized forms based on 40 CFR 264.151 (Wording of the Instruments), incorporated by reference in 35 Ill. Adm. Code 720.111(b), with such changes in wording as are necessary under Illinois law. Any owner or operator required to establish financial assurance under this Subpart H must do so only upon the standardized forms promulgated by the Agency. The Agency must reject any financial assurance document that is not submitted on such standardized forms.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 724.273 Management of Containers

a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

b) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

BOARD NOTE: Reuse of containers in transportation is governed by ~~U.S. Department of~~

~~Transportation~~ USDOT regulations including those set forth in 49 CFR 173.28 (Reuse, Reconditioning, and Remanufacture of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.277 Special Requirements for Incompatible Wastes

a) Incompatible wastes or incompatible wastes and materials (see ~~Appendix E~~ appendix V of ~~this Part~~ 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same container, unless Section 724.117(b) is complied with.

b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.

c) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

BOARD NOTE: The purpose of this Section is to prevent fires, explosions, gaseous emission, leaching, or other discharge of hazardous waste or hazardous waste constituents that could result from the mixing of incompatible wastes or materials if containers break or leak. As required by Section 724.113, the waste analysis plan must include analyses needed to comply with Section 724.277. Also Section 724.117(c) requires waste analyses, trial tests, or other documentation to assure compliance with Section 724.117(b). As required by Section 724.173, the owner or operator must place the results of each waste analysis and trial test, and any documented information, in the operating record of the facility.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART J: TANK SYSTEMS

Section 724.290 Applicability

The requirements of this Subpart J apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in subsection (a), (b), or (c) of this Section or in Section 724.101.

a) Tank systems that are used to store or treat hazardous waste that contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in Section 724.293. To demonstrate the absence or presence of free liquids in the stored or treated waste, the following test must be used: USEPA Method ~~9095~~ 9095B (Paint Filter Liquids Test), as described in

"Test Methods for Evaluating Solid Wastes Physical/Chemical Methods" USEPA ~~Publication No.~~ publication number EPA-530/SW-846~~)~~, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

b) Tank systems, including sumps, are defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 724.293(a).

c) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in 35 Ill. Adm. Code 720.110 and regulated under Subpart W of this Part, must meet the requirements of this Subpart J.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.291 Assessment of Existing Tank System Integrity

a) For each existing tank system that does not have secondary containment meeting the requirements of Section 724.293, the owner or operator must determine either that the tank system is not leaking or that it is unfit for use. Except as provided in subsection (c) of this Section, the owner or operator must, by January 12, 1988, obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified registered professional engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that attests to the tank system's integrity.

b) This assessment must determine whether the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1) Design standards, if available, according to which the tank and ancillary equipment were constructed;

2) Hazardous characteristics of the wastes that have been and will be handled;

3) Existing corrosion protection measures;

4) Documented age of the tank system, if available (otherwise an estimate of the age); and

5) Results of a leak test, internal inspection, or other tank integrity examination so that the following is true:

A) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and

high water table effects, and

B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by an independent, qualified registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d), that address cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used, where applicable, as guidelines in conducting other than a leak test.

c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.

d) If, as a result of the assessment conducted in accordance with subsection (a) of this Section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of Section 724.296.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.292 Design and Installation of New Tank Systems or Components

a) Owners or operators of new tank systems or components must obtain and submit to the Agency, at time of submittal of Part B information, a written assessment, reviewed and certified by an independent, qualified registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which will be used by the Agency to review and approve or disapprove the acceptability of the tank system design, must include, at a minimum, the following information:

1) Design standards according to which tanks or the ancillary equipment are constructed;

2) Hazardous characteristics of the wastes to be handled;

3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of the following:

A) Factors affecting the potential for corrosion, including but not limited to the following:

i) Soil moisture content;

ii) Soil pH;

iii) Soil sulfide level;

iv) Soil resistivity;

v) Structure to soil potential;

vi) Influence of nearby underground metal structures (e.g., piping);

vii) Existence of stray electric current;

viii) Existing corrosion-protection measures (e.g., coating, cathodic protection, etc.); and

B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

i) Corrosion-resistant materials of construction, such as special alloys, fiberglass reinforced plastic, etc.;

ii) Corrosion-resistant coating, such as epoxy, fiberglass, etc., with cathodic protection (e.g., impressed current or sacrificial anodes); and

iii) Electrical isolation devices, such as insulating joints, flanges, etc.

BOARD NOTE: The practices described in the National Association of Corrosion Engineers (NACE) standard, ~~"Recommended Practice (RP-02-85)~~ "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285,

and ~~API Publication 1632,~~ "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

4) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

5) Design considerations to ensure the following:

A) That tank foundations will maintain the load of a full tank;

B) That tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of Section 724.118(a); and

C) That tank systems will withstand the effects of frost heave.

b) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent qualified installation inspector or an independent, qualified registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:

1) Weld breaks;

2) Punctures;

3) Scrapes of protective coatings;

4) Cracks;

5) Corrosion;

6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

c) New tank systems or components that are placed underground and which are backfilled must be provided with a backfill material that is a noncorrosive,

porous, and homogeneous substance which is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed, or placed into use.

e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

BOARD NOTE: The piping system installation procedures described in ~~API Publication 1615,~~ "Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615~~;~~, or ~~American National Standards Institute (ANSI) Standard B31.3,~~ "Chemical Plant and Petroleum Refinery Piping,"~~;~~ ASME/ANSI Standard B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, and ~~ANSI Standard B31.4~~ "Liquid Petroleum Transportation Piping Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI Standard B31.4-1986, as supplemented by B31.4a-1987, each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used where applicable, as guidelines for proper installation of piping systems.

f) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under subsection (a)(3) of this Section, or other corrosion protection if the Agency determines that other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

g) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (b) through (f) of this Section, that attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (b) and (d) of this Section, were performed. These written statements must also include the certification statement, as required in 35 Ill. Adm. Code 702.126(d).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.293 Containment and Detection of Releases

a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in subsections (f) and (g) of this Section).

1) For a new tank system or component, prior to their being put into service;

2) For all existing tank systems used to store or treat Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027, as defined in 35 Ill. Adm. Code 721.131, within two years after January 12, 1987;

3) For those existing tank systems of known and documented age, within two years after January 12, 1987, or when the tank system has reached 15 years of age, whichever comes later;

4) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of January 12, 1987, whichever comes later; and

5) For tank systems that store or treat materials that become hazardous wastes subsequent to January 12, 1987, within the time intervals required in subsections (a)(1) through (a)(4) of this Section, except that the date that a material becomes a hazardous waste must be used in place of January 12, 1987.

b) Secondary containment systems must fulfill the following:

1) It must be designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

2) It must be capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

c) To meet the requirements of subsection (b) of this Section, secondary containment systems must, at a minimum, fulfill the following:

1) It must be constructed of or lined with materials that are compatible with the wastes to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

2) It must be placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression or uplift;

3) It must be provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator demonstrates, by way of permit application, to the Agency that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and

4) It must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator demonstrates to the Agency, by way of permit application, that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

BOARD NOTE: If the collected material is a hazardous waste under 35 Ill. Adm. Code 721, it is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 725. If the collected material is discharged through a point source to waters of the State, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Work (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~.

d) Secondary containment for tanks must include one or more of the following devices:

1) A liner (external to the tank);

2) A vault;

3) A double-walled tank; or

4) An equivalent device, as approved by the Board in an adjusted standards proceeding.

e) In addition to the requirements of subsections (b), (c), and (d) of this Section, secondary containment systems must satisfy the following requirements:

1) An external liner system must fulfill the following:

   A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary.

   B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.

   C) It must be free of cracks or gaps~~; and~~.

   D) It must be designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tanks (i.e., it is capable of preventing lateral as well as vertical migration of the waste).

2) A vault system must fulfill the following:

   A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within the vault system's boundary;

   B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

   C) It must be constructed with chemical-resistant water stops in place at all joints (if any);

   D) It must be provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

   E) It must be provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated fulfills the following:

      i) It meets the definition of ignitable waste under 35 Ill. Adm. Code 721.121; or

      ii) It meets the definition of reactive waste under 35 Ill. Adm. Code 721.123, and may form an ignitable or explosive vapor;

F) It must be provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3) A double-walled tank must fulfill the following:

A) It must be designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

B) It must be protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

C) It must be provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator demonstrates, by way of permit application, to the Agency that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

BOARD NOTE: The provisions outlined in the Steel Tank ~~Institute's~~ Institute document (STI) "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used as a guideline for aspects of the design of underground steel double-walled tanks.

f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (b) and (c) of this Section, except as follows:

1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.

g) Pursuant to Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1], and in accordance with 35 Ill. Adm. Code 101 and 104, an adjusted standard will be granted by the Board regarding alternative design and operating practices only if the Board finds either that the alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not receive an adjusted standard from the secondary containment requirements of this Section through a justification in accordance with subsection (g)(2) of this Section.

1) When determining whether to grant alternative design and operating practices based on a demonstration of equivalent protection of groundwater and surface water, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:

A) The nature and quantity of the wastes;

B) The proposed alternative design and operation;

C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater; and

D) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

2) When determining whether to grant alternative design and operating practices based on a demonstration of no substantial present or potential hazard, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:

A) The potential adverse effects on groundwater, surface water and land quality taking into account, considering the following:

i) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

ii) The hydrogeological characteristics of the facility and surrounding land;

iii) The potential for health risk caused by human exposure to waste constituents;

iv) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

v) The persistence and permanence of the potential adverse effects.

B) The potential adverse effects of a release on groundwater quality, taking into account;

i) The quantity and quality of groundwater and the direction of groundwater flow;

ii) The proximity and withdrawal rates of groundwater users;

iii) The current and future uses of groundwater in the area; and

iv) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality.

C) The potential adverse effects of a release on surface water quality, taking the following into account:

i) The quantity and quality of groundwater and the direction of groundwater flow;

ii) The patterns of rainfall in the region;

iii) The proximity of the tank system to surface waters;

iv) The current and future uses of surface waters in the area and water quality standards established for those surface waters; and

v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality.

D) The potential adverse effect of a release on the land surrounding the tank system, taking the following into account:

i) The patterns of rainfall in the region; and

ii) The current and future uses of the surrounding land.

3) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system but which has not migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:

A) It must comply with the requirements of Section 724.296, except Section 724.296(d); and

B) It must decontaminate or remove contaminated soil to the extent necessary to do the following:

i) Enable the tank system for which the alternative design and operating practices were granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and

ii) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and

C) If contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this Section, the owner or operator must comply with the requirement of Section 724.297(b).

4) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system and which has migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:

A) Comply with the requirements of Section 724.296(a), (b), (c), and (d); and

B) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of Section 724.297(b); and

C) If repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this Section, or make the alternative

design and operating practices demonstration to the Board again, and meet the requirements for new tank systems in Section 724.292 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil is decontaminated or removed and groundwater or surface water has not been contaminated.

h) In order to make an alternative design and operating practices, the owner or operator must follow the following procedures in addition to those specified in Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:

1) The owner or operator must file a petition for approval of alternative design and operating practices according to the following schedule:

A) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with subsection (a) of this Section.

B) For new tank systems, at least 30 days prior to entering into a contract for installation.

2) As part of the petition, the owner or operator must also submit the following to the Board:

A) A description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in subsection (g)(1) or (g)(2) of this Section; and

B) The portion of the Part B permit application specified in 35 Ill. Adm. Code 703.202.

3) The owner or operator must complete its showing within 180 days after filing its petition for approval of alternative design and operating practices.

4) The Agency must issue or modify the RCRA permit so as to require the permittee to construct and operate the tank system in the manner that was provided in any Board order approving alternative design and operating practices.

i) All tank systems, until such time as secondary containment that meets the requirements of this Section is provided, must comply with the following:

1) For non-enterable underground tanks, a leak test that meets the requirements of Section 724.291(b)(5) or other tank integrity methods, as

approved or required by the Agency, must be conducted at least annually.

2) For other than non-enterable underground tanks, the owner or operator must do either of the following:

A) Conduct a leak test, as in subsection (i)(1) of this Section, or

B) Develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.

3) For ancillary equipment, a leak test or other integrity assessment, as approved by the Agency, must be conducted at least annually.

BOARD NOTE: The practices described in the API Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used, where applicable, as a guideline for assessing the overall condition of the tank system.

4) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(1) through (i)(3) of this Section.

5) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(1) through (1)(3) of this Section, the owner or operator must comply with the requirements of Section 724.296.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.295 Inspections

a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

b) The owner or operator must inspect the following at least once each operating

day:

1) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;

2) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design; and

3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.).

BOARD NOTE: Section 724.115(c) requires the owner or operator to remedy any deterioration or malfunction the owner or operator finds. Section 724.296 requires the owner or operator to notify the Agency within 24 hours of confirming a leak. Also federal 40 CFR ~~302~~ 302.6 may require the owner or operator to notify the National Response Center of a release.

c) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and

2) All sources of impressed current must be inspected or tested, as appropriate, at least bimonthly (i.e., every other month).

BOARD NOTE: The practices described in ~~the NACE Standard, RP-02-85,~~ "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85 and ~~API Publication 1632,~~ "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

d) The owner or operator must document in the operating record of the facility an inspection of those items in subsections (a) through (c) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

a) Cease using; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

b) Removal of waste from tank system or secondary containment system.

1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak or as otherwise provided in the permit, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or as otherwise provided in the permit to prevent harm to human health and the environment.

c) Containment of visible releases to the environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection, do the following:

1) Prevent further migration of the leak or spill to soils or surface water; and

2) Remove and properly dispose of any visible contamination of the soil or surface water.

d) Notifications, reports.

1) Any release to the environment, except as provided in subsection (d)(2) of this Section, must be reported to the Agency within 24 hours of its detection.

2) A leak or spill of hazardous waste is exempted from the requirements of this subsection (d) if the following is true:

A) The spill was less than or equal to a quantity of one pound; and

B) It was immediately contained and cleaned up.

3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Agency:

A) Likely route of migration of the release;

B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate, etc.);

C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency as soon as they become available.

D) Proximity the downgradient drinking water, surface water, and populated areas; and

E) Description of response actions taken or planned.

e) Provision of secondary containment, repair, or closure.

1) Unless the owner or operator satisfies the requirements of subsections (e)(2) through (e)(4) of this Section, the tank system must be closed in accordance with Section 724.297.

2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner or operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 724.293 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment, as long as the requirements of subsection (f) of this Section are satisfied. If a component is replaced to comply with the requirements of this subsection (e), that component must satisfy the requirements of new tank systems or components in Sections 724.292 and 724.293. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g.,

the bottom of an in-ground or on-ground tank), the entire component must be provided with secondary containment in accordance with Section 724.293 prior to being returned to use.

f) Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (e) of this Section, and the repair has been extensive (e.g., installation of an internal liner, repair, or a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner or operator has obtained a certification by an independent, qualified registered professional engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Agency within seven days after returning the tank system to use.

BOARD NOTE: See Section 724.115(c) for the requirements necessary to remedy a failure. Also, federal 40 CFR 302.6~~, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ may require the owner or operator to notify the National Response Center of~~ certain releases.~~ any "reportable quantity."

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.298 Special Requirements for Ignitable or Reactive Waste

a) Ignitable or reactive waste must not be placed in tank systems unless the following is true:

1) The waste is treated, rendered, or mixed before or immediately after placement in the tank system so that the following is true:

A) The resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under 35 Ill. Adm. Code 721.121 or 721.123; and

B) Section 724.117(b) is complied with; or

2) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

3) The tank is used solely for emergencies.

b) The owner or operator of a facility where ignitable or reactive waste is stored or treated in a tank must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon, as required in tables 2-1 through 2-6 of ~~the National Fire Protection Association's~~ "Flammable

and Combustible Liquids Code," NFPA 30, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART N: LANDFILLS

Section 724.414 Special Requirements for Bulk and Containerized Liquids

a) This subsection (a) corresponds with 40 CFR 264.314(a), which pertains to pre May 8, 1985 actions, a date long since passed. This statement maintains structural consistency with USEPA rules.

b) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

c) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method ~~9095~~ 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA ~~Publication No.~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

d) Containers holding free liquids must not be placed in a landfill unless the following is true:

1) All free-standing liquid fulfills one of the following:

A) It has been removed by decanting or other methods;

B) It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or

C) It has been otherwise eliminated; or

2) The container is very small, such as an ampule; or

3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

4) The container is a lab pack as defined in Section 724.416 and is disposed of in accordance with Section 724.416.

e) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are the following: materials listed or described in subsection (e)(1) of this Section; materials that pass one of the

tests in subsection (e)(2) of this Section; or materials that are determined by the Board to be nonbiodegradable through the adjusted standard procedure of 35 Ill. Adm. Code 104.

1) Nonbiodegradable sorbents are the following:

A) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates (clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, etc.), calcium carbonate (organic free limestone), oxides/hydroxides (alumina, lime, silica (sand), diatomaceous earth, etc.), perlite (volcanic glass), expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal (activated carbon), etc.); or

B) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstrene and tertiary butyl copolymers, etc.). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

C) Mixtures of these nonbiodegradable materials.

2) Tests for nonbiodegradable sorbents are the following:

A) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) ~~–~~ " (Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi)," ~~"~~ incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a);

B) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) ~~–~~ " (Standard Practice for Determining Resistance of Plastics to Bacteria)," ~~"~~ incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a); or

C) The sorbent material is determined to be non-biodegradable under OECD ~~test~~ Guideline for Testing of Chemicals, Method 301B (CO_2 Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

f) The placement of any liquid that is not a hazardous waste in a hazardous waste landfill is prohibited (35 Ill. Adm. Code 729.311), unless the Board finds that the

owner or operator has demonstrated the following in a petition for an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:

1) The only reasonably available alternative to the placement in a hazardous waste landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, that contains or which may reasonably be anticipated to contain hazardous waste; and

2) Placement in the hazardous waste landfill will not present a risk of contamination of any underground source of drinking water (as that term is defined in 35 Ill. Adm. Code 702.110).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.416 Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. The inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the ~~Department of Transportation (DOT)~~ USDOT hazardous materials regulations (49 CFR 173 (Shippers--General Requirements for Shipments and Packages), 178 (Specifications for Packagings), and 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111(b)), if those regulations specify a particular inside container for the waste.

b) The inside containers must be overpacked in an open head ~~DOT-specification~~ USDOT-specification metal shipping container (49 CFR 178 (Specifications for Packagings) and 179 (Specifications for Tank Cars)) of no more than 416 liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with Section 724.414(e), to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and sorbent material.

c) In accordance with Section 724.117(b), the sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with Section 724.117(b).

d) Incompatible waste, as defined in 35 Ill. Adm. Code 720.110, must not be placed

in the same outside container.

e) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in 35 Ill. Adm. Code 721.123(a)(5), must be treated or rendered non-reactive prior to packaging in accordance with subsections (a) through (d) of this Section. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with subsections (a) through (d) of this Section without first being treated or rendered non-reactive.

f) Such disposal is in compliance with 35 Ill. Adm. Code 728. Persons who incinerate lab packs according to 35 Ill. Adm. Code 728.142(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the ~~DOT~~ USDOT specifications in 49 CFR 173.12 (Exceptions for Shipments of Waste Materials), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and be overpacked according to the requirements of subsection (b) of this Section.

g) Pursuant to 35 Ill. Adm. Code 729.312, the use of labpacks for disposal of liquid wastes or wastes containing free liquids allowed under this Section is restricted to labwaste and non-periodic waste, as those terms are defined in that Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART O: INCINERATORS

Section 724.440 Applicability

a) The regulations in this Subpart O apply to owners and operators of hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as Section 724.101 provides otherwise.

b) Integration of the MACT standards.

1) Except as provided by subsections (b)(2), (b)(3), and (b)(4) of this Section, the standards of this Part no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of subpart EEE of 40 CFR 63~~, Subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, under 40 CFR 63.1207(j) and 63.1210(b), documenting compliance with the requirements of subpart EEE of 40 CFR 63~~, subpart EEE~~. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of this Part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides

otherwise.

2) The MACT standards of subpart EEE of 40 CFR 63~~, subpart EEE~~ do not replace the closure requirements of Section 724.451 or the applicable requirements of Subparts A through H, BB, and CC of this Part.

3) The particulate matter standard of Section 724.443(c) remains in effect for incinerators that elect to comply with the alternative to the particulate matter standard of 40 CFR 63.1206(b)(14) (When and How Must You Comply with the Standards and Operating Requirements?), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

4) The following requirements remain in effect for startup, shutdown, and malfunction events if the owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from the following events:

A) Section 724.445(a), requiring that an incinerator operate in accordance with operating requirements specified in the permit; and

B) Section 724.445(c), requiring compliance with the emission standards and operating requirements during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes.

BOARD NOTE: Sections 9.1 and 39.5 of the Environmental Protection Act [415 ILCS 5/9.1 and 39.5] make the federal MACT standards directly applicable to entities in Illinois and authorize the Agency to issue permits based on the federal standards. Operating conditions used to determine effective treatment of hazardous waste remain effective after the owner or operator demonstrates compliance with the standards of subpart EEE of 40 CFR 63~~, subpart EEE~~. In adopting this subsection (b), USEPA stated as follows (at 64 Fed Reg. 52828, 52975 (September 30,1999)):

> Under this approach . . . , MACT air emissions and related operating requirements are to be included in Title V permits; RCRA permits will continue to be required for all other aspects of the combustion unit and the facility that are governed by RCRA (e.g., corrective action, general facility standards, other combustor-specific concerns such as materials handling, risk-based emissions limits and operating requirements, as appropriate, and other hazardous waste management units).

c) After consideration of the waste analysis included with Part B of the permit application, the Agency, in establishing the permit conditions, must exempt the

applicant from all requirements of this Subpart O, except Section 724.441 (Waste Analysis) and Section 724.451 (Closure):

1) If the Agency finds that the waste to be burned is one of the following:

A) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both;

B) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is reactive (Hazard Code R) for characteristics other than those listed in Section 721.123(a)(4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone;

C) It is a hazardous waste solely because it possesses the characteristic of ignitability, as determined by the test for characteristics of hazardous wastes under Subpart C of 35 Ill. Adm. Code 721; or

D) It is a hazardous waste solely because it possesses any of the reactivity characteristics described by 35 Ill. Adm. Code 721.123(a)(1), (a)(2), (a)(3), (a)(6), (a)(7), and (a)(8) and will not be burned when other hazardous wastes are present in the combustion zone; and

2) If the waste analysis shows that the waste contains none of the hazardous constituents listed in Subpart H of 35 Ill. Adm. Code 721 that would reasonably be expected to be in the waste.

d) If the waste to be burned is one that is described by subsection (b)(1)(A), (b)(1)(B), (b)(1)(C), or (b)(1)(D) of this Section and contains insignificant concentrations of the hazardous constituents listed in Subpart H of 35 Ill. Adm. Code 721, then the Agency may, in establishing permit conditions, exempt the applicant from all requirements of this Subpart O, except Section 724.441 (Waste Analysis) and Section 724.451 (Closure), after consideration of the waste analysis included with Part B of the permit application, unless the Agency finds that the waste will pose a threat to human health or the environment when burned in an incinerator.

e) The owner or operator of an incinerator may conduct trial burns subject only to the requirements of 35 Ill. Adm. Code 703.222 through 703.225 (short-term and incinerator permits).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.442 Principal Organic Hazardous Constituents (POHCs)

a) Principal organic hazardous constituents (POHCs) in the waste feed must be treated to the extent required by the performance standard of Section 724.443.

b) Designation of POHCs.

1) One or more POHCs will be specified in the facility's permit, from among those constituents listed in Appendix H to 35 Ill. Adm. Code 721~~, Appendix H,~~ for each waste feed to be burned. This specification will be based on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses and trial burns or alternative data submitted with Part B of the facility's permit application. Organic constituents that represent the greatest degree of difficulty of incineration will be those most likely to be designated as POHCs. Constituents are more likely to be designated as POHCs if they are present in large quantities or concentrations in the waste.

2) Trial POHCs will be designated for performance of trial burns in accordance with the procedure specified in 35 Ill. Adm. Code 703.222 through 703.225 for obtaining trial burn permits.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.443 Performance Standards

An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section 724.445, it will meet the following performance standards:

a) Destruction and removal efficiency.

1) Except as provided in subsection (a)(2) of this Section, an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under Section 724.442) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$\text{DRE} = \frac{100 \times (\text{N} - \text{O})}{\text{N}}$$

Where:

N = Mass feed rate of one principal organic hazardous

constituent (POHC) in the waste stream feeding the incinerator~~, and~~

O = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

2) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under Section 724.442) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1) of this Section. In addition, the owner or operator of the incinerator must notify the Agency of its intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.

b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.

c) An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the following formula:

$$C = \frac{14 \times M}{21 - Y}$$

1) Where:

C = the corrected concentration of particulate matter~~,~~

M = the measured concentration of particulate matter~~, and~~

Y = the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Method 3 in appendix A to 40 CFR 60~~, Appendix A (Method 3) (Gas Analysis for the Determination of Dry Molecular Weight),~~ incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these

facilities, ~~The~~ the Agency must select an appropriate correction procedure, to be specified in the facility permit.

d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 724.445) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this Section may be "information" justifying modification, revocation or reissuance of a permit under 35 Ill. Adm. Code 702.184.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART S: SPECIAL PROVISIONS FOR CLEANUP

Section 724.652 Corrective Action Management Units

a) To implement remedies under Section 724.201 or RCRA section 3008(h), or to implement remedies at a permitted facility that is not subject to Section 724.201, the Agency may designate an area at the facility as a corrective action management unit under the requirements in this Section. "Corrective action management unit" or "CAMU" means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at that facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.

1) "CAMU-eligible waste" means the following:

A) All solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either hazardous or non-hazardous) from ongoing industrial operations at a site are not CAMU-eligible wastes.

B) Wastes that would otherwise meet the description in subsection (a)(1)(A) of this Section are not CAMU-eligible waste where the following is true:

i) The wastes are hazardous waste found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers, or non-land-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or

ii) The Agency makes the determination in subsection (a)(2)

of this Section to prohibit the wastes from management in a CAMU.

C) Notwithstanding subsection (a)(1)(A) of this Section, where appropriate, as-generated non-hazardous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.

2) The Agency must prohibit the placement of waste in a CAMU where the Agency determines that the wastes have not been managed in compliance with applicable land disposal treatment standards of 35 Ill. Adm. Code 728, applicable unit design requirements of this Part or 35 Ill. Adm. Code 725, or other applicable requirements of this Subtitle G, and that the non-compliance likely contributed to the release of the waste.

3) Prohibition against placing liquids in a CAMU.

A) The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.

B) The requirements in Section 724.414(d) for placement of containers holding free liquids in landfills apply to placement in a CAMU, except where placement facilitates the remedy selected for the waste.

C) The placement of any liquid that is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to Section 724.414(f).

D) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with Section 724.414(c). Sorbents used to treat free liquids in a CAMU must meet the requirements of Section 724.414(e).

4) Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous waste.

5) Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.

b) Establishing a CAMU.

1) The Agency must designate a regulated unit (as defined in Section 724.190(a)(2)) as a CAMU or must incorporate a regulated unit into a CAMU, if it determines that the following is true of a regulated unit:

A) The regulated unit is closed or closing, meaning it has begun the closure process under Section 724.213 or 35 Ill. Adm. Code 725.213; and

B) Inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.

2) The Subpart F, G, and H requirements and the unit-specific requirements of this Part or 35 Ill. Adm. Code 265 that applied to the regulated unit will continue to apply to that portion of the CAMU after incorporation into the CAMU.

c) The Agency must designate a CAMU that will be used for storage or treatment only in accordance with subsection (f) of this Section. The Agency must designate any other CAMU in accordance with the following requirements:

1) The CAMU must facilitate the implementation of reliable, effective, protective, and cost-effective remedies;

2) Waste management activities associated with the CAMU must not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;

3) The CAMU must include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility;

4) Areas within the CAMU, where wastes remain in place after closure of the CAMU, must be managed and contained so as to minimize future releases, to the extent practicable;

5) The CAMU must expedite the timing of remedial activity implementation, when appropriate and practicable;

6) The CAMU must enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and

7) The CAMU must, to the extent practicable, minimize the land area of the

facility upon which wastes will remain in place after closure of the CAMU.

d) The owner or operator must provide sufficient information to enable the Agency to designate a CAMU in accordance with the criteria in this Section. This must include, unless not reasonably available, information on the following:

1) The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal or release);

2) Whether the waste was listed or identified as hazardous at the time of disposal or release; and

3) Whether the disposal or release of the waste occurred before or after the land disposal requirements of 35 Ill. Adm. Code 728 were in effect for the waste listing or characteristic.

e) The Agency must specify, in the permit or order, requirements for the CAMU to include the following:

1) The areal configuration of the CAMU.

2) Except as provided in subsection (g) of this Section, requirements for CAMU-eligible waste management to include the specification of applicable design, operation, treatment, and closure requirements.

3) Minimum Design Requirements: a CAMU, except as provided in subsection (f) of this Section, into which wastes are placed must be designed in accordance with the following:

A) Unless the Agency approves alternative requirements under subsection (e)(3)(B) of this Section, a CAMU that consists of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this Section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than $1x10^{-7}$ cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;

B) Alternative Requirements. The Agency must approve alternative requirements if it determines that either of the following is true:

i) The Agency determines that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the groundwater or surface water at least as effectively as the liner and leachate collection systems in subsection (e)(3)(A) of this Section; or

ii) The CAMU is to be established in an area with existing significant levels of contamination, and the Agency determines that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.

4) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage or treatment only in accordance with subsection (f) of this Section, CAMU-eligible wastes that, absent this Section, would be subject to the treatment requirements of 35 Ill. Adm. Code 728, and that the Agency determines contain principal hazardous constituents must be treated to the standards specified in subsection (e)(4)(C) of this Section.

A) Principal hazardous constituents are those constituents that the Agency determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

i) In general, the Agency must designate as principal hazardous constituents those contaminants specified in subsection (e)(4)(H) of this Section.

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(i)(A)(*1*) and (e)(4)(i)(A)(*2*) as subsections (e)(4)(H)(i) and (e)(4)(H)(ii) of this Section in order to comply with Illinois Administrative Code codification requirements.

ii) The Agency must also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to groundwater are substantially higher than cleanup levels or goals at the site; when making such a designation, the Agency must consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.

iii) The Agency must also designate other constituents as principal hazardous constituents that the Agency determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.

B) In determining which constituents are "principal hazardous constituents," the Agency must consider all constituents that, absent this Section, would be subject to the treatment requirements in 35 Ill. Adm. Code 728.

C) Waste that the Agency determines contains principal hazardous constituents must meet treatment standards determined in accordance with subsection (e)(4)(D) or (e)(4)(E) of this Section.

D) Treatment standards for wastes placed in a CAMU.

i) For non-metals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by subsection (e)(4)(D)(iii) of this Section.

ii) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (e)(4)(D)(iii) of this Section.

iii) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in Table U to 35 Ill. Adm. Code 728.

iv) For waste exhibiting the hazardous characteristic of ignitability, corrosivity, or reactivity, the waste must also be treated to eliminate these characteristics.

v) For debris, the debris must be treated in accordance with ~~§ 268.45~~ 35 Ill. Adm. Code 728.145, or by methods or to

levels established under subsections (e)(4)(D)(i) through (e)(4)(D)(iv) or subsection (e)(4)(E) of this Section, whichever the Agency determines is appropriate.

vi) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the Agency must specify a leaching test other than ~~the TCLP (SW-846,~~ Method 1311 (Toxicity Characteristic Leaching Procedure), in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111)~~ 720.111(a) to measure treatment effectiveness, provided the Agency determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.

E) Adjusted standards. The Board will grant an adjusted standard pursuant to Section 28.1 of the Act to adjust the treatment level or method in subsection (e)(4)(D) of this Section to a higher or lower level, based on one or more of the following factors, as appropriate, if the owner or operator demonstrates that the adjusted level or method would be protective of human health and the environment, based on consideration of the following:

i) The technical impracticability of treatment to the levels or by the methods in subsection (e)(4)(D) of this Section;

ii) The levels or methods in subsection (e)(4)(D) of this Section would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated under State or federal law);

iii) The views of the affected local community on the treatment levels or methods in subsection (e)(4)(D) of this Section, as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;

iv) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in subsection (e)(4)(D) of this Section;

v) The long-term protection offered by the engineering design of the CAMU and related engineering controls under the

circumstances set forth in subsection (e)(4)(I) of this Section.

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(v)(E)(*1*) through (e)(4)(v)(E)(*5*) as subsections (e)(4)(I)(i) through (e)(4)(I)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.

F) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.

G) For the purpose of determining whether wastes placed in a CAMU have met site-specific treatment standards, the Agency must specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents if it determines that the specification is appropriate based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.

H) Principal hazardous constituents that the Agency must designate are the following:

i) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10^{-3}; and

ii) Non-carcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.

I) Circumstances relating to the long-term protection offered by engineering design of the CAMU and related engineering controls are the following:

i) Where the treatment standards in subsection (e)(4)(D) of this Section are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility;

ii) Where cost-effective treatment has been used and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);

iii) Where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not reasonably available, and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);

iv) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or

v) Where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or a laterally expanded CAMU in subsections (e)(3)(A) and (e)(3)(B) of this Section or the CAMU provides substantially equivalent or greater protection.

5) Except as provided in subsection (f) of this Section, requirements for groundwater monitoring and corrective action that are sufficient to do the following:

A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU;

B) Detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and

C) Require notification to the Agency and corrective action as necessary to protect human health and the environment for releases to groundwater from the CAMU.

6) Except as provided in subsection (f) of this Section, closure and post-closure requirements, as follows:

A) Closure of corrective action management units must do the following:

i) Minimize the need for further maintenance; and

ii) Control, minimize, or eliminate, to the extent necessary to

protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.

B) Requirements for closure of a CAMU must include the following, as appropriate and as deemed necessary by the Agency for a given CAMU:

i) Requirements for excavation, removal, treatment or containment of wastes; and

ii) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.

C) In establishing specific closure requirements for a CAMU under this subsection (e), the Agency must consider the following factors:

i) CAMU characteristics;

ii) Volume of wastes that remain in place after closure;

iii) Potential for releases from the CAMU;

iv) Physical and chemical characteristics of the waste;

v) Hydrological and other relevant environmental conditions at the facility that may influence the migration of any potential or actual releases; and

vi) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.

D) Cap requirements:

i) At final closure of the CAMU, for areas in which wastes will remain with constituent concentrations at or above remedial levels or goals applicable to the site after closure of the CAMU, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the performance criteria listed in subsection (e)(6)(F) of this Section, except as provided in subsection (e)(6)(D)(ii) of this Section:

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(6)(iv)(A)(*1*) through (e)(6)(iv)(A)(*5*) as subsections (e)(6)(F)(i) through (e)(6)(F)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.

ii) The Agency must apply cap requirements that deviate from those prescribed in subsection (e)(6)(D)(i) of this Section if it determines that the modifications are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).

E) Post-closure requirements as necessary to protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities must be performed to ensure the integrity of any cap, final cover, or other containment system.

F) The final cover design and performance criteria are as follows:

i) Provide long-term minimization of migration of liquids through the closed unit;

ii) Function with minimum maintenance;

iii) Promote drainage and minimize erosion or abrasion of the cover;

iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and

v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

f) A CAMU used for storage or treatment only is a CAMU in which wastes will not remain after closure. Such a CAMU must be designated in accordance with all of the requirements of this Section, except as follows:

1) A CAMU that is used for storage or treatment only and that operates in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i) is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c) and (e)(3) through (e)(6) of this Section.

2) A CAMU that is used for storage or treatment only and that does not operate in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i):

A) The owner or operator must operate in accordance with a time limit, established by the Agency, that is no longer than necessary to achieve a timely remedy selected for the waste and

B) The CAMU is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c), (e)(4), and (6) of this Section.

g) A CAMU into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at subsection (e)(3)(A) of this Section, caps at subsection (e)(6)(D) of this Section, groundwater monitoring requirements at subsection (e)(5) of this Section or, for treatment or storage-only a CAMU, the design standards at subsection (f) of this Section.

h) The Agency must provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice must include the rationale for any proposed adjustments under subsection (e)(4)(E) of this Section to the treatment standards in subsection (e)(4)(D) of this Section.

i) Notwithstanding any other provision of this Section, the Agency must impose those additional requirements that it determines are necessary to protect human health and the environment.

j) Incorporation of a CAMU into an existing permit must be approved by the Agency according to the procedures for Agency-initiated permit modifications under 35 Ill. Adm. Code 703.270 through 703.273, or according to the permit modification procedures of 35 Ill. Adm. Code 703.280 through 703.283.

k) The designation of a CAMU does not change the Agency's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART W: DRIP PADS

Section 724.673 Design and Operating Requirements

a) Drip pads must fulfill the following:

1) Not be constructed of earthen materials, wood, or asphalt, unless the asphalt is structurally supported;

2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;

3) Have a curb or berm around the perimeter;

4) In addition, the drip pad must fulfill the following:

A) Have a hydraulic conductivity of less than or equal to 1 ~~X~~ × 10^{-7} centimeters per second (cm/sec), e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1 ~~X~~ × 10^{-7} cm/sec such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to the existing drip pads and those drip pads for which the owner or operator elects to comply with Section 724.672(a) instead of Section 724.672(b).

B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for in subsection (b) of this Section.

5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

BOARD NOTE: In judging the structural integrity requirement of this subsection (c), the Agency should generally consider applicable standards established by professional organizations generally recognized by the industry, including ACI 318 (Building Code Requirements for Reinforced Concrete), or ASTM ~~C94~~ C 94-90 (Standard Specification for Ready-

Mixed Concrete), each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

b) If an owner or operator elects to comply with Section 724.672(b) instead of Section 724.672(a), the drip pad must have the following:

1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must fulfill the following:

A) It must be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

B) It must be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and

C) It must be installed to cover all surrounding earth that could come in contact with the waste or leakage; and

2) A leakage detection system immediately above the liner that is designed, constructed, maintained, and operated to detect leakage from the drip pad. The leakage detection system must fulfill the following:

A) It must be constructed of materials that are as follows:

i) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and

B) It must be designed and operated to function without clogging through the scheduled closure of the drip pad; and

C) It must be designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

3) A leaking collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

A) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as to allow weekly inspections of the entire drip pad surface without interference of hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and cleaning procedure used in the facility's operating log. The owner or operator must determine if the residues are hazardous, as per 35 Ill. Adm. Code 722.111, and, if so, the owner or operator must manage them under 35 Ill. Adm. Code 721 through 728, and Section 3010 of RCRA.

B) The ~~Federal~~ federal rules do not contain a 40 CFR 264.573(b)(3)(B). This subsection (b) is added to conform to Illinois Administrative Code rules.

c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

BOARD NOTE: See subsection (m) of this Section for remedial action required if deterioration or leakage is detected.

d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.

e) Unless the drip pad is protected by a structure, as described in Section 724.670(b), the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system.

f) Unless the drip pad is protected by a structure or cover, as described in Section

724.670(b), the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f) of this Section. The owner or operator must obtain a statement from an independent, qualified registered professional engineer certifying that the drip pad design meets the requirements of this Section.

h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

i) The drip surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator must document, in the facility's operating log, the date and time of each cleaning and the cleaning procedure used.

j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad, in accordance with this Section, following treatment.

l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must do the following:

A) Enter a record of the discovery in the facility operating log;

B) Immediately remove from service the portion of the drip pad affected by the condition;

C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;

D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

2) The Agency must do the following: review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

3) Upon completing all repairs and clean up, the owner or operator must notify the Agency in writing and provide a certification, signed by an independent, qualified registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with subsection (m)(1)(D) of this Section.

n) If a permit is necessary, the Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART X: MISCELLANEOUS UNITS

Section 724.701 Environmental Performance Standards

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as are necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions must include those requirements of Subparts I through O and AA through CC of this Part; 35 Ill. Adm.

Code 702, 703, and 730; and federal subpart EEE of 40 CFR 63~~, Subpart EEE~~, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), that are appropriate for the miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to the following:

a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the groundwater or subsurface environment, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

2) The hydrologic and geologic characteristics of the unit and the surrounding area;

3) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;

4) The quantity and direction of groundwater flow;

5) The proximity to and withdrawal rates of current and potential groundwater users;

6) The patterns of land use in the region;

7) The potential for deposition or migration of waste constituents into subsurface physical structures and the root zone of food-chain crops and other vegetation;

8) The potential for health risks caused by human exposure to waste constituents; and

9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

b) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, in wetlands, or on the soil surface, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit;

2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

3) The hydrologic characteristics of the unit and surrounding area, including the topography of the land around the unit;

4) The patterns of precipitation in the region;

5) The quantity, quality, and direction of groundwater flow;

6) The proximity of the unit to surface waters;

7) The current and potential uses of the nearby surface waters and any water quality standards in 35 Ill. Adm. Code 302 or 303;

8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

9) The patterns of land use in the region;

10) The potential for health risks caused by human exposure to waste constituents; and

11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering the following:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates;

2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

3) The operating characteristics of the unit;

4) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

6) The potential for health risks caused by human exposure to waste constituents; and

7) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by waste constituents.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 724.933 Standards: Closed-Vent Systems and Control Devices

a) Compliance Required.

1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this Part must comply with the provisions of this Section.

2) Implementation Schedule.

A) The owner or operator of an existing facility that cannot install a closed-vent system and control device to comply with the provisions of this Subpart AA on the effective date that the facility becomes subject to the provisions of this Subpart AA must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this Subpart AA for installation and startup.

B) Any unit that began operation after December 21, 1990 and which was subject to the provisions of this Subpart AA when operation began must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

C) The owner or operator of any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to this Subpart AA must comply with all requirements of this Subpart AA as soon as practicable, but no later than 30 months after the effective date of the amendment. When control equipment required by this Subpart AA ~~can not~~ cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator must prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control

equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this Subpart AA. The owner or operator must enter the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

D) An owner or operator of a facility or unit that becomes newly subject to the requirements of this Subpart AA after December 8, 1997, due to an action other than those described in subsection (a)(2)(C) of this Section must comply with all applicable requirements immediately (i.e., the facility or unit must have control devices installed and operating on the date the facility or unit becomes subject to this Subpart AA; the 30-month implementation schedule does not apply).

b) A control device involving vapor recovery (e.g., a condenser or adsorber) must be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Section 724.932(a)(1) for all affected process vents is attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds and not in carbon equivalents, on a dry basis, corrected to three percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° C. If a boiler or process heater is used as the control device, then the vent stream must be introduced into the flame zone of the boiler or process heater.

d) Flares.

1) A flare must be designed for and operated with no visible emissions, as determined by the methods specified in subsection (e)(1) of this Section, except for periods not to exceed a total of five minutes during any two consecutive hours.

2) A flare must be operated with a flame present at all times, as determined by the methods specified in subsection (f)(2)(C) of this Section.

3) A flare must be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater and the flare is steam-assisted or air-assisted or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater and the flare is nonassisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2) of this Section.

4) Exit Velocity.

A) A steam-assisted or nonassisted flare must be designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (d)(4)(C) of this Section.

B) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (~~1000~~ 1,000 Btu/scf).

C) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, less than the velocity, V, as determined by the method specified in subsection (e)(4) of this Section, and less than 122 m/s (400 ft/s) is allowed.

5) An air-assisted flare must be designed and operated with an exit velocity less than the velocity, V, as determined by the method specified in subsection (e)(5) of this Section.

6) A flare used to comply with this Section must be steam-assisted, air-assisted, or nonassisted.

e) Compliance determination and equations.

1) Reference Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), must be used to determine the compliance of a flare with the visible emission provisions of this Subpart AA. The observation period is two hours and must be used according to Method 22.

2) The net heating value of the gas being combusted in a flare must be calculated using the following equation:

$$H_T = K \times \sum_{i=1}^{n} C_i \times H_i$$

Where:

H_T ~~is~~ = the net heating value of the sample in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25° C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mole is 20° C~~.~~

K = $1.74 \times$ ~~10^{7}~~ 10^{-7} (1/ppm)(g mol/scm)(MJ/kcal) where the standard temperature for (g mol/scm) is 20° C~~.~~

$\Sigma(Xi)$ ~~means~~ = the sum of the values of X for each component i, from i=1 to n~~.~~

C_i ~~is~~ = the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), and for carbon monoxide, by ASTM D 1946-90 (Standard Practice for Analysis of Reformed Gas by Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code 720.111~~.~~

H_i ~~is~~ = the net heat of combustion of sample component i, kcal/gmol at 25° C and 760 mm Hg. The heats of combustion must be determined using ASTM D 2382-88 (Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method)), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), if published values are not available or cannot be calculated.

3) The actual exit velocity of a flare must be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), or 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code~~ 720.111~~ 720.111(b), as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

4) The maximum allowed velocity in m/s, V_{max}, for a flare complying with subsection (d)(4)(C) of this Section must be determined by the following equation:

$$\log_{10}\left(V_{max}\right) = \frac{H_T + 28.8}{31.7}$$

Where:

$\log_{10}$ ~~means~~ = logarithm to the base 10

H_T ~~is~~ = the net heating value as determined in subsection (e)(2) of this Section.

5) The maximum allowed velocity in m/s, V_{max}, for an air-assisted flare must be determined by the following equation:

$$V_{max} = 8.706 + 0.7084H_T$$

Where:

H_T ~~is~~ = the net heating value as determined in subsection (e)(2) of this Section.

f) The owner or operator must monitor and inspect each control device required to comply with this Section to ensure proper operation and maintenance of the control device by implementing the following requirements:

1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor must be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation, as follows:

A) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must have accuracy of ±1 percent of the temperature being monitored in ° C or ±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the combustion chamber downstream of the combustion zone.

B) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of ±1 percent of the temperature being monitored in ° C or ±0.5° C,

whichever is greater. One temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

D) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of ±1 percent of the temperature being monitored in ° C or ±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the furnace downstream of the combustion zone.

E) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure parameters that indicate good combustion operating practices are being used.

F) For a condenser, either of the following:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

ii) A temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in ° C or ±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

G) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either of the following:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

ii) A monitoring device equipped with a continuous recorder

to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

3) Inspect the readings from each monitoring device required by subsections (f)(1) and (f)(2) of this Section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this Section.

g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 724.935(b)(4)(C)(vi).

h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Section 724.935(b)(4)(C)(vii), whichever is longer.

2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Section 724.935(b)(4)(C)(vii).

i) An alternative operational or process parameter may be monitored if the operator demonstrates that the parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

j) An owner or operator of an affected facility seeking to comply with the provisions of this Part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

k) A closed-vent system must meet either of the following design requirements:

1) A closed-vent system must be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as determined by the methods specified at Section 724.934(b), and by visual inspections; or

2) A closed-vent system must be designed to operate at a pressure below atmospheric pressure. The system must be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

l) The owner or operator must monitor and inspect each closed-vent system required to comply with this Section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

1) Each closed-vent system that is used to comply with subsection (k)(1) of this Section must be inspected and monitored in accordance with the following requirements:

A) An initial leak detection monitoring of the closed-vent system must be conducted by the owner or operator on or before the date that the system becomes subject to this Section. The owner or operator must monitor the closed-vent system components and connections using the procedures specified in Section 724.934(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

B) After initial leak detection monitoring required in subsection (l)(1)(A) of this Section, the owner or operator must inspect and monitor the closed-vent system as follows:

i) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) must be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator must monitor a component or connection using the procedures specified in Section 724.934(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

ii) Closed-vent system components or connections other than

those specified in subsection (l)(1)(B)(i) of this Section must be monitored annually and at other times as requested by the Regional Administrator, except as provided for in subsection (o) of this Section, using the procedures specified in Section 724.934(b) to demonstrate that the components or connections operate with no detectable emissions.

C) In the event that a defect or leak is detected, the owner or operator must repair the defect or leak in accordance with the requirements of subsection (l)(3) of this Section.

D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 724.935.

2) Each closed-vent system that is used to comply with subsection (k)(2) of this Section must be inspected and monitored in accordance with the following requirements:

A) The closed-vent system must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

B) The owner or operator must perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year.

C) In the event that a defect or leak is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (l)(3) of this Section.

D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 724.935.

3) The owner or operator must repair all detected defects as follows:

A) Detectable emissions, as indicated by visual inspection or by an instrument reading greater than 500 ppmv above background, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in subsection (l)(3)(C) of this Section.

B) A first attempt at repair must be made no later than five calendar days after the emission is detected.

C) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment must be completed by the end of the next process unit shutdown.

D) The owner or operator must maintain a record of the defect repair in accordance with the requirements specified in Section 724.935.

m) A closed-vent system or control device used to comply with provisions of this Subpart AA must be operated at all times when emissions may be vented to it.

n) The owner or operator using a carbon adsorption system to control air pollutant emissions must document that all carbon removed that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the volatile organic concentration of the carbon:

1) It is regenerated or reactivated in a thermal treatment unit that meets one of the following:

A) The owner or operator of the unit has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart X of this Part; or

B) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Subparts AA and CC of this Part or Subparts AA and CC of 35 Ill. Adm. Code 725; or

C) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants) or ~~40 CFR~~ 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) It is incinerated in a hazardous waste incinerator for which the owner or operator has done either of the following:

A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of

Subpart O of this Part; or

B) The owner or operator has certified compliance in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.

3) It is burned in a boiler or industrial furnace for which the owner or operator has done either of the following:

A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

B) The owner or operator has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726.

o) Any components of a closed-vent system that are designated, as described in Section 724.935(c)(9), as unsafe to monitor are exempt from the requirements of subsection (l)(1)(B)(ii) of this Section if both of the following conditions are fulfilled:

1) The owner or operator of the closed-vent system has determined that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (l)(1)(B)(ii) of this Section; and

2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in subsection (l)(1)(B)(ii) of this Section as frequently as practicable during safe-to-monitor times.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.934 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart AA must comply with the test methods and procedures requirements provided in this Section

b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 724.933(l), the test must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test

Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be as follows:

A) Zero air (less than 10 ppm of hydrocarbon in air); and

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The background level must be determined as set forth in Reference Method 21.

6) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

c) Performance tests to determine compliance with Section 724.932(a) and with the total organic compound concentration limit of Section 724.933(c) must comply with the following:

1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices must be conducted and data reduced in accordance with the following reference methods and calculation procedures:

A) Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for velocity and volumetric flow rate.

B) Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) or Method 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code

720.111(b), for organic content. If Method 25A is used, the organic HAP used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

C) Each performance test must consist of three separate runs, each run conducted for at least one hour under the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs applies. The average must be computed on a time-weighed basis.

D) Total organic mass flow rates must be determined by the following equation:

i) For a source using Method 18:

$$E_h = Q_{2sd} \times \left(\sum_{i=1}^{n} C_i \times MW_i \right) \times 0.0416 \times 10^{-6}$$

Where:

E_h = The total organic mass flow rate, kg/h~~.~~

Q_{2sd} = The volumetric flow rate of gases entering or exiting control device, dscm/h, as determined by Method 2~~ in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111.~~

n = The number of organic compounds in the vent gas~~.~~

C_i = The organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18~~ in 40 CFR 60.~~

MW_i = The molecular weight of organic compound i in the vent gas, kg/kg-mol~~.~~

0.0416 = The conversion factor for molar volume, kg-mol/m^3, at 293 K and 760 mm Hg~~.~~

10^{-6} = The conversion factor from ppm.

ii) For a source using Method 25A:

$$E_h = Q \times C \times MW \times 0.0416 \times 10^{-6}$$

Where:

E_h = The total organic mass flow rate, kg/h

Q = The volumetric flow rate of gases entering or exiting control device, dscm/h, as determined by Method 2

C = The organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 25A

MW = The molecular weight of propane, 44 kg/kg-mol

0.0416 = The conversion factor for molar volume, kg-mol/m^3, at 293 K and 760 mm Hg

10^{-6} = The conversion factor from ppm.

E) The annual total organic emission rate must be determined by the following equation:

$$A = F \times H$$

Where:

A ~~is~~ = total organic emission rate, kg/y~~.~~

F ~~is~~ = the total organic mass flow rate, kg/h, as calculated in subsection (c)(1)(D) of this Section.

H ~~is~~ = the total annual hours of operation for the affected unit.

F) Total organic emissions from all affected process vents at the facility must be determined by summing the hourly total organic mass emissions rates (F as determined in subsection (c)(1)(D) of this Section) and by summing the annual total organic mass emission rates (A as determined in subsection (c)(1)(E) of this Section) for all affected process vents at the facility.

2) The owner or operator must record such process information as is necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction do not constitute representative conditions for the purpose of a performance test.

3) The owner or operator of an affected facility must provide, or cause to be provided, performance testing facilities as follows:

A) Sampling ports adequate for the test methods specified in subsection (c)(1) of this Section.

B) Safe sampling platforms.

C) Safe access to sampling platforms.

D) Utilities for sampling and testing equipment.

4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs must apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Agency's approval, be determined using the average of the results of the two other runs.

d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this Subpart AA, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

1) Direct measurement of the organic concentration of the waste using the following procedures:

A) The owner or operator must take a minimum of four grab samples of waste for each wastestream managed in the affected unit under process conditions expected to cause the maximum waste organic

concentration.

B) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere, such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

C) Each sample must be analyzed and the total organic concentration of the sample must be computed using Method ~~9060~~ 9060A (Total Organic Carbon) ~~or 8260~~ of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference under 35 Ill. Adm. Code ~~720.111~~ 720.111(a), or analyzed for its individual constituents.

D) The arithmetic mean of the results of the analyses of the four samples apply for each wastestream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each wastestream managed in the unit.

2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that must be used to support a determination under this subsection (d)(2) include the following:

A) Production process information documenting that no organic compounds are used;

B) Information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a wastestream having a total organic content less than 10 ppmw; or

C) Prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) The determination that a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation that manages hazardous wastes that have time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:

1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the waste is first managed in a waste management unit, whichever is later; and either of the following:

2) For continuously generated waste, annually; or

3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

f) When an owner or operator and the Agency do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, ~~the procedures in Method 8260 in SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ direct measurement may be used to resolve the dispute, as specified in subsection (d)(1) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 724.935 Recordkeeping Requirements

a) Compliance Required.

1) Each owner or operator subject to the provisions of this Subpart AA must comply with the recordkeeping requirements of this Section.

2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subpart AA may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

b) Owners and operators must record the following information in the facility operating record:

1) For facilities that comply with the provisions of Section 724.933(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule

must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this Subpart AA.

2) Up-to-date documentation of compliance with the process vent standards in Section 724.932, including the following:

A) Information and data identifying all affected process vents, annual throughput, and operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

B) Information and data supporting determination of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

3) Where an owner or operator chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include the following:

A) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This must include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

B) A detailed engineering description of the closed-vent system and

control device including the following:

i) Manufacturer's name and model number of control device;

ii) Type of control device;

iii) Dimensions of the control device;

iv) Capacity; and

v) Construction materials.

C) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

4) Documentation of compliance with Section 724.933 must include the following information:

A) A list of all information references and sources used in preparing the documentation.

B) Records, including the dates of each compliance test required by Section 724.933(k).

C) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," (USEPA publication number EPA-450/2-81-005, incorporated by reference in 35 Ill. Adm. Code ~~720.111)~~ 720.111(a), or other engineering texts, approved by the Agency, that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with subsections (b)(4)(C)(i) through (b)(4)(C)(vii) of this Section may be used to comply with this requirement. The design analysis must address the vent stream characteristics and control device operation parameters as specified below.

i) For a thermal vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

ii) For a catalytic vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

iii) For a boiler or process heater, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average flame zone temperatures, combustion zone residence time and description of method and location where the vent stream is introduced into the combustion zone.

iv) For a flare, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also consider the requirements specified in Section 724.933(d).

v) For a condenser, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream and design average temperatures of the coolant fluid at the condenser inlet and outlet.

vi) For a carbon adsorption system, such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time and design service life of carbon.

vii) For a carbon adsorption system, such as a carbon canister that does not regenerate the carbon bed directly onsite in

the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Section 724.932(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Section 724.932(a) for affected process vents at the facility are attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

F) If performance tests are used to demonstrate compliance, all test results.

c) Design documentation and monitoring operating and inspection information for each closed-vent system and control device required to comply with the provisions of this Part must be recorded and kept up-to-date in the facility operating record. The information must include the following:

1) Description and date of each modification that is made to the closed-vent system or control device design.

2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 724.933(f)(1) and (f)(2).

3) Monitoring, operating and inspection information required by Section 724.933(f) through (k).

4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:

A) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760° C, any period when the combustion temperature is below 760° C.

B) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, any period when the combustion zone temperature is more than 28° C below the design average combustion zone temperature established as a requirement of subsection (b)(4)(C)(i) of this Section.

C) For a catalytic vapor incinerator, any period when:

i) Temperature of the vent stream at the catalyst bed inlet is more than 28° C below the average temperature of the inlet vent stream established as a requirement of subsection (b)(4)(C)(ii) of this Section; or

ii) Temperature difference across the catalyst bed is less than 80% of the design average temperature difference established as a requirement of subsection (b)(4)(C)(ii) of this Section.

D) For a boiler or process heater, any period when either of the following occurs:

i) Flame zone temperature is more than 28° C below the design average flame zone temperature established as a requirement of subsection (b)(4)(C)(iii) of this Section; or

ii) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of subsection (b)(4)(C)(iii) of this Section.

E) For a flare, period when the pilot flame is not ignited.

F) For a condenser that complies with Section 724.933(f)(2)(F)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement

of subsection (b)(4)(C)(v) of this Section.

G) For a condenser that complies with Section 724.933(f)(2)(F)(ii), any period when the following occurs:

i) Temperature of the exhaust vent stream from the condenser is more than 6° C above the design average exhaust vent stream temperature established as a requirement of subsection (b)(4)(C)(v) of this Section.

ii) Temperature of the coolant fluid exiting the condenser is more than 6° C above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (b)(4)(C)(v) of this Section.

H) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Section 724.933(f)(2)(G)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (b)(4)(C)(vi) of this Section.

I) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Section 724.933(f)(2)(G)(ii), any period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (b)(4)(C)(vi) of this Section.

5) Explanation for each period recorded under subsection (c)(4) of this Section of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

6) For a carbon adsorption system operated subject to requirements specified in Section 724.933(g) or (h)(2), any date when existing carbon in the control device is replaced with fresh carbon.

7) For a carbon adsorption system operated subject to requirements specified in Section 724.933(h)(1), a log that records the following:

A) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading; and

B) Date when existing carbon in the control device is replaced with fresh carbon.

8) Date of each control device startup and shutdown.

9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Section 724.933(o) must record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Section 724.933(o), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

10) When each leak is detected, as specified in Section 724.933(l), the following information must be recorded:

A) The instrument identification number; the closed-vent system component identification number; and the operator name, initials, or identification number.

B) The date the leak was detected and the date of first attempt to repair the leak.

C) The date of successful repair of the leak.

D) Maximum instrument reading measured by Method 21 (Determination of Volatile Organic Compound Leaks) of appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), after it is successfully repaired or determined to be nonrepairable.

E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

d) Records of the monitoring, operating, and inspection information required by subsections (c)(3) through (c)(10) of this Section must be kept at least three years following the date of each occurrence, measurement, corrective action, or record.

e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify the appropriate recordkeeping requirements.

f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section 724.932, including supporting documentation as required by Section 724.934(d)(2), when application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced is used, must be recorded in a log that is kept in the facility operating record.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 724.950 Applicability

a) The regulations in this Subpart BB apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in Section 724.101).

b) Except as provided in Section 724.964(k), this Subpart BB applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

1) A unit that is subject to the RCRA permitting requirements of 35 Ill. Adm. Code 702, 703, and 705,

2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 35 Ill. Adm. Code 722.134(a) (i.e., a hazardous waste recycling unit that is not a “90-day” tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 35 Ill. Adm. Code 702, 703, and 705, or

3) A unit that is exempt from permitting under the provisions of 35 Ill. Adm. Code 722.134(a) (i.e., a “90-day” tank or container) and which is not a recycling unit under the provisions of 35 Ill. Adm. Code 721.106.

c) For the owner or operator of a facility subject to this Subpart BB that received a final permit under 35 Ill. Adm. Code 702, 703, and 705 prior to December 6,

1996, the requirements of this Subpart BB must be incorporated into the permit when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705. Until such date when the owner or operator receives a final permit incorporating the requirements of this Subpart BB, the owner or operator is subject to the requirements of Subpart BB of 35 Ill. Adm. Code 725.

d) Each piece of equipment to which this Subpart BB applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

e) Equipment that is in vacuum service is excluded from the requirements of Sections 724.952 to 724.960, if it is identified as required in Section 724.964(g)(5).

f) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year is excluded from the requirements of Sections 724.952 through 724.960 if it is identified as required in Section 724.964(g)(6).

g) This subsection (g) corresponds with 40 CFR 264.1050(g), which relates exclusively to a facility outside Illinois. This statement maintains structural consistency with the corresponding federal regulations.

h) Purged coatings and solvents from surface coating operations subject to the federal national emission standards for hazardous air pollutants (NESHAPs) for the surface coating of automobiles and light-duty trucks at ~~Subpart~~ subpart IIII of 40 CFR 63~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks) are not subject to the requirements of this Subpart BB.

BOARD NOTE: The requirements of Sections 724.952 through 724.965 apply to equipment associated with hazardous waste recycling units previously exempt under 35 Ill. Adm. Code 721.106(c)(1). Other exemptions under 35 Ill. Adm. Code 721.104 and 724.101(g) are not affected by these requirements.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.963 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart BB must comply with the test methods and procedures requirements provided in this Section.

b) Leak detection monitoring, as required in Sections 724.952 through 724.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be as follows:

A) Zero air (less than 10 ppm of hydrocarbon in air); and

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 724.952(e), 724.953(i), 724.954, and 724.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) of this Section apply.

2) The background level must be determined as set forth in Reference Method 21.

3) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

4) This arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) In accordance with the waste analysis plan required by Section 724.113(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267-88 (Standard Test Method

for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography), E 168-88 (Standard Practices for General Techniques of Infrared Quantitative Analysis), E 169-87 (Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis), ~~and~~ or E 260-85 (Standard Practice for Packed Column Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a);

2) Method ~~9060 or 8260~~ 9060A (Total Organic Carbon) of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), for computing total organic concentration of the sample, or analyzed for its individual constituents; or

3) Application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that must be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in subsection (d)(1) or (d)(2) of this Section.

f) When an owner or operator and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) of this Section must be used to resolve the dispute.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must either be obtained from standard reference texts or be determined by ASTM D 2879-92 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction must comply with the procedures of Section 724.934(c)(1) through (c)(4).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.964 Recordkeeping Requirements

a) Lumping Units.

1) Each owner or operator subject to the provisions of this Subpart BB must comply with the recordkeeping requirements of this Section.

2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subpart BB may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

b) Owners and operators must record the following information in the facility operating record:

1) For each piece of equipment to which this Subpart BB applies, the following:

A) Equipment identification number and hazardous waste management unit identification.

B) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan).

C) Type of equipment (e.g., a pump or pipeline valve).

D) Percent-by-weight total organics in the hazardous wastestream at the equipment.

E) Hazardous waste state at the equipment (e.g., gas-vapor or liquid).

F) Method of compliance with the standard (e.g., “monthly leak detection and repair” or “equipped with dual mechanical seals”).

2) For facilities that comply with the provisions of Section 724.933(a)(2), an implementation schedule, as specified in that Section.

3) Where an owner or operator chooses to use test data to demonstrate the

organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan, as specified in Section 724.935(b)(3).

4) Documentation of compliance with Section 724.960, including the detailed design documentation or performance test results specified in Section 724.935(b)(4).

c) When each leak is detected as specified in Sections 724.952, 724.953, 724.957, or 724.958, the following requirements apply:

1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Section 724.958(a), and the date the leak was detected, must be attached to the leaking equipment.

2) The identification on equipment except on a valve, may be removed after it has been repaired.

3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Section 724.957(c) and no leak has been detected during those two months.

d) When each leak is detected as specified in Section 724.952, 724.953, 724.957, or 724.958, the following information must be recorded in an inspection log and must be kept in the facility operating record:

1) The instrument and operator identification numbers and the equipment identification number.

2) The date evidence of a potential leak was found in accordance with Section 724.958(a).

3) The date the leak was detected and the dates of each attempt to repair the leak.

4) Repair methods applied in each attempt to repair the leak.

5) "Above 10,000," if the maximum instrument reading measured by the methods specified in Section 724.963(b) after each repair attempt is equal to or greater than 10,000 ppm.

6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

7) Documentation supporting the delay of repair of a valve in compliance

with Section 724.959(c).

8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.

9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

10) The date of successful repair of the leak.

e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 724.960 must be recorded and kept up-to-date in the facility operating record, as specified in Section 724.935(c)(1) and (c)(2), and monitoring, operating and inspection information in Section 724.935(c)(3) through (c)(8).

f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify the appropriate recordkeeping requirements, indicating proper operation and maintenance of the control device, in the RCRA permit.

g) The following information pertaining to all equipment subject to the requirements in Sections 724.952 through 724.960 must be recorded in a log that is kept in the facility operating record:

1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subpart BB.

2) List of Equipment

A) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 724.952(e), 724.953(i), and 724.957(f).

B) The designation of this equipment as subject to the requirements of Section 724.952(e), 724.953(i), or 724.957(f) must be signed by the owner or operator.

3) A list of equipment identification numbers for pressure relief devices required to comply with Section 724.954(a).

4) Compliance tests.

A) The dates of each compliance test required in Sections 724.952(e), 724.953(i), 724.954, and 724.957(f).

B) The background level measured during each compliance test.

C) The maximum instrument reading measured at the equipment during each compliance test.

5) A list of identification numbers for equipment in vacuum service.

6) Identification, either by list or location (area or group), of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per year.

h) The following information pertaining to all valves subject to the requirements of Section 724.957(g) and (h) must be recorded in a log that is kept in the facility operating record:

1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

i) The following information must be recorded in the facility operating record for valves complying with Section 724.962:

1) A schedule of monitoring.

2) The percent of valves found leaking during each monitoring period.

j) The following information must be recorded in a log that is kept in the facility operating record:

1) Criteria required in Sections 724.952(d)(5)(B) and 724.953(e)(2) and an explanation of the design criteria.

2) Any changes to these criteria and the reasons for the changes.

k) The following information must be recorded in a log that is kept in the facility operating record for use in determining exemptions, as provided in Section 724.950 and other specific Subparts:

1) An analysis determining the design capacity of the hazardous waste

management unit.

2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Section 724.960 and an analysis determining whether these hazardous wastes are heavy liquids.

3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sections 724.952 through 724.960. The record must include supporting documentation as required by Section 724.963(d)(3) when application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in Sections 724.952 through 724.960, then a new determination is required.

l) Records of the equipment leak information required by subsection (d) of this Section and the operating information required by subsection (e) of this Section need be kept only three years.

m) The owner or operator of any facility with equipment that is subject to this Subpart BB and to regulations at federal 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), ~~incorporated by reference in 35 Ill. Adm. Code 720.111~~, may elect to determine compliance with this Subpart BB by documentation of compliance either pursuant to Section 724.964 or by documentation of compliance with the regulations at 40 CFR 60, 61, or 63, pursuant to the relevant provisions of 40 CFR 60, 61, or 63, each incorporated by reference in 35 Ill. Adm. Code 720.111(b). The documentation of compliance under the regulation at 40 CFR 60, 61, or 63 must be kept with or made readily available with the facility operating record.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section 724.980 Applicability

a) The requirements of this Subpart CC apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to Subpart I, J, or K of this Part, except as

Section 724.101 and subsection (b) of this Section provide otherwise.

b) The requirements of this Subpart CC do not apply to the following waste management units at the facility:

1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996.

2) A container that has a design capacity less than or equal to 0.1 m^3 (3.5 ft^3 or 26.4 gal).

3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required pursuant to the Act or Board regulations or under the corrective action authorities of RCRA section 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar federal or State authorities.

6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act of 1954 (42 USC 2011 et seq.) and the Nuclear Waste Policy Act of 1982 (42 USC 10101 et seq.).

7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories). For the purpose of complying with this subsection (b)(7), a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of Section 724.984(i), except as provided in Section 724.982(c)(5).

8) A tank that has a process vent, as defined in 35 Ill. Adm. Code 724.931.

c) For the owner and operator of a facility subject to this Subpart CC and that received a final RCRA permit prior to December 6, 1996, the requirements of this Subpart CC must be incorporated into the permit when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705. Until the date when the owner and operator receives a final permit incorporating the requirements of this Subpart CC, the owner and operator are subject to the requirements of Subpart CC of 35 Ill. Adm. Code 725.

d) The requirements of this Subpart CC, except for the recordkeeping requirements specified in Section 724.989(i), are stayed for a tank or container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations, when the owner or operator of the unit meets all of the following conditions:

1) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purposes of this subsection (d), "organic peroxide" means an organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

2) The owner or operator prepares documentation, in accordance with Section 724.989(i), explaining why an undue safety hazard would be created if air emission controls specified in Sections 724.984 through 724.987 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of subsection (d)(1) of this Section.

3) The owner or operator notifies the Agency in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of subsection (d)(1) of this Section are managed at the facility in tanks or containers meeting the conditions of subsection (d)(2) of this Section. The notification must state the name and address of the facility and be signed and dated by an authorized representative of the facility owner or operator.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.982 Standards: General

a) This Section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this Subpart CC.

b) The owner or operator must control air pollutant emissions from each waste management unit in accordance with the standards specified in Sections 724.984 through 724.987, as applicable to the waste management unit, except as provided for in subsection (c) of this Section.

c) A tank, surface impoundment, or container is exempt from standards specified in Sections 724.984 through 724.987, as applicable, provided that all hazardous waste placed in the waste management unit is one of the following:

1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration must be determined by the procedures specified in Section 724.983(a). The owner or operator must review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering the unit.

2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

A) The process removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process must be determined using the procedures specified in Section 724.983(b).

B) The process removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 724.983(b).

C) The process removes or destroys the organics contained in the hazardous waste to such a level that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process must be determined using the procedures specified in Section 724.983(b).

D) The process is a biological process that destroys or degrades the organics contained in the hazardous waste so that either of the following conditions are met:

i) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process must be determined using the procedures specified in Section 724.983(b).

ii) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process must be determined using the procedures specified in Section 724.983(b).

E) The process removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

i) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is continuously managed in waste management units that use air emission controls in accordance with the standards specified in Sections 724.984 through 724.987, as applicable to the waste management unit.

ii) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere.

BOARD NOTE: The USEPA considers a drain system that meets the requirements of federal subpart RR of 40 CFR 63~~, subpart RR,~~ ~~"~~(National Emission Standards for Individual Drain Systems~~,"~~) to be a closed system.

iii) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination, determined for each of the individual hazardous waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual hazardous waste stream at the point of waste origination must be determined using the procedures specified in Section 724.983(a). The average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 724.983(b).

F) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination must be determined using the procedures specified in Section 724.983(b) and Section 724.983(a), respectively.

G) A hazardous waste incinerator for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

ii) The owner or operator has designed and operates the incinerator in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.

H) A boiler or industrial furnace for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under

35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

ii) The owner or operator has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.

I) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of subsections (c)(2)(A) through (c)(2)(F) of this Section, the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

i) If Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code~~ 720.111~~ 720.111(b), is used for the analysis, one-half the blank value determined in Section 4.4 of the method or a value of 25 ppmw, whichever is less.

ii) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C.

3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of subsection (c)(2)(D) of this Section.

4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit fulfills either of the following conditions:

A) It meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in Table T to 35 Ill. Adm. Code 728; or

B) The organic hazardous constituents in the waste have been treated by the treatment technology established by USEPA for the waste, as set forth in 35 Ill. Adm. Code 728.142(a), or have been removed or destroyed by an equivalent method of treatment approved by the Agency pursuant to 35 Ill. Adm. Code 728.142(b).

5) A tank used for bulk feed of hazardous waste to a waste incinerator and all of the following conditions are met:

A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under federal subpart FF of 40 CFR 61~~, subpart FF, "~~(National Emission Standard for Benzene Waste Operations)~~,"~~ incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams (11 tons) per year;

B) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996; and

C) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~ (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code~~ 720.111~~ 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" annually.

d) The Agency may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container that is exempted from using air emission controls under the provisions of this Section, as follows:

1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination must be performed using direct measurement in accordance with the applicable requirements of Section 724.983(a). The waste determination for a hazardous waste at the point of waste treatment must be performed in accordance with the applicable requirements of Section 724.983(b).

2) In performing a waste determination pursuant to subsection (d)(1) of this Section, the sample preparation and analysis must be conducted as follows:

A) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in subsection (d)(2)(B) of this Section.

B) If the Agency determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Agency may choose an appropriate method.

3) Where the owner or operator is requested to perform the waste determination, the Agency may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

4) Where the results of the waste determination performed or requested by the Agency do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of subsection (d)(1) of this Section must be used to establish compliance with the requirements of this Subpart CC.

5) Where the owner or operator has used an averaging period greater than one hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Agency may elect to establish compliance with this Subpart CC by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a one-hour period, as follows:

A) The average VO concentration of the hazardous waste at the point of waste origination must be determined by direct measurement in accordance with the requirements of Section 724.983(a).

B) Results of the waste determination performed or requested by the Agency showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw must constitute noncompliance with this Subpart CC, except in a case as provided for in subsection (d)(5)(C) of this Section.

C) Where the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than one hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given one-hour period may be equal

to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Section 724.983(a) and Section 724.989 must be considered by the Agency together with the results of the waste determination performed or requested by the Agency in establishing compliance with this Subpart CC.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.984 Standards: Tanks

a) The provisions of this Section apply to the control of air pollutant emissions from tanks for which Section 724.982(b) references the use of this Section for such air emission control.

b) The owner or operator must control air pollutant emissions from each tank subject to this Section in accordance with the following requirements, as applicable:

1) For a tank that manages hazardous waste that meets all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C) of this Section, the owner or operator must control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in subsection (c) of this Section or the Tank Level 2 controls specified in subsection (d) of this Section.

A) The hazardous waste in the tank has a maximum organic vapor pressure that is less than the maximum organic vapor pressure limit for the tank's design capacity category, as follows:

i) For a tank design capacity equal to or greater than 151 m^3 (39,900 gal), the maximum organic vapor pressure limit for the tank is 5.2 kPa (0.75 psig).

ii) For a tank design capacity equal to or greater than 75 m^3 (19,800 gal) but less than 151 m^3 (39,900 gal), the maximum organic vapor pressure limit for the tank is 27.6 kPa (4.00 psig).

iii) For a tank design capacity less than 75 m^3 (19,800 gal), the maximum organic vapor pressure limit for the tank is 76.6 kPa (11.1 psig).

B) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at

which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with subsection (b)(1)(A) of this Section.

C) The owner or operator does not treat the hazardous waste in the tank using a waste stabilization process, as defined in 35 Ill. Adm. Code 725.981.

2) For a tank that manages hazardous waste that does not meet all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C) of this Section, the owner or operator must control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of subsection (d) of this Section. Examples of tanks required to use Tank Level 2 controls include a tank used for a waste stabilization process and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category, as specified in subsection (b)(1)(A) of this Section.

c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls must meet the requirements specified in subsections (c)(1) through (c)(4) of this Section:

1) The owner or operator must determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 724.983(c). Thereafter, the owner or operator must perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in subsection (b)(1)(A) of this Section, as applicable to the tank.

2) The tank must be equipped with a fixed roof designed to meet the following specifications:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

B) The fixed roof must be installed in such a manner that there are no

visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

C) Either of the following must be true of each opening in the fixed roof and of any manifold system associated with the fixed roof:

i) The opening or manifold system is equipped with a closure device designed to operate so that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

ii) The opening or manifold system is connected by a closed-vent system that is vented to a control device. The control device must remove or destroy organics in the vent stream, and it must be operating whenever hazardous waste is managed in the tank, except as provided for in subsection (c)(2)(E) of this Section.

D) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the following: the organic vapor permeability; the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

E) The control device operated pursuant to subsection (c)(2)(C) of this Section needs not remove or destroy organics in the vent stream under the following conditions:

i) During periods when it is necessary to provide access to the tank for performing the activities of subsection (c)(2)(E)(ii) of this Section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device; and

ii) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

BOARD NOTE: Subsections (c)(2)(E)(i) and (c)(2)(E)(ii) of this Section are derived from 40 CFR 264.1084(c)(2)(iii)(B)(*1*) and (c)(2)(iii)(B)(*2*), which the Board has codified here to comport with Illinois Administrative Code format requirements.

3) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position, except as follows:

A) Opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of the tank.

B) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may

require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

C) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator must inspect the air emission control equipment in accordance with the following requirements.

A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The owner or operator must perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except under the special conditions provided for in subsection (l) of this Section.

C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.

D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).

d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls must use one of the following tanks:

1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in subsection (e) of this Section;

2) A tank equipped with an external floating roof in accordance with the requirements specified in subsection (f) of this Section;

3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (g) of this Section;

4) A pressure tank designed and operated in accordance with the requirements specified in subsection (h) of this Section; or

5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in subsection (i) of this Section.

e) The owner or operator that controls air pollutant emissions from a tank using a fixed roof with an internal floating roof must meet the requirements specified in subsections (e)(1) through (e)(3) of this Section.

1) The tank must be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

A) The internal floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The internal floating roof must be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

i) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 725.981; or

ii) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

C) The internal floating roof must meet the following specifications:

i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

ii) Each opening in the internal floating roof must be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

iii) Each penetration of the internal floating roof for the purpose of sampling must have a slit fabric cover that covers at least 90 percent of the opening.

iv) Each automatic bleeder vent and rim space vent must be gasketed.

v) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.

vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.

2) The owner or operator must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

C) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof must be bolted or fastened closed (i.e., no visible gaps). Rim space vents must be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

3) The owner or operator must inspect the internal floating roof in accordance with the procedures specified as follows:

A) The floating roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, any of the following: when the internal floating roof is not floating on the surface of the liquid inside the tank; when liquid has accumulated on top of the internal floating roof; when any portion of the roof seals have detached from the roof rim; when holes, tears, or other openings are visible in the seal fabric; when the gaskets no longer close off the hazardous waste surface from the atmosphere; or when the slotted membrane has more than 10 percent open area.

B) The owner or operator must inspect the internal floating roof components as follows, except as provided in subsection (e)(3)(C) of this Section:

i) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and

ii) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least once every 10 years.

C) As an alternative to performing the inspections specified in subsection (e)(3)(B) of this Section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years.

D) Prior to each inspection required by subsection (e)(3)(B) or (e)(3)(C) of this Section, the owner or operator must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The owner or operator must notify the Agency of the date and location of the inspection, as follows:

i) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned, as provided for in subsection (e)(3)(D)(ii) of this Section.

ii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

E) In the event that a defect is detected, the owner or operator must

repair the defect in accordance with the requirements of subsection (k) of this Section.

F) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).

4) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any tank complying with the requirements of this subsection (e).

f) The owner or operator that controls air pollutant emissions from a tank using an external floating roof must meet the requirements specified in subsections (f)(1) through (f)(3) of this Section.

1) The owner or operator must design the external floating roof in accordance with the following requirements:

A) The external floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The floating roof must be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) The primary seal must be a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 725.981. The total area of the gaps between the tank wall and the primary seal must not exceed 212 square centimeters (cm^2) per meter (10.0 square inches (in^2) per foot) of tank diameter, and the width of any portion of these gaps must not exceed 3.8 centimeters (cm) (1.5 in). If a metallic shoe seal is used for the primary seal, the metallic shoe seal must be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 cm (24 in) above the liquid surface.

ii) The secondary seal must be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal must not exceed 21.2 cm^2 per meter (1.00 in^2 per foot) of tank diameter, and the width of any portion of these gaps must not exceed 1.3 cm (0.51 in).

C) The external floating roof must meet the following specifications:

i) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof must provide a projection below the liquid surface.

ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal, or lid.

iii) Each access hatch and each gauge float well must be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

iv) Each automatic bleeder vent and each rim space vent must be equipped with a gasket.

v) Each roof drain that empties into the liquid managed in the tank must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

vi) Each unslotted and slotted guide pole well must be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

vii) Each unslotted guide pole must be equipped with a gasketed cap on the end of the pole.

viii) Each slotted guide pole must be equipped with a gasketed float or other device that closes off the liquid surface from the atmosphere.

ix) Each gauge hatch and each sample well must be equipped with a gasketed cover.

2) The owner or operator must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Except for automatic bleeder vents, rim space vents, roof drains,

and leg sleeves, each opening in the roof must be secured and maintained in a closed position at all times except when the closure device must be open for access.

C) Covers on each access hatch and each gauge float well must be bolted or fastened when secured in the closed position.

D) Automatic bleeder vents must be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

E) Rim space vents must be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

F) The cap on the end of each unslotted guide pole must be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

G) The cover on each gauge hatch or sample well must be secured in the closed position at all times except when the hatch or well must be opened for access.

H) Both the primary seal and the secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

3) The owner or operator must inspect the external floating roof in accordance with the procedures specified as follows:

A) The owner or operator must measure the external floating roof seal gaps in accordance with the following requirements:

i) The owner or operator must perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every five years.

ii) The owner or operator must perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

iii) If a tank ceases to hold hazardous waste for a period of one year or more, subsequent introduction of hazardous waste into the tank must be considered an initial operation for the purposes of subsections (f)(3)(A)(i) and (f)(3)(A)(ii) of this Section.

iv) The owner or operator must determine the total surface area of gaps in the primary seal and in the secondary seal individually using the procedure of subsection (f)(3)(D) of this Section.

v) In the event that the seal gap measurements do not conform to the specifications in subsection (f)(1)(B) of this Section, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.

vi) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).

B) The owner or operator must visually inspect the external floating roof in accordance with the following requirements:

i) The floating roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, any of the following conditions: holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

ii) The owner or operator must perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (l) of this Section.

iii) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.

iv) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).

C) Prior to each inspection required by subsection (f)(3)(A) or (f)(3)(B) of this Section, the owner or operator must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The owner or operator must notify the Agency of the date and location of the inspection, as follows:

i) Prior to each inspection to measure external floating roof seal gaps as required under subsection (f)(3)(A) of this Section, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before the date the measurements are scheduled to be performed.

ii) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned as provided for in subsection (f)(3)(C)(iii) of this Section.

iii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

D) Procedure for determining the total surface area of gaps in the primary seal and the secondary seal:

i) The seal gap measurements must be performed at one or more floating roof levels when the roof is floating off the roof supports.

ii) Seal gaps, if any, must be measured around the entire perimeter of the floating roof in each place where a 0.32 cm (0.125 in) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

iii) For a seal gap measured under subsection (f)(3) of this Section, the gap surface area must be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

iv) The total gap area must be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type, as specified in subsection (f)(1)(B) of this Section.

BOARD NOTE: Subsections (f)(3)(D)(i) through (f)(3)(D)(iv) of this Section are derived from 40 CFR 264.1084(f)(3)(i)(D)(*1*) through (f)(3)(i)(D)(*4*), which the Board has codified here to comport with Illinois Administrative Code format requirements.

4) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any tank complying with the requirements of subsection (f) of this Section.

g) The owner or operator that controls air pollutant emissions from a tank by venting the tank to a control device must meet the requirements specified in subsections (g)(1) through (g)(3) of this Section.

1) The tank must be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

B) Each opening in the fixed roof not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric

pressure when the control device is operating, the closure device must be designed to operate so that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions.

C) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the following: organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 724.987.

2) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device, except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of a tank.

B) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, any of the following: visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The closed-vent system and control device must be inspected and monitored by the owner or operator in accordance with the procedures specified in Section 724.987.

C) The owner or operator must perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (l) of this Section.

D) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.

E) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).

h) The owner or operator that controls air pollutant emissions by using a pressure tank must meet the following requirements:

1) The tank must be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

2) All tank openings must be equipped with closure devices designed to operate with no detectable organic emissions, as determined using the procedure specified in Section 724.983(d).

3) Whenever a hazardous waste is in the tank, the tank must be operated as a closed-vent system that does not vent to the atmosphere, except under

either of the following two conditions:

A) The tank does not need to be operated as a closed-vent system at those times when the opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is required to avoid an unsafe condition.

B) The tank does not need to be operated as a closed-vent system at those times when the purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section 724.987.

i) The owner or operator that controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device must meet the requirements specified in subsections (i)(1) through (i)(4) of this Section.

1) The tank must be located inside an enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~ (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure, as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure," initially when the enclosure is first installed and, thereafter, annually.

2) The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section 724.987.

3) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of subsections (i)(1) and (i)(2) of this Section.

4) The owner or operator must inspect and monitor the closed-vent system and control device, as specified in Section 724.987.

j) The owner or operator must transfer hazardous waste to a tank subject to this

Section in accordance with the following requirements:

1) Transfer of hazardous waste, except as provided in subsection (j)(2) of this Section, to the tank from another tank subject to this Section or from a surface impoundment subject to Section 724.985 must be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63~~, subpart RR,~~ ~~"~~(National Emission Standards for Individual Drain Systems~~,"~~), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

2) The requirements of subsection (j)(1) of this Section do not apply when transferring a hazardous waste to the tank under any of the following conditions:

A) The hazardous waste meets the average VO concentration conditions specified in Section 724.982(c)(1) at the point of waste origination.

B) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Section 724.982(c)(2).

C) The hazardous waste meets the requirements of Section 724.982(c)(4).

k) The owner or operator must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(4), (e)(3), (f)(3), or (g)(3) of this Section, as follows:

1) The owner or operator must make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible but no later than 45 calendar days after detection except as provided in subsection (k)(2) of this Section.

2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator must repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect must be completed before the process or unit resumes operation.

l) Following the initial inspection and monitoring of the cover, as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year under the following special conditions:

1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

A) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

B) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable Section of this Subpart CC, as frequently as practicable during those times when a worker can safely access the cover.

2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this Section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.985 Standards: Surface Impoundments

a) The provisions of this Section apply to the control of air pollutant emissions from surface impoundments for which Section 724.982(b) references the use of this Section for such air emission control.

b) The owner or operator must control air pollutant emissions from the surface impoundment by installing and operating either of the following:

1) A floating membrane cover in accordance with the provisions specified in subsection (c) of this Section; or

2) A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in subsection (d) of this Section.

c) The owner or operator that controls air pollutant emissions from a surface impoundment using a floating membrane cover must meet the requirements specified in subsections (c)(1) through (c)(3) of this Section.

1) The surface impoundment must be equipped with a floating membrane

cover designed to meet the following specifications:

A) The floating membrane cover must be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

B) The cover must be fabricated from a synthetic membrane material that is either of the following:

i) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm) (0.098 in); or

ii) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in subsection (c)(1)(B)(i) of this Section and chemical and physical properties that maintain the material integrity for the intended service life of the material.

C) The cover must be installed in such a manner that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.

D) Except as provided for in subsection (c)(1)(E) of this Section, each opening in the floating membrane cover must be equipped with a closure device so designed as to operate that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.

E) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.

F) The closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture,

and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover must float on the liquid and each closure device must be secured in the closed position, except as follows:

A) Opening of closure devices or removal of the cover is allowed at the following times:

i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly replace the cover and secure the closure device in the closed position, as applicable.

ii) To remove accumulated sludge or other residues from the bottom of surface impoundment.

B) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect the floating membrane cover in accordance with the following procedures:

A) The floating membrane cover and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The owner or operator must perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (g) of this Section.

C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (f) of this Section.

D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(c).

d) The owner or operator that controls air pollutant emissions from a surface impoundment using a cover vented to a control device must meet the requirements specified in subsections (d)(1) through (d)(3) of this Section.

1) The surface impoundment must be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

A) The cover and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.

B) Each opening in the cover not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions using the procedure specified in Section 724.983(d).

C) The cover and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere to the extent practical and which will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed.

D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 724.987.

2) Whenever a hazardous waste is in the surface impoundment, the cover must be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device, except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment.

ii) To remove accumulated sludge or other residues from the bottom of the surface impoundment.

B) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The surface impoundment cover and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The closed-vent system and control device must be inspected and monitored by the owner or operator in accordance with the procedures specified in Section 724.987.

C) The owner or operator must perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (g) of this Section.

D) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (f) of this Section.

E) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(c).

e) The owner or operator must transfer hazardous waste to a surface impoundment subject to this Section in accordance with the following requirements:

1) Transfer of hazardous waste, except as provided in subsection (e)(2) of this Section, to the surface impoundment from another surface impoundment subject to this Section or from a tank subject to Section 724.984 must be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63~~, Subpart RR,~~ ~~"~~(National Emission Standards for Individual Drain Systems~~,"~~), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

2) The requirements of subsection (e)(1) of this Section do not apply when transferring a hazardous waste to the surface impoundment under any of the following conditions:

A) The hazardous waste meets the average VO concentration conditions specified in Section 724.982(c)(1) at the point of waste origination.

B) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Section 724.982(c)(2).

C) The hazardous waste meets the requirements of Section 724.982(c)(4).

f) The owner or operator must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(3) or (d)(3) of this Section as follows:

1) The owner or operator must make first efforts at repair of the defect no later than five calendar days after detection and repair must be completed as soon as possible but no later than 45 calendar days after detection except as provided in subsection (f)(2) of this Section.

2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator must repair the defect the next time the process or unit that is generating the hazardous waste managed in the surface impoundment stops operation. Repair of the defect must be completed before the process or unit resumes operation.

g) Following the initial inspection and monitoring of the cover, as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable Section of this Subpart CC as frequently as practicable during those times when a worker can safely access the cover.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.986 Standards: Containers

a) The provisions of this Section apply to the control of air pollutant emissions from containers for which Section 724.982(b) references the use of this Section for such air emission control.

b) General requirements.

1) The owner or operator must control air pollutant emissions from each container subject to this Section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in subsection (b)(2)

of this Section apply to the container.

A) For a container having a design capacity greater than 0.1 m^3 (26 gal) and less than or equal to 0.46 m^3 (120 gal), the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c) of this Section.

B) For a container having a design capacity greater than 0.46 m^3 (120 gal) that is not in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards, specified in subsection (c) of this Section.

C) For a container having a design capacity greater than 0.46 m^3 (120 gal) that is in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in subsection (d) of this Section.

2) When a container having a design capacity greater than 0.1 m^3 (26 gal) is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in subsection (e) of this Section at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

c) Container Level 1 standards.

1) A container using Container Level 1 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in subsection (f) of this Section.

B) A container equipped with a cover and closure devices that form a continuous barrier over the container openings so that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a “portable tank” or bulk cargo container equipped with a screw-type cap).

C) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container so that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

2) A container used to meet the requirements of subsection (c)(1)(B) or (c)(1)(C) of this Section must be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator must install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position, except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container, as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container, as follows:

i) For the purpose of meeting the requirements of this Section, an empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, as defined in 35 Ill. Adm. Code 721.107(b), the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of

flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator of containers using Container Level 1 controls must inspect the containers and their covers and closure devices, as follows:

A) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., it does not meet the conditions for an empty container, as specified in 35 Ill. Adm. Code 721.107(b)), the owner or operator must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility (i.e., the date when the container becomes subject to the Subpart CC container standards). For the purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, as set forth in the appendix to 40 CFR 262 (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700–22 and 8700–22a and Their Instructions)), incorporated by reference in ~~Appendix A to~~ 35 Ill. Adm. Code ~~722~~ 720.111(b) (USEPA Forms 8700-22 and 8700-22A), as required under Section 724.171. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (c)(4)(C) of this Section.

B) In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator must visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator must repair the defect in accordance with the

requirements of subsection (c)(4)(C) of this Section.

C) When a defect is detected for the container, cover, or closure devices, the owner or operator must make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

5) The owner or operator must maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 (120 gal) or greater that do not meet applicable USDOT regulations, as specified in subsection (f) of this Section, are not managing hazardous waste in light material service.

d) Container Level 2 standards.

1) A container using Container Level 2 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in subsection (f) of this Section.

B) A container that operates with no detectable organic emissions, as defined in 35 Ill. Adm. Code 725.981, and determined in accordance with the procedure specified in subsection (g) of this Section.

C) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test) in appendix A to 40 CFR 60~~, appendix A, Method 27~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), in accordance with the procedure specified in subsection (h) of this Section.

2) Transfer of hazardous waste in or out of a container using Container Level 2 controls must be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that the USEPA considers to meet the requirements of this subsection (d)(2) include using any one of the following: a submerged-fill pipe or other

submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator must install all covers and closure devices for the container, and secure and maintain each closure device in the closed position, except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container, as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container, as follows:

i) For the purpose of meeting the requirements of this Section, an empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

ii) In the case when discrete quantities or batches of material are removed from the container but the container does not

meet the conditions to be an empty container, as defined in 35 Ill. Adm. Code 721.107(b), the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator of containers using Container Level 2 controls must

inspect the containers and their covers and closure devices, as follows:

A) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., it does not meet the conditions for an empty container as specified in 35 Ill. Adm. Code 721.107(b)), the owner or operator must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility (i.e., the date when the container becomes subject to the Subpart CC container standards). For the purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, in the appendix to 40 CFR 262 ~~incorporated by reference in the appendix to 40 CFR 262~~ (Uniform Hazardous Waste Manifest and Instructions (USEPA Forms 8700-22 and ~~8700-22A~~ 8700-22a and Their Instructions)), as required under Section 724.171. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (d)(4)(C) of this Section.

B) In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator must visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (d)(4)(C) of this Section.

C) When a defect is detected for the container, cover, or closure devices, the owner or operator must make first efforts at repair of the defect no later than 24 hours after detection, and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

e) Container Level 3 standards.

1) A container using Container Level 3 controls is one of the following:

   A) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of subsection (e)(2)(B) of this Section.

   B) A container that is vented inside an enclosure that is exhausted through a closed-vent system to a control device in accordance with the requirements of subsections (e)(2)(A) and (e)(2)(B) of this Section.

2) The owner or operator must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

   A) The container enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B, incorporated by reference in 35 Ill. Adm. Code 720.111~~ (VOM Measurement Techniques for Capture Efficiency). The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure, as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

   B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 724.987.

3) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of subsection (e)(1) of this Section.

4) Owners and operators using Container Level 3 controls in accordance with the provisions of this Subpart CC must inspect and monitor the closed-vent systems and control devices, as specified in Section 724.987.

5) Owners and operators that use Container Level 3 controls in accordance with the provisions of this Subpart CC must prepare and maintain the records specified in Section 724.989(d).

6) The transfer of hazardous waste into or out of a container using Container Level 3 controls must be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA considers to meet the requirements of this subsection (e)(6) include using any one of the following: the use of a submerged-fill pipe or other submerged-fill method to load liquids into the container; the use of a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or the use of a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

f) For the purpose of compliance with subsection (c)(1)(A) or (d)(1)(A) of this Section, containers must be used that meet the applicable USDOT regulations on packaging hazardous materials for transportation, as follows:

1) The container meets the applicable requirements specified by USDOT in 49 CFR 178~~,~~ ~~"~~(Specifications for Packaging),~~"~~ or 49 CFR 179~~,~~ ~~"~~(Specifications for Tank Cars),~~"~~ ~~both~~ each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

2) Hazardous waste is managed in the container in accordance with the applicable requirements specified by USDOT in subpart B of 49 CFR 107~~,~~ ~~subpart B,~~ ~~"~~(Exemptions~~";~~), 49 CFR 172~~,~~ ~~"~~(Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements~~";~~), 49 CFR 173~~,~~ ~~"~~(Shippers—General Requirements for Shipments and Packages~~";~~), and 49 CFR 180~~,~~ ~~"~~(Continuing Qualification and Maintenance of Packagings),~~"~~ each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

3) For the purpose of complying with this Subpart CC, no exceptions to the 49 CFR 178 or 179 regulations are allowed, except as provided for in subsection (f)(4) of this Section.

4) For a lab pack that is managed in accordance with the USDOT requirements of 49 CFR 178 (Specifications for Packagings)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~, for the purpose of complying with this Subpart CC, an owner or operator may comply with the exceptions for combination packagings specified by USDOT in 49 CFR 173.12(b) (Exceptions for Shipments of Waste Materials), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

g) To determine compliance with the no detectable organic emissions requirement of subsection (d)(1)(B) of this Section, the procedure specified in Section 724.983(d) must be used.

1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, must be checked. Potential leak interfaces that are associated with containers include, but are not limited to, the following: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

2) The test must be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices must be secured in the closed position.

h) Procedure for determining a container to be vapor-tight using Method 27 ~~of 40 CFR 60, appendix A~~ for the purpose of complying with subsection (d)(1)(C) of this Section.

1) The test must be performed in accordance with Method 27 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111~~.

2) A pressure measurement device must be used that has a precision of ± 2.5 mm (0.098 in) water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals (0.11 psig) within five minutes after it is pressurized to a minimum of 4,500 Pascals (0.65 psig), then the container is determined to be vapor-tight.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.989 Recordkeeping Requirements

a) Each owner or operator of a facility subject to the requirements of this Subpart CC must record and maintain the information specified in subsections (b) through (j) of this Section, as applicable to the facility. Except for air emission control equipment design documentation and information required by subsections (i) and (j) of this Section, records required by this Section must be maintained in the operating record for a minimum of three years. Air emission control equipment

design documentation must be maintained in the operating record until the air emission control equipment is replaced or is otherwise no longer in service. Information required by subsections (i) and (j) of this Section must be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sections 724.984 through 724.987, in accordance with the conditions specified in Section 724.980(d) or (b)(7), respectively.

b) The owner or operator of a tank using air emission controls in accordance with the requirements of Section 724.984 must prepare and maintain records for the tank that include the following information:

1) For each tank using air emission controls in accordance with the requirements of Section 724.984, the owner or operator must record the following:

A) A tank identification number (or other unique identification description, as selected by the owner or operator).

B) A record for each inspection required by Section 724.984 that includes the following information:

i) Date inspection was conducted.

ii) For each defect detected during the inspection: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section 724.984, the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected.

2) In addition to the information required by subsection (b)(1) of this Section, the owner or operator must record the following information, as applicable to the tank:

A) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 724.984(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Section 724.984(c). The records must include the date and time the samples were collected, the analysis method used, and the analysis results.

B) The owner or operator using an internal floating roof to comply

with the Tank Level 2 control requirements specified in Section 724.984(e) must prepare and maintain documentation describing the floating roof design.

C) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 724.984(f) must prepare and maintain the following records:

i) Documentation describing the floating roof design and the dimensions of the tank.

ii) Records for each seal gap inspection required by Section 724.984(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 724.984(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

D) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Section 724.984(i) must prepare and maintain the following records:

i) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~ (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.

c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section 724.985 must prepare and maintain records for the surface impoundment that include the following information:

1) A surface impoundment identification number (or other unique identification description as selected by the owner or operator).

2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Section 724.985(c).

3) A record for each inspection required by Section 724.985 that includes the following information:

A) Date inspection was conducted.

B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 724.985(f), the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected.

4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator must prepare and maintain the records specified in subsection (e) of this Section.

d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section 724.986 must prepare and maintain records that include the following information:

1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T-- Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B, incorporated by reference in 35 Ill. Adm. Code 720.111~~ (VOM Measurement Techniques for Capture Efficiency).

2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.

e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section 724.987 must prepare and maintain records that include the following information:

1) Documentation for the closed-vent system and control device that includes the following:

A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in subsection (e)(1)(B) of this Section or by performance tests as specified in subsection (e)(1)(C) of this Section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

B) If a design analysis is used, then design documentation, as specified in Section 724.935(b)(4). The documentation must include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 724.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications.

C) If performance tests are used, then a performance test plan as specified in Section 724.935(b)(3) and all test results.

D) Information as required by Section 724.935(c)(1) and Section 724.935(c)(2), as applicable.

E) An owner or operator must record, on a semiannual basis, the information specified in subsections (e)(1)(E)(i) and (e)(1)(E)(ii) of this Section for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 724.987(c)(1)(A), (c)(1)(B), or (c)(1)(C) of this Section, as applicable.

i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

ii) A description of the planned routine maintenance that was performed for the control device during the previous six-month period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 724.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance.

F) An owner or operator must record the information specified in

subsections (e)(1)(F)(i) through (e)(1)(F)(iii) of this Section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Section 724.987 (c)(1)(A), (c)(1)(B), or (c)(1)(C) of this Section, as applicable.

i) The occurrence and duration of each malfunction of the control device system.

ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 724.987(c)(3)(B).

f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Section 724.982(c) must prepare and maintain the following records, as applicable:

1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Section 724.982(c)(1) or (c)(2)(A) through (c)(2)(E), the owner or operator must record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator must record the date, time, and location that each waste sample is collected in accordance with the applicable requirements of Section 724.983.

2) For tanks, surface impoundments, or containers exempted under the provisions of Section 724.982(c)(2)(G) or (c)(2)(H), the owner or operator must record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

g) An owner or operator designating a cover as “unsafe to inspect and monitor” pursuant to Section 724.984(l) or Section 724.985(g) must record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as “unsafe

to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

h) The owner or operator of a facility that is subject to this Subpart CC and to the control device standards in federal subpart VV of 40 CFR 60~~, Subpart VV~~ (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry) or subpart V of 40 CFR 61~~, Subpart V~~ (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), may elect to demonstrate compliance with the applicable Sections of this Subpart CC by documentation either pursuant to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60~~, Subpart VV~~ or subpart V of 40 CFR 61~~, Subpart V~~, to the extent that the documentation required by 40 CFR 60 or 61 duplicates the documentation required by this Section.

i) For each tank or container not using air emission controls specified in Sections 724.984 through 724.987 in accordance with the conditions specified in Section 724.980(d), the owner or operator must record and maintain the following information:

1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Section 724.980(d)(1).

2) A description of how the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) of this Section are managed at the facility in tanks and containers. This description must include the following information:

A) For the tanks used at the facility to manage this hazardous waste, sufficient information must be provided to describe the following for each tank: a facility identification number for the tank, the purpose and placement of this tank in the management train of this hazardous waste, and the procedures used to ultimately dispose of the hazardous waste managed in the tanks.

B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to describe each tank: a facility identification number for the container or group of containers, the purpose and placement of this container or group of containers in the management train of this hazardous waste, and the procedures used to ultimately dispose of the hazardous waste managed in the containers.

3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) of

this Section in the tanks or containers identified pursuant to subsection (i)(2) of this Section would create an undue safety hazard if the air emission controls specified in Sections 724.984 through 724.987 were installed and operated on these waste management units. This explanation must include the following information:

A) For tanks used at the facility to manage this hazardous waste, sufficient information must be provided to explain the following: how use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to explain the following: how use of the required air emission controls on the tanks would affect the container design features and handling procedures currently used to prevent an undue safety hazard during management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

j) For each hazardous waste management unit not using air emission controls specified in Sections 724.984 through 724.987 in accordance with the requirements of Section 724.980(b)(7), the owner and operator must record and maintain the following information:

1) The certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63.

2) An identification of the specific federal requirements codified under 40 CFR 60, 61, or 63 with which the waste management unit is in compliance.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1101 Design and Operating Standards

a) All containment buildings must comply with the following design and operating standards:

1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g. precipitation, wind, run on) and to assure containment of managed wastes.

2) The floor and containment walls of the unit, including the secondary containment system if required under subsection (b) of this Section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The containment building must meet the structural integrity requirements established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM). If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet the following criteria:

A) They provide an effective barrier against fugitive dust emissions under subsection (c)(1)(C) of this Section; and

B) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.

3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include the following:

1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).

2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building, as follows:

A) The primary barrier must be sloped to drain liquids to the associated collection system; and

B) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.

3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.

A) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, as follows:

i) It is constructed with a bottom slope of 1 percent or more; and

ii) It is constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more.

B) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.

C) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and

thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Section 724.193(d)(1). In addition, the containment building must meet the requirements of Section 724.193(b) and Sections 724.193(c)(1) and (c)(2) to be an acceptable secondary containment system for a tank.)

4) For existing units other than 90-day generator units, USEPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart DD. In making this demonstration, the owner or operator must have done the following:

A) Provided written notice to USEPA of their request by November 16, 1992. This notification must have described the unit and its operating practices with specific reference to the performance of existing systems, and specific plans for retrofitting the unit with secondary containment;

B) Responded to any comments from USEPA on these plans within 30 days; and

C) Fulfilled the terms of the revised plans, if such plans are approved by USEPA.

c) An owner or operator of a containment building must do the following:

1) Use controls and practice to ensure containment of the hazardous waste within the unit, and at a minimum:

A) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be release from the primary barrier;

B) Maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

C) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and

D) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60~~, appendix A, Method 22 (Test Methods) – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares)~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator, etc.) must be operated and maintained with sound air pollution control practices (see 40 CFR 60 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.

BOARD NOTE: At 40 CFR 264.1101(c)(1)(iv)~~ (2004)~~ (2005), USEPA cites "40 CFR part 60, subpart 292." At 57 Fed. Reg. 37217 (Aug. 18, 1992), USEPA repeats this citation in the preamble discussion of adoption of the rules. No such provision exists in the Code of Federal Regulations. While section 40 CFR 60.292 of the federal regulations pertains to control of fugitive dust emissions, that provision is limited in its application to glass melting furnaces. The Board has chosen to use the ~~more~~ general citation: "40 CFR 60."

2) Obtain certification by a qualified registered professional engineer (PE) that the containment building design meets the requirements of subsections (a) through (c) of this Section. For units placed into operation prior to February 18, 1993, this certification must have been placed in the facility's operating record (on-site files for generators that are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification has been required prior to operation of the unit.

3) Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, must repair the condition promptly. In addition, however the following is required:

A) Upon detection of a condition that has caused to a release of hazardous wastes (e.g., upon detection of leakage from the primary barrier) the owner or operator must do the following:

i) Enter a record of the discovery in the facility operating

record;

ii) Immediately remove the portion of the containment building affected by the condition from service;

iii) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

iv) Within seven days after the discovery of the condition, notify the Agency in writing of the condition, and within 14 working days, provide a written notice to the Agency with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.

B) The Agency must review the information submitted, make a determination in accordance with Section 34 of the Act, regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.

C) Upon completing all repairs and cleanup the owner and operator must notify the Agency in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with subsection (c)(3)(A)(iv) of this Section.

4) Inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring equipment and leak detection equipment, as well as the containment building and the area immediately surrounding the containment building, to detect signs of releases of hazardous waste.

d) For containment buildings that contain areas both with and without secondary containment, the owner or operator must do the following:

1) Design and operate each area in accordance with the requirements enumerated in subsections (a) through (c) of this Section;

2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and

3) Maintain in the facility's operating log a written description of the

operating procedures used to maintain the integrity of areas without secondary containment.

e) Notwithstanding any other provision of this Subpart DD the Agency must not require secondary containment for a permitted containment building where the owner operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.Appendix A Recordkeeping Instructions

See appendix I to 40 CFR 264~~, Appendix I~~ (Recordkeeping Instructions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.Appendix D Cochran's Approximation to the Behrens-Fisher Student's T-Test

See appendix IV to 40 CFR 264~~, Appendix IV~~ (Cochran's Approximation to the Behrens-Fisher Students' T-Test), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.Appendix E Examples of Potentially Incompatible Waste

See appendix V to 40 CFR 264~~, Appendix V~~ (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 724.Appendix I Groundwater Monitoring List

~~a) The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also subsections (e) and (f) of this Section.~~

~~b~~a) Common names are those widely used in government regulations, scientific publications and commerce; synonyms exist for many chemicals.

~~c~~b) "CAS RN" means "Chemical Abstracts Service Registry Number." Where "total" is entered, all species in the groundwater that contain this element are included.

~~d~~c) CAS index names are those used in the 9th Cumulative index.

~~e) "Suggested Methods" refer to analytical procedure numbers used in "Test Methods for Solid Waste," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111. Analytical details can be found in "Test Methods," and in documentation on file with USEPA. The packed column gas chromatography methods 8010, 8020, 8030, 8040, 8060, 8080, 8090, 8110, 8120, 8140, 8150, 8240, and 8250 were in Update IIB of SW-846. However, in Update III, USEPA replaced these methods with "capillary column gas chromatography (GC) methods," as the suggested methods.~~

~~f) Practical Quantitation Limits ("PQLs") are the lowest concentrations of analytes in groundwater that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The POLs listed are generally stated to one significant figure. Caution: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.~~

~~g~~d) PCBs (CAS RN 1336-36-3). This category contains congener chemicals, including constituents Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1) and Aroclor-1260 (CAS RN 11096-82-5). ~~The PQL shown is an average value for PCB congeners.~~

~~h~~e) PCDDs. This category includes congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins and hexachlorodibenzo-p-dioxins. ~~The PQL shown is an average value for PCDD congeners.~~

~~i~~f) PCDFs. This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. ~~The PQL shown is an average for all PCDF congeners.~~

~~Common Name~~	~~CAS RN~~	~~Chemical Abstracts Service Index Name~~	~~Suggested Methods~~	~~PQL (µg/L)~~
~~Acenaphthene~~	~~83-32-9~~	~~Acenaphthylene, 1,2-dihydro-~~	~~8100 8270~~	~~200. 10.~~
~~Acenaphthylene~~	~~208-96-8~~	~~Acenaphthylene~~	~~8100 8270~~	~~200. 10.~~
~~Acetone~~	~~67-64-1~~	~~2-Propanone~~	~~8240~~	~~100.~~

~~Acetophenone~~	~~98-86-2~~	~~Ethanone, 1-phenyl-~~	~~8270~~	~~10.~~
~~Acetonitrile; Methyl cyanide~~	~~75-05-8~~	~~Acetonitrile~~	~~8015~~	~~100.~~
~~2-Acetylaminofluorene; 2-AAF~~	~~53-96-3~~	~~Acetamide, N-9H-fluoren-2-yl-~~	~~8270~~	~~10.~~
~~Acrolein~~	~~107-02-8~~	~~2-Propenal~~	~~8030~~ ~~8240~~	~~5.~~ ~~5.~~
~~Acrylonitrile~~	~~107-13-1~~	~~2-Propenenitrile~~	~~8030~~ ~~8240~~	~~5.~~ ~~5.~~
~~Aldrin~~	~~309-00-2~~	~~1,4:5,8-Dimethano-naphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5α,8α,8aβ)-~~	~~8080~~ ~~8270~~	~~0.05~~ ~~10.~~
~~Allyl chloride~~	~~107-05-1~~	~~1-Propene, 3-chloro-~~	~~8010~~ ~~8240~~	~~5.~~ ~~100.~~
~~4-Aminobiphenyl~~	~~92-67-1~~	~~[1,1'-Biphenyl]-4-amine~~	~~8270~~	~~10.~~
~~Aniline~~	~~62-53-3~~	~~Benzenamine~~	~~8270~~	~~10.~~
~~Anthracene~~	~~120-12-7~~	~~Anthracene~~	~~8100~~ ~~8270~~	~~200.~~ ~~10.~~
~~Antimony~~	~~(Total)~~	~~Antimony~~	~~6010~~ ~~7040~~ ~~7041~~	~~300.~~ ~~2000.~~ ~~30.~~
~~Aramite~~	~~140-57-8~~	~~Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester~~	~~8270~~	~~10.~~
~~Arsenic~~	~~(Total)~~	~~Arsenic~~	~~6010~~ ~~7060~~ ~~7061~~	~~500.~~ ~~10.~~ ~~20.~~
~~Barium~~	~~(Total)~~	~~Barium~~	~~6010~~ ~~7080~~	~~20.~~ ~~1000.~~

Benzene	71-43-2	Benzene	8020 8240	2. 5.
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270	200. 10.
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100 8270	200. 10.
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100 8270	200. 10.
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100 8270	200. 10.
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100 8270	200. 10.
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20.
Beryllium	(Total)	Beryllium	6010 7090 7091	3. 50. 2.
α-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5β,6β)-	8080 8250	0.05 10.
β-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2β,3α,4β,5α,6β)-	8080 8250	0.05 40.
δ-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3α,4β,5α,6β)-	8080 8250	0.1 30.
γ-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-	8080 8250	0.05 10.
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	8270	10.
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8270	10.

Bis(2-chloro-1-methylethyl) ether; 2,2' Dichlorodiiso-propyl ether	108-60-1	Propane, 2,2' oxybis[1-chloro-	8010 8270	100. 10.
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	8060 8270	20. 10.
Bromodichloromethane	75-27-4	Methane, bromodichloro-	8010 8240	1. 5.
Bromoform; Tribromo-methane	75-25-2	Methane, tribromo-	8010 8240	2. 5.
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8270	10.
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	8060 8270	5. 10.
Cadmium	Total	Cadmium	6010 7130 7131	40. 50. 1.
Carbon disulfide	75-15-0	Carbon disulfide	8240	5.
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010 8240	1. 5.
Chlordane	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octa-chloro-2,3,3a,4,7,7a-hexa-hydro-	8080 8250	0.1 10.
p-Chloroaniline	106-47-8	Benzeneamine, 4-chloro-	8270	20.
Chlorobenzene	108-90-7	Benzene, chloro-	8010 8020 8240	2. 2. 5.
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethylf ester	8270	10.

p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-	8040 8270	5. 20.
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010 8240	5. 10.
Chloroform	67-66-3	Methane, trichloro-	8010 8240	0.5 5.
2-Chloronapthalene	91-58-7	Naphthalene, 2-chloro-	8120 8270	10. 10.
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040 8270	5. 10.
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8270	10.
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010 8240	50. 5.
Chromium	(Total)	Chromium	6010 7190 7191	70. 500. 10.
Chrysene	218-01-9	Chrysene	8100 8270	200. 10.
Cobalt	(Total)	Cobalt	6010 7200 7201	70. 500. 10.
Copper	(Total)	Copper	6010 7210	60. 200.
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	10.
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	10.
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	10.
Cyanide	57-12-5	Cyanide	9010	40.
2,4-D; 2,4-Dichloro-phenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichloro-phenoxy)-	8150	10.

4,4'-DDD	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	8080 8270	0.1 10.
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethylidene)bis[4-chloro-	8080 8270	0.05 10.
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	8080 8270	0.1 10.
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	8270	10.
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene	8100 8270	200. 10.
Dibenzofuran	132-64-9	Dibenzofuran	8270	10.
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010 8240	1. 5.
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-	8010 8240 8270	100. 5. 10.
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-	8010 8240	10. 5.
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060 8270	5. 10.
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010 8020 8120 8270	2. 5. 10. 10.
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010 8020 8120 8270	5. 5. 10. 10.

p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010 8020 8120 8270	2. 5. 15. 10.
3,3'-Dichlorobenzidine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	8270	20.
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8240	5.
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8010 8240	10. 5.
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010 8240	1. 5.
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-	8010 8240	0.5 5.
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-	8010 8240	1. 5.
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-, (E)-	8010 8240	1. 5.
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040 8270	5. 10.
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10.
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-	8010 8240	0.5 5.
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010 8240	20. 5.
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010 8240	5. 5.

~~Dieldrin~~	~~60-57-1~~	~~2,7:3,6-Dimethanonaphth-[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octa-hydro-,(1aα,2β,2aα,3β,6β,6aα,7β,7aα)-~~	~~8080~~ ~~8270~~	~~0.05~~ ~~10.~~
~~Diethyl phthalate~~	~~84-66-2~~	~~1,2-Benzenedicarboxylic acid, diethyl ester~~	~~8060~~ ~~8270~~	~~5.~~ ~~10.~~
~~O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin~~	~~297-97-2~~	~~Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester~~	~~8270~~	~~10.~~
~~Dimethoate~~	~~60-51-5~~	~~Phosphorodithioic acid, O,O-dimethyl S-[2-(methyl-amino)-2-oxoethyl] ester~~	~~8270~~	~~10.~~
~~p-(Dimethylamino)-azobenzene~~	~~60-11-7~~	~~Benzenamine, N,N-di-methyl-4-(phenylazo)-~~	~~8270~~	~~10.~~
~~7,12-Dimethylbenz[a]-anthracene~~	~~57-97-6~~	~~Benz[a]anthracene,7,12-di-methyl-~~	~~8270~~	~~10.~~
~~3,3'-Dimethylbenzidine~~	~~119-93-7~~	~~[1,1'-Biphenyl]-4,4'-di-amine, 3,3'-dimethyl-~~	~~8270~~	~~10.~~
~~α,α-Dimethylphenethyl-amine~~	~~122-09-8~~	~~Benzeneethanamine, α,α-dimethyl-~~	~~8270~~	~~10.~~
~~2,4-Dimethylphenol~~	~~105-67-9~~	~~Phenol, 2,4-dimethyl-~~	~~8040~~ ~~8270~~	~~5.~~ ~~10.~~
~~Dimethyl phthalate~~	~~131-11-3~~	~~1,2-Benzenedicarboxylic acid, dimethyl ester~~	~~8060~~ ~~8270~~	~~5.~~ ~~10.~~
~~m-Dinitrobenzene~~	~~99-65-0~~	~~Benzene, 1,3-dinitro-~~	~~8270~~	~~10.~~
~~4,6-Dinitro-o-cresol~~	~~534-52-1~~	~~Phenol, 2-methyl-4,6-di-nitro-~~	~~8040~~ ~~8270~~	~~150.~~ ~~50.~~
~~2,4-Dinitrophenol~~	~~51-28-5~~	~~Phenol, 2,4-dinitro-~~	~~8040~~ ~~8270~~	~~150.~~ ~~50.~~

2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090 8270	0.2 10.
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090 8270	0.1 10.
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	8150 8270	1. 10.
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060 8270	30. 10.
1,4-Dioxane	123-91-1	1,4-Dioxane	8015	150.
Diphenylamine	122-39-4	Benzeneamine, N-phenyl-	8270	10.
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	8140 8270	2. 10.
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aβ,6α,9α,9aβ)-	8080 8250	0.1 10.
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β,9aα)-	8080	0.05
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3,3-dioxide	8080 8270	0.5 10.
Endrin	72-20-8	2,7:3,6-Dimethanonaphth-[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-	8080 8250	0.1 10.

~~Endrin aldehyde~~	~~7421-93-4~~	~~1,2,4-Methanocyclopenta-[cd]pentalene-5-carbox-aldehyde, 2,2a,3,3,4,7-hexa-chlorodecahydro-, (1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R)-~~	~~8080~~ ~~8270~~	~~0.2~~ ~~10.~~
~~Ethylbenzene~~	~~100-41-4~~	~~Benzene, ethyl-~~	~~8020~~ ~~8240~~	~~2.~~ ~~5.~~
~~Ethyl methacrylate~~	~~97-63-2~~	~~2-Propenoic acid, 2-methyl-, ethyl ester~~	~~8015~~ ~~8240~~ ~~8270~~	~~10.~~ ~~5.~~ ~~10.~~
~~Ethyl methanesulfonate~~	~~62-50-0~~	~~Methanesulfonic acid, ethyl ester~~	~~8270~~	~~10.~~
~~Famphur~~	~~52-85-7~~	~~Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]-phenyl]-O,O-dimethyl ester~~	~~8270~~	~~10.~~
~~Fluoranthene~~	~~206-44-0~~	~~Fluoranthene~~	~~8100~~ ~~8270~~	~~200.~~ ~~10.~~
~~Fluorene~~	~~86-73-7~~	~~9H-Fluorene~~	~~8100~~ ~~8270~~	~~200.~~ ~~10.~~
~~Heptachlor~~	~~76-44-8~~	~~4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-~~	~~8080~~ ~~8270~~	~~0.05~~ ~~10.~~
~~Heptachlor epoxide~~	~~1024-57-3~~	~~2,5-Methano-2H-indeno-[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-~~	~~8080~~ ~~8270~~	~~1.~~ ~~10.~~
~~Hexachlorobenzene~~	~~118-74-1~~	~~Benzene, hexachloro-~~	~~8120~~ ~~8270~~	~~0.5~~ ~~10.~~
~~Hexachlorobutadiene~~	~~87-68-3~~	~~1,3-Butadiene, 1,1,2,3,4,4-hexachloro-~~	~~8120~~ ~~8270~~	~~5.~~ ~~10.~~

Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	8120 8270	5. 10.
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8270	0.5 10.
Hexachlorophene	70-30-4	Phenol, 2,2'-methylenebis-[3,4,6-trichloro-	8270	10.
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10.
2-Hexanone	591-78-6	2-Hexanone	8240	50.
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno[1,2,3-cd]pyrene	8100 8270	200. 10.
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015	50.
Isodrin	465-73-6	1,4,5,8-Dimethano-naphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5β,8β,8aβ)-	8270	10.
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-	8090 8270	60. 10.
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	10.
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta-[c,d]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	8270	10.
Lead	(Total)	Lead	6010 7420 7421	40. 1000. 10.
Mercury	(Total)	Mercury	7470	2.
Methacrylonitrile	126-96-7	2-Propenenitrile, 2-methyl-	8015 8240	5. 5.

Methapyrilene	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	8270	10.
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	8080 8270	2. 10.
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010 8240	20. 10.
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010 8240	1. 10.
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10.
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-	8010 8240	15. 5.
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-	8010 8240	5. 5.
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015 8240	10. 100.
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010 8240	40. 5.
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015 8240	2. 5.
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10.
2-Methylnaphthalene	91-57-6	Naphthylene, 2-methyl-	8270	10.
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	8140 8270	0.5 10.
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-	8015 8240	5. 50.

Naphthalene	91-20-3	Naphthalene	8100 8270	200. 10.
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10.
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10.
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10.
Nickel	(Total)	Nickel	6010 7520	50. 400.
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	8270	50.
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50.
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	8270	50.
Nitrobenzene	98-95-3	Benzene, nitro-	8090 8270	40. 10.
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040 8270	5. 10.
p-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040 8270	10. 50.
4-Nitroquinoline 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide	8270	10.
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	10.
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	10.
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8270	10.
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8270	10.
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8270	10.

N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10.
N-Nitrosomorpholine	59-89-2	Morpholine, 4-nitroso-	8270	10.
N-Nitrosopiperidene	100-75-4	Piperidene, 1-nitroso-	8270	10.
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	10.
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	10.
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	8270	10.
Polychlorinated biphenyls; PCBs	See (g)	1,1'-Biphenyl, chloro derivatives	8080 8250	50. 100.
Polychlorinated dibenzo-p-dioxins; PCDDs	See (h)	Dibenzo[b,e][1,4]dioxin, chloro derivatives	8280	0.01
Polychlorinated dibenzofurans; PCDFs	See (i)	Bibenzofuran, chloro derivatives	8280	0.01
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	8270	10.
Pentachloroethane	76-01-7	Ethane, pentachloro-	8240 8270	5. 10.
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	10.
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040 8270	5. 50.
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	10.
Phenanthrene	85-01-8	Phenanthrene	8100 8270	200. 10.
Phenol	108-95-2	Phenol	8040 8270	1. 10.
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	10.

Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)-methyl] ester	8140 8270	2. 10.
2-Picoline	109-06-8	Pyridine, 2-methyl-	8240 8270	5. 10.
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-	8270	10.
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015 8240	60. 5.
Pyrene	129-00-0	Pyrene	8100 8270	200. 10.
Pyridine	110-86-1	Pyridine	8240 8270	5. 10.
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10.
Selenium	(Total)	Selenium	6010 7740 7741	750. 20. 20.
Silver	(Total)	Silver	6010 7760	70. 100.
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2.
Styrene	100-42-5	Benzene, ethenyl-	8020 8240	1. 5.
Sulfide	18496-25-8	Sulfide	9030	10000.
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2.
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-8	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	8280	0.005

1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10.
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010 8240	5. 5.
1,1,2,2,-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010 8240	0.5 5.
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-	8010 8240	0.5 5.
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	10.
Tetraethyl dithiopyrophosphate; Sulfotepp	3689-24-5	Thiodiphosphoric acid ([(HO)2P(S)]2O), tetraethyl ester	8270	10.
Thallium	(Total)	Thallium	6010 7840 7841	400. 1000. 10.
Tin	(Total)	Tin	7870	8000.
Toluene	108-88-3	Benzene, methyl-	8020 8240	2. 5.
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10.
Toxaphene	8001-35-2	Toxaphene	8080 8250	2. 10.
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8270	10.
1,1,1-Trichloroethane; Methyl chloroform	71-55-6	Ethane, 1,1,1-trichloro-	8240	5.
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010 8240	0.2 5.
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010 8240	1. 5.

~~Trichlorofluoromethane~~	~~75-69-4~~	~~Methane, trichlorofluoro-~~	~~8010~~ ~~8240~~	~~10.~~ ~~5.~~
~~2,4,5-Trichlorophenol~~	~~95-96-4~~	~~Phenol, 2,4,5-trichloro-~~	~~8270~~	~~10.~~
~~2,4,6-Trichlorophenol~~	~~88-06-2~~	~~Phenol, 2,4,6-trichloro-~~	~~8040~~ ~~8270~~	~~5.~~ ~~10.~~
~~1,2,3-Trichloropropane~~	~~96-18-4~~	~~Propane, 1,2,3-trichloro-~~	~~8010~~ ~~8240~~	~~10.~~ ~~5.~~
~~O,O,O-Triethyl phosphorothioate~~	~~126-68-1~~	~~Phosphorothioic acid, O,O,O-triethyl ester~~	~~8270~~	~~10.~~
~~sym-Trinitrobenzene~~	~~99-35-4~~	~~Benzene, 1,3,5-trinitro-~~	~~8270~~	~~10.~~
~~Vanadium~~	~~(Total)~~	~~Vanadium~~	~~6010~~ ~~7910~~ ~~7911~~	~~80.~~ ~~2000.~~ ~~40.~~
~~Vinyl acetate~~	~~108-05-4~~	~~Acetic acid, ethenyl ester~~	~~8240~~	~~5.~~
~~Vinyl chloride~~	~~75-01-4~~	~~Ethene, chloro-~~	~~8010~~ ~~8240~~	~~2.~~ ~~10.~~
~~Xylene (total)~~	~~1330-20-7~~	~~Benzene, dimethyl-~~	~~8020~~ ~~8240~~	~~5.~~ ~~5.~~
~~Zinc~~	~~(Total)~~	~~Zinc~~	~~6010~~ ~~7950~~	~~20.~~ ~~50.~~

Common Name	CAS RN	Chemical Abstracts Service Index Name
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-
Acenaphthylene	208-96-8	Acenaphthylene
Acetone	67-64-1	2-Propanone
Acetophenone	98-86-2	Ethanone, 1-phenyl-
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-
Acrolein	107-02-8	2-Propenal
Acrylonitrile	107-13-1	2-Propenenitrile
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro- (1α,4α,4aβ,5α,8α,8aβ)-
Allyl chloride	107-05-1	1-Propene, 3-chloro-

4-Aminobiphenyl	92-67-1	(1,1'-Biphenyl)-4-amine
Aniline	62-53-3	Benzenamine
Anthracene	120-12-7	Anthracene
Antimony	(Total)	Antimony
Aramite	140-57-8	Sulfurous acid, 2-chloroethyl 2-(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester
Arsenic	(Total)	Arsenic
Barium	(Total)	Barium
Benzene	71-43-2	Benzene
Benzo(a)anthracene; Benz-anthracene	56-55-3	Benz(a)anthracene
Benzo(b)fluoranthene	205-99-2	Benz(e)acephenanthrylene
Benzo(k)fluoranthene	207-08-9	Benzo(k)fluoranthene
Benzo(ghi)perylene	191-24-2	Benzo(ghi)perylene
Benzo(a)pyrene	50-32-8	Benzo(a)pyrene
Benzyl alcohol	100-51-6	Benzenemethanol
Beryllium	(Total)	Beryllium
α-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5β,6β)-
β-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2β,3α,4β,5α,6β)-
δ-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3α,4β,5α,6β)-
γ-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-
Bis(2-chloroethoxy)-methane	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-
Bis(2-chloroethyl) ether	111-44-4	Ethane, 1,1'-oxybis(2-chloro-
Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiiso-propyl ether	108-60-1	Propane, 2,2'-oxybis(1-chloro-
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethyl-hexyl) ester
Bromodichloromethane	75-27-4	Methane, bromodichloro-
Bromoform; Tribromo-methane	75-25-2	Methane, tribromo-
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester
Cadmium	Total	Cadmium
Carbon disulfide	75-15-0	Carbon disulfide
Carbon tetrachloride	56-23-5	Methane, tetrachloro-
Chlordane	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-

p-Chloroaniline	106-47-8	Benzeneamine, 4-chloro-
Chlorobenzene	108-90-7	Benzene, chloro-
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chloro-phenyl)-α-hydroxy-, ethylf ester
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-
Chloroform	67-66-3	Methane, trichloro-
2-Chloronapthalene	91-58-7	Naphthalene, 2-chloro-
2-Chlorophenol	95-57-8	Phenol, 2-chloro-
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-
Chromium	(Total)	Chromium
Chrysene	218-01-9	Chrysene
Cobalt	(Total)	Cobalt
Copper	(Total)	Copper
m-Cresol	108-39-4	Phenol, 3-methyl-
o-Cresol	95-48-7	Phenol, 2-methyl-
p-Cresol	106-44-5	Phenol, 4-methyl-
Cyanide	57-12-5	Cyanide
2,4-D; 2,4-Dichloro-phenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-
4,4'-DDD	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis-(4-chloro-
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethylidene)bis(4-chloro-
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)-bis(4-chloro-
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro--2-propenyl) ester
Dibenz(a,h)anthracene	53-70-3	Dibenz(a,h)anthracene
Dibenzofuran	132-64-9	Dibenzofuran
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-
1,2-Dibromo-3-chloro-propane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-
3,3'-Dichlorobenzidine	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-

Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-, (E)-
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aα,2β,2aα,3β,6β,6aα,7β,7aα)-
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester
p-(Dimethylamino)-azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
7,12-Dimethylbenz(a)-anthracene	57-97-6	Benz(a)anthracene,7,12-dimethyl-
3,3'-Dimethylbenzidine	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
α,α-Dimethylphenethylamine	122-09-8	Benzeneethanamine, α,α-dimethyl-
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
1,4-Dioxane	123-91-1	1,4-Dioxane
Diphenylamine	122-39-4	Benzeneamine, N-phenyl-
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester

Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aβ,6α,9α,9aβ)-
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β,9aα)-
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3,3-dioxide
Endrin	72-20-8	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-
Endrin aldehyde	7421-93-4	1,2,4-Methanocyclopenta(cd)pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R)-
Ethylbenzene	100-41-4	Benzene, ethyl-
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester
Famphur	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)sulfonyl)phenyl)-O,O-dimethyl ester
Fluoranthene	206-44-0	Fluoranthene
Fluorene	86-73-7	9H-Fluorene
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno(1,2-b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-
Hexachlorobenzene	118-74-1	Benzene, hexachloro-
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
Hexachloroethane	67-72-1	Ethane, hexachloro-
Hexachlorophene	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
2-Hexanone	591-78-6	2-Hexanone
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno(1,2,3-cd)pyrene
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5β,8β,8aβ)-

Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta-(c,d)penta-len-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-deca-chlorooctahydro-
Lead	(Total)	Lead
Mercury	(Total)	Mercury
Methacrylonitrile	126-96-7	2-Propenenitrile, 2-methyl-
Methapyrilene	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)-bis(4-methoxy-
Methyl bromide; Bromo-methane	74-83-9	Methane, bromo-
Methyl chloride; Chloro-methane	74-87-3	Methane, chloro-
3-Methylcholanthrene	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-
Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-
Methyl ethyl ketone; MEK	78-93-3	2-Butanone
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester
2-Methylnaphthalene	91-57-6	Naphthylene, 2-methyl-
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-
Naphthalene	91-20-3	Naphthalene
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione
1-Naphthylamine	134-32-7	1-Naphthalenamine
2-Naphthylamine	91-59-8	2-Naphthalenamine
Nickel	(Total)	Nickel
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-
Nitrobenzene	98-95-3	Benzene, nitro-
o-Nitrophenol	88-75-5	Phenol, 2-nitro-
p-Nitrophenol	100-02-7	Phenol, 4-nitro-
4-Nitroquinoline 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-

N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-
N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-
N-Nitrosomorpholine	59-89-2	Morpholine, 4-nitroso-
N-Nitrosopiperidene	100-75-4	Piperidene, 1-nitroso-
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
Polychlorinated biphenyls; PCBs	See (g)	1,1'-Biphenyl, chloro derivatives
Polychlorinated dibenzo-p-dioxins; PCDDs	See (h)	Dibenzo(b,e)(1,4)dioxin, chloro derivatives
Polychlorinated dibenzofurans; PCDFs	See (i)	Bibenzofuran, chloro derivatives
Pentachlorobenzene	608-93-5	Benzene, pentachloro-
Pentachloroethane	76-01-7	Ethane, pentachloro-
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-
Pentachlorophenol	87-86-5	Phenol, pentachloro-
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)
Phenanthrene	85-01-8	Phenanthrene
Phenol	108-95-2	Phenol
p-Phenylenediamine	106-50-3	1,4-Benzenediamine
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester
2-Picoline	109-06-8	Pyridine, 2-methyl-
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile
Pyrene	129-00-0	Pyrene
Pyridine	110-86-1	Pyridine
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
Selenium	(Total)	Selenium
Silver	(Total)	Silver
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichloro-phenoxy)-
Styrene	100-42-5	Benzene, ethenyl-
Sulfide	18496-25-8	Sulfide
2,4,5-T; 2,4,5-Trichloro-phenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-8	Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetra-chloro-
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-

1,1,2,2,-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-
Tetraethyl dithiopyrophosphate; Sulfotepp	3689-24-5	Thiodiphosphoric acid $(((HO)_2P(S))_2O)$, tetraethyl ester
Thallium	(Total)	Thallium
Tin	(Total)	Tin
Toluene	108-88-3	Benzene, methyl-
o-Toluidine	95-53-4	Benzenamine, 2-methyl-
Toxaphene	8001-35-2	Toxaphene
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-
1,1,1-Trichloroethane; Methyl chloroform	71-55-6	Ethane, 1,1,1-trichloro-
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-
2,4,5-Trichlorophenol	95-96-4	Phenol, 2,4,5-trichloro-
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-
Vanadium	(Total)	Vanadium
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester
Vinyl chloride	75-01-4	Ethene, chloro-
Xylene (total)	1330-20-7	Benzene, dimethyl-
Zinc	(Total)	Zinc

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 725
INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART A: GENERAL PROVISIONS

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725.101 Purpose, Scope, and Applicability

725.104 Imminent Hazard Action

SUBPART B: GENERAL FACILITY STANDARDS

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725.110 Applicability
725.111 USEPA Identification Number
725.112 Required Notices
725.113 General Waste Analysis
725.114 Security
725.115 General Inspection Requirements
725.116 Personnel Training
725.117 General Requirements for Ignitable, Reactive, or Incompatible Wastes
725.118 Location Standards
725.119 Construction Quality Assurance Program

SUBPART C: PREPAREDNESS AND PREVENTION

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725.130 Applicability
725.131 Maintenance and Operation of Facility
725.132 Required Equipment
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725.134 Access to Communications or Alarm System
725.135 Required Aisle Space
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SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

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725.151 Purpose and Implementation of Contingency Plan
725.152 Content of Contingency Plan
725.153 Copies of Contingency Plan
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SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

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725.172 Manifest Discrepancies
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725.174 Availability, Retention, and Disposition of Records
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725.176 Unmanifested Waste Report
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SUBPART F: GROUNDWATER MONITORING

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725.191 Groundwater Monitoring System
725.192 Sampling and Analysis
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SUBPART G: CLOSURE AND POST-CLOSURE CARE

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725.211 Closure Performance Standard
725.212 Closure Plan; Amendment of Plan
725.213 Closure; Time Allowed for Closure
725.214 Disposal or Decontamination of Equipment, Structures, and Soils
725.215 Certification of Closure
725.216 Survey Plat
725.217 Post-Closure Care and Use of Property
725.218 Post-Closure Care Plan; Amendment of Plan
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725.220 Certification of Completion of Post-Closure Care
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SUBPART H: FINANCIAL REQUIREMENTS

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725.240 Applicability
725.241 Definitions of Terms as Used in this Subpart H
725.242 Cost Estimate for Closure
725.243 Financial Assurance for Closure
725.244 Cost Estimate for Post-Closure Care
725.245 Financial Assurance for Post-Closure Monitoring and Maintenance
725.246 Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care
725.247 Liability Requirements
725.248 Incapacity of Owners or Operators, Guarantors, or Financial Institutions
725.251 Promulgation of Forms (Repealed)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section
725.270 Applicability
725.271 Condition of Containers
725.272 Compatibility of Waste with Containers
725.273 Management of Containers
725.274 Inspections
725.276 Special Requirements for Ignitable or Reactive Wastes
725.277 Special Requirements for Incompatible Wastes

725.278 Air Emission Standards

SUBPART J: TANK SYSTEMS

Section
725.290 Applicability
725.291 Assessment of Existing Tank System Integrity
725.292 Design and Installation of New Tank Systems or Components
725.293 Containment and Detection of Releases
725.294 General Operating Requirements
725.295 Inspections
725.296 Response to Leaks or Spills and Disposition of Tank Systems
725.297 Closure and Post-Closure Care
725.298 Special Requirements for Ignitable or Reactive Wastes
725.299 Special Requirements for Incompatible Wastes
725.300 Waste Analysis and Trial Tests
725.301 Generators of 100 to 1,000 Kilograms of Hazardous Waste Per Month
725.302 Air Emission Standards

SUBPART K: SURFACE IMPOUNDMENTS

Section
725.320 Applicability
725.321 Design and Operating Requirements
725.322 Action Leakage Rate
725.323 Response Actions
725.324 Containment System
725.325 Waste Analysis and Trial Tests
725.326 Monitoring and Inspections
725.328 Closure and Post-Closure Care
725.329 Special Requirements for Ignitable or Reactive Wastes
725.330 Special Requirements for Incompatible Wastes
725.331 Air Emission Standards

SUBPART L: WASTE PILES

Section
725.350 Applicability
725.351 Protection from Wind
725.352 Waste Analysis
725.353 Containment
725.354 Design and Operating Requirements
725.355 Action Leakage Rates
725.356 Special Requirements for Ignitable or Reactive Wastes
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SUBPART M: LAND TREATMENT

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725.370 Applicability
725.372 General Operating Requirements
725.373 Waste Analysis
725.376 Food Chain Crops
725.378 Unsaturated Zone (Zone of Aeration) Monitoring
725.379 Recordkeeping
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725.381 Special Requirements for Ignitable or Reactive Wastes
725.382 Special Requirements for Incompatible Wastes

SUBPART N: LANDFILLS

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725.400 Applicability
725.401 Design Requirements
725.402 Action Leakage Rate
725.403 Response Actions
725.404 Monitoring and Inspections
725.409 Surveying and Recordkeeping
725.410 Closure and Post-Closure Care
725.412 Special Requirements for Ignitable or Reactive Wastes
725.413 Special Requirements for Incompatible Wastes
725.414 Special Requirements for Liquid Wastes
725.415 Special Requirements for Containers
725.416 Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)

SUBPART O: INCINERATORS

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725.440 Applicability
725.441 Waste Analysis
725.445 General Operating Requirements
725.447 Monitoring and Inspections
725.451 Closure
725.452 Interim Status Incinerators Burning Particular Hazardous Wastes

SUBPART P: THERMAL TREATMENT

Section
725.470 Other Thermal Treatment
725.473 General Operating Requirements
725.475 Waste Analysis
725.477 Monitoring and Inspections
725.481 Closure
725.482 Open Burning; Waste Explosives
725.483 Interim Status Thermal Treatment Devices Burning Particular Hazardous Wastes

SUBPART Q: CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT

Section
725.500 Applicability
725.501 General Operating Requirements
725.502 Waste Analysis and Trial Tests
725.503 Inspections
725.504 Closure
725.505 Special Requirements for Ignitable or Reactive Wastes
725.506 Special Requirements for Incompatible Wastes

SUBPART R: UNDERGROUND INJECTION

Section
725.530 Applicability

SUBPART W: DRIP PADS

Section
725.540 Applicability
725.541 Assessment of Existing Drip Pad Integrity
725.542 Design and Installation of New Drip Pads
725.543 Design and Operating Requirements
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725.545 Closure

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section
725.930 Applicability
725.931 Definitions
725.932 Standards: Process Vents
725.933 Standards: Closed-Vent Systems and Control Devices
725.934 Test Methods and Procedures
725.935 Recordkeeping Requirements

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section
725.950 Applicability
725.951 Definitions
725.952 Standards: Pumps in Light Liquid Service
725.953 Standards: Compressors
725.954 Standards: Pressure Relief Devices in Gas/Vapor Service
725.955 Standards: Sampling Connecting Systems
725.956 Standards: Open-Ended Valves or Lines
725.957 Standards: Valves in Gas/Vapor or Light Liquid Service
725.958 Standards: Pumps, Valves, Pressure Relief Devices, Flanges, and Other Connectors
725.959 Standards: Delay of Repair

725.960 Standards: Closed-Vent Systems and Control Devices
725.961 Percent Leakage Alternative for Valves
725.962 Skip Period Alternative for Valves
725.963 Test Methods and Procedures
725.964 Recordkeeping Requirements

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section
725.980 Applicability
725.981 Definitions
725.982 Schedule for Implementation of Air Emission Standards
725.983 Standards: General
725.984 Waste Determination Procedures
725.985 Standards: Tanks
725.986 Standards: Surface Impoundments
725.987 Standards: Containers
725.988 Standards: Closed-Vent Systems and Control Devices
725.989 Inspection and Monitoring Requirements
725.990 Recordkeeping Requirements
725.991 Alternative Tank Emission Control Requirements (Repealed)

SUBPART DD: CONTAINMENT BUILDINGS

Section
725.1100 Applicability
725.1101 Design and Operating Standards
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SUBPART EE: HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE

Section
725.1200 Applicability
725.1201 Design and Operating Standards
725.1202 Closure and Post-Closure Care

725.Appendix A Recordkeeping Instructions
725.Appendix B EPA Report Form and Instructions (Repealed)
725.Appendix C USEPA Interim Primary Drinking Water Standards
725.Appendix D Tests for Significance
725.Appendix E Examples of Potentially Incompatible Wastes
725.Appendix F Compounds with Henry's Law Constant Less Than 0.1 Y/X (at 25°C)

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and

codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 14034, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11869, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1085, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14069, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6044, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338, effective November 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9398, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14534, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9578, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17672, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5681, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20620, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6771, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12190, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17548, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9566, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11078, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 369, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7620, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17620, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1850, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9168, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1076, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9575, effective June 20, 2000; amended in R03-7 at 27 Ill. Reg. 4187, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6028, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6389, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 725.101 Purpose, Scope, and Applicability

a) The purpose of this Part is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure care requirements, until post-closure care responsibilities are fulfilled.

b) Except as provided in Section 725.980(b), the standards in this Part and 35 Ill. Adm. Code 724.652 through 724.654 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste and which have fully complied with the requirements for interim status under Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) (42 USC 6925(e)) and 35 Ill. Adm. Code 703, until either a permit is issued under Section 3005 of the Resource Conservation and Recovery Act (42 USC 6905) or Section 21(f) of the Environmental Protection Act [415 ILCS 5/21(f)], or until applicable closure and post-closure care responsibilities

under this Part are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980, that have failed to provide timely notification as required by Section 3010(a) of RCRA (42 USC 6910(a)) or that have failed to file Part A of the Permit Application, as required by federal 40 CFR 270.10(e) and (g) or 35 Ill. Adm. Code 703.150 and 703.152. These standards apply to all treatment, storage, or disposal of hazardous waste at these facilities after November 19, 1980, except as specifically provided otherwise in this Part or in 35 Ill. Adm. Code 721.

BOARD NOTE: As stated in Section 3005(a) of RCRA (42 USC 6905(a)), after the effective date of regulations under that Section (i.e., 40 CFR 270 and 124) the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA (42 USC 6905(e)) provides for the continued operation of an existing facility that meets certain conditions until final administrative disposition of the owner's and operator's permit application is made.

c) The requirements of this Part do not apply to any of the following:

1) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the federal Marine Protection, Research and Sanctuaries Act (33 USC 1401 et seq.);

BOARD NOTE: This Part applies to the treatment or storage of hazardous waste before it is loaded into an ocean vessel for incineration or disposal at sea, as provided in subsection (b) of this Section.

2) This subsection (c)(2) corresponds with 40 CFR 265.1(c)(2), marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules;

3) The owner or operator of a POTW (publicly owned treatment works) that treats, stores, or disposes of hazardous waste;

BOARD NOTE: The owner or operator of a facility under subsections (c)(1) and (c)(3) is subject to the requirements of 35 Ill. Adm. Code 724 to the extent they are included in a permit by rule granted to such a person under 35 Ill. Adm. Code 702 and 703 or are required by Subpart F of 35 Ill. Adm. Code 704.

4) This subsection (c)(4) corresponds with 40 CFR 265.1(c)(4), which pertains exclusively to the applicability of the federal regulations in authorized states. There is no need for a parallel provision in the Illinois regulations. This statement maintains structural consistency with USEPA rules;

5) The owner or operator of a facility permitted, licensed, or registered by

Illinois to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under this Part by 35 Ill. Adm. Code 721.105;

6) The owner or operator of a facility managing recyclable materials described in 35 Ill. Adm. Code 721.106(a)(2) through (a)(4), except to the extent that requirements of this Part are referred to in Subpart C, F, G, or H of 35 Ill. Adm. Code 726 or 35 Ill. Adm. Code 739;

7) A generator accumulating waste on-site in compliance with 35 Ill. Adm. Code 722.134, except to the extent the requirements are included in 35 Ill. Adm. Code 722.134;

8) A farmer disposing of waste pesticides from the farmer's own use in compliance with 35 Ill. Adm. Code 722.170;

9) The owner or operator of a totally enclosed treatment facility, as defined in 35 Ill. Adm. Code 720.110;

10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit, as defined in 35 Ill. Adm. Code 720.110, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in Table T of 35 Ill. Adm. Code 728) or reactive (D003) waste in order to remove the characteristic before land disposal, the owner or operator must comply with the requirements set forth in Section 725.117(b);

11) Immediate response.

A) Except as provided in subsection (c)(11)(B) of this Section, a person engaged in treatment or containment activities during immediate response to any of the following situations:

i) A discharge of a hazardous waste;

ii) An imminent and substantial threat of a discharge of a hazardous waste;

iii) A discharge of a material that becomes a hazardous waste when discharged; or

iv) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosives or munitions emergency response specialist as defined in 35

Ill. Adm. Code 720.110.

B) An owner or operator of a facility otherwise regulated by this Part must comply with all applicable requirements of Subparts C and D of this Part.

C) Any person that is covered by subsection (c)(11)(A) of this Section that continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Part and 35 Ill. Adm. Code 702, 703, and 705 for those activities;

D) In the case of an explosives or munitions emergency response, if a federal, state, or local official acting within the scope of his or her official responsibilities or an explosives or munitions emergency response specialist determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters that do not have USEPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition;

12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less;

13) The addition of absorbent material to waste in a container (as defined in 35 Ill. Adm. Code 720.110) or the addition of waste to the absorbent material in a container, provided that these actions occur at the time that the waste is first placed in the containers and Sections 725.117(b), 725.271, and 725.272 are complied with;

14) A universal waste handler or universal waste transporter (as defined in 35 Ill. Adm. Code 720.110) that handles any of the wastes listed below is subject to regulation under 35 Ill. Adm. Code 733 when handling the following universal wastes:

A) Batteries, as described in 35 Ill. Adm. Code 733.102;

B) Pesticides, as described in 35 Ill. Adm. Code 733.103;

C) Thermostats, as described in 35 Ill. Adm. Code 733.104;~~ and~~

D) Lamps, as described in 35 Ill. Adm. Code 733.105~~.~~; and

E) Mercury-containing equipment as described in 35 Ill. Adm. Code 733.106.

BOARD NOTE: Subsection (c)(14)(E) of this Section was added pursuant to Sections 3.283, 3.284, and 22.23b of the Act [415 ILCS 5/3.283, 3.284, and 22.23b] (See P.A. 93-964, effective August 20, 2004).

d) The following hazardous wastes must not be managed at facilities subject to regulation under this Part: hazardous waste numbers F020, F021, F022, F023, F026, or F027, unless the following conditions are fulfilled:

1) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

2) The waste is stored in tanks or containers;

3) The waste is stored or treated in waste piles that meet the requirements of 35 Ill. Adm. Code 724.350(c) and all other applicable requirements of Subpart L of this Part;

4) The waste is burned in incinerators that are certified pursuant to the standards and procedures in Section 725.452; or

5) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in Section 725.483.

e) This Part applies to owners and operators of facilities that treat, store, or dispose of hazardous wastes referred to in 35 Ill. Adm. Code 728, and the 35 Ill. Adm. Code 728 standards are considered material conditions or requirements of the interim status standards of this Part.

f) 35 Ill. Adm. Code 726.505 identifies when the requirements of this Part apply to the storage of military munitions classified as solid waste under 35 Ill. Adm. Code 726.302. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 35 Ill. Adm. Code 702, 703, 705, 720 through 726, and 728.

g) Other bodies of regulations may apply to a person, facility, or activity, such as 35 Ill. Adm. Code 809 (special waste hauling), 35 Ill. Adm. Code 807 or 810 through 817 (solid waste landfills), 35 Ill. Adm. Code 848 or 849 (used and scrap tires), or 35 Ill. Adm. Code 1420 through 1422 (potentially infectious medical waste),

depending on the provisions of those other regulations.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 725.156 Emergency Procedures

a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately do the following:

1) ~~Activate~~ He or she must activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

2) ~~Notify~~ He or she must notify appropriate State or local agencies with designated response roles if their help is needed.

b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real extent of any released materials. He or she may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosions).

d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, he or she must report his findings as follows:

1) If his assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. He or she must be available to help appropriate officials decide whether local areas should be evacuated; and

2) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under federal 40 CFR 300), or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following:

A) The name and telephone number of reporter;

B) The name and address of facility;

C) The time and type of incident (e.g., release, fire, etc.);

D) The name and quantity of materials involved, to the extent known;

E) The extent of injuries, if any; and

F) The possible hazards to human health or the environment outside the facility.

e) During an emergency the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility.

BOARD NOTE: Unless the owner or operator can demonstrate in accordance with 35 Ill. Adm. Code 721.103(d) or (e) that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

h) The emergency coordinator must ensure that, in the affected areas of the facility, the following occur:

1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

i) The owner or operator must notify the Agency and other appropriate State and local authorities that the facility is in compliance with subsection (h) of this Section before operations are resumed in the affected areas of the facility.

j) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, it must submit a written report on the incident to the Agency. The report must include the following information:

1) The name, address, and telephone number of the owner or operator;

2) The name, address, and telephone number of the facility;

3) The date, time, and type of incident (e.g., fire, explosion, etc.);

4) The name and quantity of materials involved;

5) The extent of injuries, if any;

6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

7) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

Section 725.170 Applicability

The regulations in this Subpart E apply to owners and operators of both on-site and off-site facilities, except as Section 725.101 provides otherwise. Sections 725.171, 725.172, and 725.176 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources, nor do they apply to owners and operators of off-site facilities with respect to waste military munitions exempted from manifest requirements under 35 Ill. Adm. Code 726.303(a).

BOARD NOTE: This Section corresponds with 40 CFR 265.70(a) (2005), effective September 5, 2006. The Board omitted 40 CFR 265.70(b), as added at 70 Fed. Reg. 10776 (March 4, 2005), since that provision only stated the September 5, 2006 effective date for the newer manifest requirements.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.171 Use of Manifest System

a) Receipt of manifested hazardous waste.

~~a~~1) The following requirements apply until September 5, 2006: If a facility receives hazardous waste accompanied by a manifest, the owner or operator or its agent must do each of the following:

~~1~~A) ~~Sign~~ It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

~~2~~B) ~~Note~~ It must note any significant discrepancies in the manifest, as defined in Section 725.172(a), on each copy of the manifest;

BOARD NOTE: An owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the manifest and giving it to the transporter. Section 725.172(b), however, requires the owner or operator to report any unreconciled discrepancy discovered during later analysis.

~~3~~C) ~~Immediately~~ It must immediately give the transporter at least one copy of the signed manifest;

~~4~~D) ~~Send~~ It must send a copy of the manifest to the generator and the Agency within 30 days of the date of delivery; and

~~5~~E) ~~Retain~~ It must retain at the facility a copy of each manifest for at least three years ~~from~~ after the date of delivery.

2) The following requirements apply effective September 5, 2006:

A) If a facility receives hazardous waste accompanied by a manifest, the owner, operator, or its agent must sign and date the manifest, as indicated in subsection (a)(2)(B) of this Section, to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.

B) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:

i) It must sign and date, by hand, each copy of the manifest;

ii) It must note any discrepancies (as defined in Section 725.172(b)) on each copy of the manifest;

iii) It must immediately give the transporter at least one copy of the manifest;

iv) It must send a copy of the manifest to the generator within 30 days after delivery; and

v) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.

C) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within 30 days after delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

BOARD NOTE: Subsection (a)(1) of this Section corresponds with 40 CFR 265.71(a) (2004), effective until September 5, 2006. Subsection (a)(2) of this Section corresponds with 40 CFR 265.71(a) (2005), effective September 5, 2006.

b) If a facility receives from a rail or water (bulk shipment) transporter hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification, and signatures), the owner or operator or its agent must do each of the following:

1) ~~Sign~~ It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

2) ~~Note~~ It must note any significant discrepancies, as defined in Section 725.172(a), in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

BOARD NOTE: The owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the shipping paper and giving it to the transporter. Section 725.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

3) ~~Immediately~~ It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

4) Forwarding copies of the manifest.

~~4~~A) Until September 5, 2006: The facility owner or operator must send a copy of the signed and dated manifest to the generator and to the

Agency within 30 days after the delivery; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or its agent, must send a copy of the shipping paper signed and dated to the generator; ~~and~~ or

B) Effective September 5, 2006: The owner or operator must send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within 30 days after delivery) to the generator within 30 days after the delivery; and

BOARD NOTE: 35 Ill. Adm. Code 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment). Subsection (b)(4)(A) is derived from 40 CFR 265.74(b)(4) (2004), effective until September 5, 2006. Subsection (b)(4)(B) is derived from 40 CFR 265.74(b)(4) (2005), effective September 5, 2006.

5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.

c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of 35 Ill. Adm. Code 722.134 apply only to owners or operators that are shipping hazardous waste which they generated at that facility.

d) Within three working days of the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier; to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460; to the Bureau of Land, Division of Land Pollution Control, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.172 Manifest Discrepancies

a) The following requirements apply until September 5, 2005:

~~a~~1) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper and the quantity or type of hazardous waste a facility actually receives.

~~b~~2) Significant discrepancies in quantity are defined as follows:

~~1~~A) For bulk waste, variations greater than 10 percent in weight, and

~~2~~B) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload.

~~c~~3) Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid or toxic constituents not reported on the manifest or shipping paper.

~~d~~4) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue.

b) The following requirements apply effective September 5, 2005:

1) "Manifest discrepancies" are defined as any one of the following:

A) Significant differences (as defined by subsection (b)(2) of this Section) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;

B) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or

C) Container residues, which are residues that exceed the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b).

2) "Significant differences in quantity" are defined as the appropriate of the

following: for bulk waste, variations greater than 10 percent in weight; or, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. "Significant differences in type" are defined as obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or as toxic constituents not reported on the manifest or shipping paper.

3) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

4) Rejection of hazardous waste.

A) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within 60 days after the rejection or the container residue identification.

B) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under subsection (b)(5) or (b)(6) of this Section.

5) Except as provided in subsection (b)(5)(G) of this Section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions:

A) Write the generator's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.

B) Write the name of the alternate designated facility and the facility's USEPA identification number in the designated facility block (Item 8) of the new manifest.

C) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

D) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).

E) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.

F) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

G) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(5)(A) through (b)(5)(F) of this Section.

6) Except as provided in subsection (b)(6)(G) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions:

A) Write the facility's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.

B) Write the name of the initial generator and the generator's USEPA identification number in the designated facility block (Item 8) of

the new manifest.

C) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

D) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).

E) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.

F) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.

G) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(6)(A) through (b)(6)(F) of this Section.

7) If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

BOARD NOTE: Subsection (a) is derived from 40 CFR 265.72 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 265.72 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.176 Unmanifested Waste Report

a) The following requirements apply until September 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest or without an accompanying shipping paper, as described in 35 Ill. Adm. Code 723.120(e)(2), and, if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 721.105, then the owner or operator must prepare and submit a single copy of a report to the Agency within 15 days after receiving the waste. The unmanifested waste report must be submitted on USEPA form 8700-13B. Such report must be designated "Unmanifested Waste Report" and must include the following information:

~~a~~1) The USEPA identification number, name, and address of the facility;

~~b~~2) The date the facility received the waste;

~~c~~3) The USEPA identification number, name, and address of the generator and the transporter, if available;

~~d~~4) A description and the quantity of each unmanifested hazardous waste the facility received;

~~e~~5) The method of treatment, storage, or disposal for each hazardous waste;

~~f~~6) The certification signed by the owner or operator of the facility or its authorized representative; and

~~g~~7) A brief explanation of why the waste was unmanifested, if known.

b) The following requirements apply effective September 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, as described by 35 Ill. Adm. Code 723.120(e), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 260 through 265, then the owner or operator must prepare and submit a letter to the Agency within 15 days after receiving the waste. The unmanifested waste report must contain the following information:

1) The USEPA identification number, name, and address of the facility;

2) The date the facility received the waste;

3) The USEPA identification number, name, and address of the generator

and the transporter, if available;

4) A description and the quantity of each unmanifested hazardous waste the facility received;

5) The method of treatment, storage, or disposal for each hazardous waste;

6) The certification signed by the owner or operator of the facility or its authorized representative; and

7) A brief explanation of why the waste was unmanifested, if known.

(BOARD NOTE: Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility received unmanifested hazardous waste, the Board suggests USEPA has suggested that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Board suggests USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement. Subsection (a) is derived from 40 CFR 265.76 (2004), effective until September 5, 2006. Subsection (b) is derived from 40 CFR 265.76 (2005), effective September 5, 2006.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART F: GROUNDWATER MONITORING

Section 725.190 Applicability

a) The owner or operator of a surface impoundment, landfill, or land treatment facility that is used to manage hazardous waste must implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility, except as Section 725.101 and subsection (c) of this Section provide otherwise.

b) Except as subsections (c) and (d) of this Section provide otherwise, the owner or operator must install, operate, and maintain a groundwater monitoring system that meets the requirements of Section 725.191 and must comply with Sections 725.192 through 725.194. This groundwater monitoring program must be carried out during the active life of the facility and for disposal facilities during the post-closure care period as well.

c) All or part of the groundwater monitoring requirements of this Subpart F may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial, or agricultural) or to surface water. This demonstration must be in writing and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and must establish the following:

1) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer by an evaluation of the following information:

   A) A water balance of precipitation, evapotranspiration, runoff, and infiltration; and

   B) Unsaturated zone characteristics (i.e., geologic materials, physical properties, and depth to ground water); and

2) The potential for hazardous waste or hazardous waste constituents that enter the uppermost aquifer to migrate to a water supply well or surface water by an evaluation of the following information:

   A) Saturated zone characteristics (i.e., geologic materials, physical properties, and rate of groundwater flow); and

   B) The proximity of the facility to water supply wells or surface water.

d) If an owner or operator assumes (or knows) that groundwater monitoring of indicator parameters in accordance with Sections 725.191 and 725.192 would show statistically significant increases (or decreases in the case of pH) when evaluated under Section 725.193(b), it may install, operate, and maintain an alternate groundwater monitoring system (other than the one described in Sections 725.191 and 725.192). If the owner or operator decides to use an alternate groundwater monitoring system it must have done as follows:

   1) By November 19, 1981, the owner or operator must have submitted to the USEPA Region 5 a specific plan, certified by a qualified geologist or geotechnical engineer, that satisfies the requirements of federal 40 CFR 265.93(d)(3) for an alternate groundwater monitoring system;

   2) By November 19, 1981, the owner or operator must have initiated the determinations specified in federal 40 CFR 265.93(d)(4);

   3) The owner or operator must have prepared and submitted a written report in accordance with Section 725.193(d)(5);

   4) The owner or operator must continue to make the determinations specified in Section 725.193(d)(4) on a quarterly basis until final closure of the facility; and

   5) The owner or operator must comply with the recordkeeping and reporting requirements in Section 725.194(b).

e) The groundwater monitoring requirements of this Subpart F may be waived with respect to any surface impoundment of which the following is true:

1) The impoundment is used to neutralize wastes that are hazardous solely because they exhibit the corrosivity characteristic under 35 Ill. Adm. Code 721.122 or which are listed as hazardous wastes in Subpart D of 35 Ill. Adm. Code 721 only for this reason; and

2) The impoundment contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstration must establish, based upon consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional.

f) A permit or enforceable document can contain alternative requirements for groundwater monitoring that replace all or part of the requirements of this Subpart F applicable to a regulated unit (as defined in 35 Ill. Adm. Code 724.190), as provided under 35 Ill. Adm. Code 703.161, where the Board has determined by an adjusted standard granted pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104 the following:

1) The regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management units (or areas of concern) are likely to have contributed to the release; and

2) It is not necessary to apply the groundwater monitoring requirements of this Subpart F because the alternative requirements will protect human health and the environment. The alternative standards for the regulated unit must meet the requirements of 35 Ill. Adm. Code 724.201(a).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.192 Sampling and Analysis

a) The owner or operator must obtain and analyze samples from the installed groundwater monitoring system. The owner or operator must develop and follow a groundwater sampling and analysis plan. The owner or operator must keep this plan at the facility. The plan must include procedures and techniques for each of the following:

1) Sample collection;

2) Sample preservation and shipment;

3) Analytical procedures; and

4) Chain of custody control.

BOARD NOTE: See "Procedures Manual For ~~Groundwater~~ Ground Water Monitoring At Solid Waste Disposal Facilities," USEPA document number EPA-530/SW-611, and "Methods for Chemical Analysis of Water and Wastes," USEPA document number EPA-600/4-79-020, incorporated by reference in 35 Ill. Adm. Code 720.111(a), for discussions of sampling and analysis procedures.

b) The owner or operator must determine the concentration or value of the following parameters in groundwater samples in accordance with subsections (c) and (d) of this Section:

1) Parameters characterizing the suitability of the groundwater as a drinking water supply, as specified in Appendix C to this Part.

2) The following parameters establishing groundwater quality:

A) Chloride,

B) Iron,

C) Manganese,

D) Phenols,

E) Sodium, and

F) Sulfate.

BOARD NOTE: These parameters are to be used as a basis for comparison in the event a groundwater quality assessment is required under Section 725.193(d).

3) The following parameters used as indicators of groundwater contamination:

A) pH,

B) Specific Conductance,

C) Total Organic Carbon, and

D) Total Organic Halogen.

c) Establishing background concentrations.

1) For all monitoring wells, the owner or operator must establish initial background concentrations or values of all parameters specified in subsection (b) of this Section. The owner or operator must do this quarterly for one year.

2) For each of the indicator parameters specified in subsection (b)(3) of this Section, the owner or operator must obtain at least four replicate measurements for each sample and determine the initial background arithmetic mean and variance by pooling the replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.

d) After the first year, the owner or operator must sample all monitoring wells and analyze the samples with the following frequencies:

1) Samples collected to establish groundwater quality must be obtained and analyzed for the parameters specified in subsection (b)(2) of this Section at least annually.

2) Samples collected to indicate groundwater contamination must be obtained and analyzed for the parameters specified in subsection (b)(3) of this Section at least semi-annually.

e) The owner or operator must determine the elevation of the groundwater surface at each monitoring well each time a sample is obtained.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: FINANCIAL REQUIREMENTS

Section 725.243 Financial Assurance for Closure

An owner or operator of each facility must establish financial assurance for closure of the facility. The owner or operator must choose from the options specified in subsections (a) through (e) of this Section.

a) Closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the requirements of this subsection and submitting an original, signed duplicate of the trust

agreement to the Agency. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

2) The wording of the trust agreement must be as specified in 35 Ill. Adm. Code 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment as specified in 35 Ill. Adm. Code 724.251. Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.

3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning May 19, 1981, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:

A) The first payment must be made before May 19, 1981, except as provided in subsection (a)(5) of this Section. The first payment must be at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section, divided by the number of years in the pay-in period.

B) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next Payment} = \frac{\text{CE} - \text{CV}}{\text{Y}}$$

Where:

CE ~~is~~ = the current closure cost estimate~~,~~
CV~~is~~ = the current value of the trust fund~~, and~~
Y ~~is~~ = the number of years remaining in the pay-in period.

4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.

5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this Section, the owner or operator's first payment must be in at least the amount that the fund would

contain if the trust fund were established initially and annual payments made as specified in subsection (a)(3) of this Section.

6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance, as specified in this Section, to cover the difference.

7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate.

8) If an owner or operator substitutes other financial assurance, as specified in this Section, for all or part of the trust fund, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate covered by the trust fund.

9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.

10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (h) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator a detailed written statement of reasons.

11) The Agency must agree to termination of the trust when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

b) Surety bond guaranteeing payment into a closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be as specified in 35 Ill. Adm. Code 724.251.

3) The owner or operator that uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a);

ii) Updating of Schedule A of the trust agreement (see ~~40 CFR 264.251(a))~~ 35 Ill. Adm. Code 724.251(a)) to show current closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The bond must guarantee that the owner or operator will:

A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;

B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin final closure is issued by the Board or a court of competent jurisdiction; or

C) Provide alternate financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section.

7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial

assurance, as specified in this Section.

c) Closure letter of credit.

1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (c) and submitting the letter to the Agency. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.

2) The wording of the letter of credit must be as specified in 35 Ill. Adm. Code 724.251.

3) An owner or operator that uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and

B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a) of this Section;

ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.251) to show current closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment as required by the trust agreement.

4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.

5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.

6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section.

7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

8) Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the approved closure plan when required to do so, the Agency may draw on the letter of credit.

9) If the owner or operator does not establish alternate financial assurance, as specified in this Section, and obtain written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

10) The Agency must return the letter of credit to the issuing institution for termination when one of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

d) Closure insurance.

1) An owner or operator may satisfy the requirements of this Section by obtaining closure insurance that conforms to the requirements of this subsection and submitting a certificate of such insurance to the Agency. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

2) The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251.

3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies.

5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (h) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the particular facility. If the Agency does not instruct the insurer to make such

reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator as specified in subsection (d)(10) of this Section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that, on or before the date of expiration, one of the following occurs:

   A) The Agency deems the facility abandoned;

   B) Interim status is terminated or revoked;

   C) Closure is ordered by the Board or a court of competent jurisdiction;

   D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 ~~U.S.C.~~ USC (Bankruptcy); or

   E) The premium due is paid.

9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days

after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Agency.

10) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

e) Financial test and corporate guarantee for closure.

1) An owner or operator may satisfy the requirements of this Section by demonstrating that the owner or operator passes a financial test as specified in this subsection. To pass this test the owner or operator must meet the criteria of either subsection (e)(1)(A) or (e)(1)(B) of this Section:

A) The owner or operator must have all of the following:

i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

B) The owner or operator must have all of the following:

i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;

ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

2) The phrase "current closure and post-closure cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 264.151(f)) (incorporated by reference in~~ see 35 Ill. Adm. Code 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 144.70(f)), incorporated by reference in~~ see 35 Ill. Adm. Code 704.240).

3) To demonstrate that the owner or operator meets this test, the owner or operator must submit each of the following items to the Agency:

A) A letter signed by the owner's or operator's chief financial officer and worded as specified in 35 Ill. Adm. Code 724.251;

B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:

i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii) In connection with that procedure, that no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.

4) This subsection (e)(4) corresponds with 40 CFR 265.143(e)(4), a federal provision relating to an extension of the time to file the proofs of financial assurance required by this subsection (e) granted by USEPA. This statement maintains structural consistency with the corresponding federal regulations.

5) After the initial submission of items specified in subsection (e)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (e)(3) of this Section.

6) If the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternate financial assurance as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7) The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (e)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (e)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must provide alternate financial assurance as specified in this Section within 30 days after notification of such a finding.

8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (e)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this Section within 30 days after notification of the disallowance.

9) The owner or operator is no longer required to submit the items specified

in subsection (e)(3) of this Section when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

10) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (e)(1) through (e)(8) of this Section, and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in 35 Ill. Adm. Code 724.251. The corporate guarantee must accompany the items sent to the Agency as specified in subsection (e)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide the following:

A) That, if the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section, in the name of the owner or operator.

B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

C) That, if the owner or operator fails to provide alternate financial assurance as specified in this Section and obtain the written approval of such alternate assurance from the Agency within 90

days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in subsections (a) through (d) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, the owner or operator may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for closure of the facility.

g) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

h) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that final closure has been completed in accordance with the approved closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain financial assurance for closure of the facility, unless the Agency determines that closure has not been in accordance with the approved closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that closure has not been in accordance with the approved closure plan.

i) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):

1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance; or

2) Requiring alternate assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.245 Financial Assurance for Post-Closure Monitoring and Maintenance

An owner or operator of a facility with a hazardous waste disposal unit must establish financial assurance for post-closure care of the disposal units. The owner or operator must choose from the following options:

a) Post-closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by establishing a post-closure trust fund that conforms to the requirements of this subsection and submitting an original, signed duplicate of the trust agreement to the Agency. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

2) The wording of the trust agreement must be as specified in 35 Ill. Adm. Code 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment (as specified in 35 Ill. Adm. Code 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

3) Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning May 19, 1981, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:

A) The first payment must have been made before May 19, 1981, except as provided in subsection (a)(5) of this Section. The first payment must be at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section, divided by the number of years in the pay-in period.

B) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$\text{Next Payment} = \frac{CE - CV}{Y}$$

Where:

CE ~~is~~ = the current closure cost estimate~~,~~
CV~~is~~ = the current value of the trust fund~~, and~~
Y ~~is~~ = the number of years remaining in the pay-in period.

4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.

5) If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this Section, the owner or operator's first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in subsection (a)(3) of this Section.

6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this Section to cover the difference.

7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate.

8) If an owner or operator substitutes other financial assurance as specified in this Section for all or part of the trust fund, owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.

9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator

such funds as the Agency specifies in writing.

10) During the period of post-closure care, the Agency must approve a release of funds if the owner or operator demonstrates to the Agency that the value of the trust fund exceeds the remaining cost of post-closure care.

11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

12) The Agency must agree to termination of a trust when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

b) Surety bond guaranteeing payment into a post-closure trust fund.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on ~~Federal~~ federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

2) The wording of the surety bond must be as specified in 35 Ill. Adm. Code 724.251.

3) The owner or operator that uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms

of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a) of this Section;

ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.251) to show current post-closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The bond must guarantee that the owner or operator will perform the following acts:

A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or

B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Board or a court of competent jurisdiction; or

C) Provide alternate financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.

5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section.

7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this Section.

c) Post-closure letter of credit.

1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (c) and submitting the letter to the Agency. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.

2) The wording of the letter of credit must be as specified in 35 Ill. Adm. Code 724.251.

3) An owner or operator that uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:

A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and

B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:

i) Payments into the trust fund, as specified in subsection (a) of this Section;

ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.151) to show current post-closure cost estimates;

iii) Annual valuations, as required by the trust agreement; and

iv) Notices of nonpayment, as required by the trust agreement.

4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.

5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.

6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section.

7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

8) During the period of post-closure care, the Agency must approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.

9) Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other interim status requirements, the Agency may draw on the letter of credit.

10) If the owner or operator does not establish alternate financial assurance, as specified in this Section, and obtain written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days after any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

11) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

d) Post-closure insurance.

1) An owner or operator may satisfy the requirements of this Section by obtaining post-closure insurance that conforms to the requirements of this subsection and submitting a certificate of such insurance to the Agency. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

2) The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251.

3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure estimate, except as provided in subsection (f) of this Section. The term “face amount” means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer’s will not change the face amount, although the insurer’s future liability will be lowered by the amount of the payments.

4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of facility whenever the post-closure period begins. The policy must also guarantee that, once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency, to such party or parties as the Agency specifies.

5) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing, if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator, as specified in subsection (d)(11) of this Section. Failure to pay the premium, without substitution of alternate financial assurance, as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.

7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.

8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect in the event that, on or before the date of expiration, one of the following occurs:

A) The Agency deems the facility abandoned;

B) Interim status is terminated or revoked;

C) Closure is ordered by the Board or a court of competent jurisdiction;

D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or

E) The premium due is paid.

9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

11) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

e) Financial test and corporate guarantee for post-closure care.

1) An owner or operator may satisfy the requirements of this Section by demonstrating that the owner or operator passes a financial test, as

specified in this subsection (e). To pass this test the owner or operator must meet the criteria of either subsection (e)(1)(A) or (e)(1)(B) of this Section:

A) The owner or operator must have each of the following:

i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;

iii) Tangible new worth of at least $10 million; and

iv) Assets in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the plugging and abandonment cost estimates.

B) The owner or operator must have each of the following:

i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;

ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;

iii) Tangible net worth of at least $10 million; and

iv) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.

2) The phrase "current closure and post-closure cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 264.151(f)) (incorporated by reference in~~ see 35 Ill. Adm. Code 724.251). The phrases "current

plugging and abandonment cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (~~40 CFR 144.70(f)), incorporated by reference in~~ see 35 Ill. Adm. Code 704.240).

3) To demonstrate that it meets this test, the owner or operator must submit each of the following items to the Agency:

A) A letter signed by the owner's or operator's chief financial officer and worded as specified in 35 Ill. Adm. Code 724.251;

B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and

C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating both of the following:

i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and

ii) In connection with that procedure, that no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.

4) This subsection (e)(4) corresponds with 40 CFR 265.143(e)(4), a federal provision relating to an extension of the time to file the proofs of financial assurance required by this subsection (e) granted by USEPA. This statement maintains structural consistency with the corresponding federal regulations.

5) After the initial submission of items specified in subsection (e)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (e)(3) of this Section.

6) If the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternate financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days

after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

7) The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (e)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (e)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must provide alternate financial assurance, as specified in this Section, within 30 days after notification of such a finding.

8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (e)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance, as specified in this Section, within 30 days after notification of the disallowance.

9) During the period of post-closure care, the Agency must approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Agency that the amount of the cost estimate exceeds the remaining cost of post-closure care.

10) The owner or operator is no longer required to submit the items specified in subsection (e)(3) of this Section when either of the following occurs:

A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or

B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

11) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in

subsections (e)(1) through (e)(9) of this Section, and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in 35 Ill. Adm. Code 724.251. The corporate guarantee must accompany the items sent to the Agency as specified in subsection (e)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:

A) That, if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section, in the name of the owner or operator.

B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

C) That, if the owner or operator fails to provide alternate financial assurance, as specified in this Section, and obtain the written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in subsections (a) through (d) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more

mechanisms. The Agency may use any or all of the mechanisms to provide for post-closure care of the facility.

g) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to provide post-closure care for all of the owner or operator's facilities. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

h) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer that the post-closure care period has been completed in accordance with the approved post-closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain financial assurance for post-closure care of that unit, unless the Agency determines that post-closure care has not been in accordance with the approved post-closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan.

i) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):

1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance; or

2) Requiring alternate assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.248 Incapacity of Owners or Operators, Guarantors, or Financial Institutions

a) An owner or operator must notify the Agency by certified mail of the commencement of a voluntary or involuntary proceeding under 11 USC (Bankruptcy) naming the owner or operator as debtor, within 10 days after

commencement of the proceeding. A guarantor of a corporate guarantee as specified in Sections 725.243(e) and 725.245(e) must make such a notification if the guarantor is named as a debtor, as required under the terms of the corporate guarantee (see 35 Ill. Adm. Code 724.251).

b) An owner or operator that fulfills the requirements of Sections 725.243, 725.245 or 725.247 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The owner or operator must establish other financial assurance or liability coverage within 60 days after such an event.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 725.273 Management of Containers

a) A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

b) A container holding hazardous waste must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

BOARD NOTE: Re-use of containers in transportation is governed by ~~U.S. Department of Transportation~~ USDOT regulations, including those set forth in 49 CFR 173.28 (Reuse, Reconditioning, and Remanufacture of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.277 Special Requirements for Incompatible Wastes

a) Incompatible wastes or incompatible wastes and materials (see ~~Appendix~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same container, unless Section 725.117(b) is complied with.

b) Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material (see ~~Appendix~~ appendix V of 40 CFR 265~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~, for examples), unless Section 725.117(b) is complied with.

c) A storage container holding a hazardous waste that is incompatible with any

waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

BOARD NOTE: The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge or hazardous waste or hazardous waste constituents that could result from the mixing of incompatible wastes or materials if containers break or leak.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART J: TANK SYSTEMS

Section 725.290 Applicability

The regulations of this Subpart J apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in ~~subsections~~ subsection (a), (b), or (c) of this Section or in Section 725.101.

a) Tank systems that are used to store or treat hazardous waste that contains no free liquids and that are situated inside a building with an impermeable floor are exempted from the requirements in Section 725.293. To demonstrate the absence or presence of free liquids in the stored or treated waste, the following test must be used: USEPA Method ~~9095~~ 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA ~~Publication No.~~ publication number EPA-530/SW-846~~)~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

b) Tank systems, including sumps, as defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 725.293(a).

c) Tanks, sumps, and other collection devices used in conjunction with drip pads, as defined in 35 Ill. Adm. Code 720.110 and regulated under Subpart W of this Part, must meet the requirements of this Subpart J.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.291 Assessment of Existing Tank System Integrity

a) For each existing tank system that does not have secondary containment meeting the requirements of Section 725.293, the owner or operator must determine either that the tank system is not leaking or that it is unfit for use. Except as provided in subsection (c), the owner or operator ~~shall~~ must, after January 12, 1988, obtain and keep on file at the facility a written assessment reviewed and certified by an independent, qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d), that attests to the tank system's integrity.

b) This assessment must determine whether the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1) Design standards, if available, according to which the tank and ancillary equipment were constructed;

2) Hazardous characteristics of the wastes that have been or will be handled;

3) Existing corrosion protection measures;

4) Documented age of the tank system, if available, (otherwise, an estimate of the age); and

5) Results of a leak test, internal inspection, or other tank integrity examination, such that the following conditions are met:

A) For non-enterable underground tanks, this assessment must consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pocket, and high water table effects.

B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must be either a leak test, as described above, or an internal inspection or other tank integrity examination certified by an independent, qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d), that addresses cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in conducting the integrity examination of an other than non-enterable underground tank system.

c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986 must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.

d) If, as a result of the assessment conducted in accordance with subsection (a) of this Section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of Sections 725.296.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.292 Design and Installation of New Tank Systems or Components

a) An owner or operator of a new tank system or component must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by an independent, qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d), attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include, at a minimum, the following information:

1) Design standards according to which the tanks and ancillary equipment is or will be constructed.

2) Hazardous characteristics of the wastes to be handled.

3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water, a determination by a corrosion expert of the following:

A) Factors affecting the potential for corrosion, including but not limited to the following:

i) Soil moisture content;

ii) Soil pH;

iii) Soil sulfides level;

iv) Soil resistivity;

v) Structure to soil potential;

vi) Influence of nearby underground metal structures (e.g., piping);

vii) Stray electric current;

viii) Existing corrosion-protection measures (e.g., coating, cathodic protection, etc.); and

B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:

i) Corrosion-resistant materials of construction such as special alloys, or fiberglass-reinforced plastic;

ii) Corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (e.g., impressed current or sacrificial anodes); and

iii) Electrical isolation devices such as insulating joints and flanges, etc.

BOARD NOTE: The practices described in the National Association of Corrosion Engineers (NACE) Standard ~~.~~ , ~~"Recommended Practice (RP-02-85)~~ "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285, and ~~API Publication 1632,~~ "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

4) For underground tank system components that are likely to be affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and

5) Design considerations to ensure the following:

A) Tank foundations will maintain the load of a full tank;

B) Tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone; and

C) Tank systems will withstand the effects of frost heave.

b) The owner and operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, qualified, registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must

inspect the system or component for the presence of any of the following items:

1) Weld breaks;

2) Punctures;

3) Scrapes of protective coatings;

4) Cracks;

5) Corrosion; and

6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.

c) New tank systems or components and piping that are placed underground and which are backfilled must be provided with a backfill material that is a noncorrosive, porous, and homogeneous substance which is carefully installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.

d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed, or placed in use.

e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

BOARD NOTE: The piping system installation procedures described in ~~API Publication 1615,~~ "Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, or ~~ANSI Standard B31.3,~~ "Chemical Plant and Petroleum Refinery Piping," ASME/ANSI Standard B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used where applicable, as guidelines for proper installation of piping systems.

f) The owner and operator must provide the type and degree of corrosion protection necessary, based on the information provided under subsection (a)(3) of this Section, to ensure the integrity of the tank system during use of the tanks system. An independent corrosion expert must supervise the installation of a corrosion protection system that is field fabricated to ensure proper installation.

g) The owner and operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and

supervise the installation of the tank system in accordance with the requirements of subsections (b) through (f) of this Section to attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (b) and (d) of this Section were performed. These written statements must also include the certification statement, as required in 35 Ill. Adm. Code 702.126(d).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.293 Containment and Detection of Releases

a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in subsections (f) and (g) of this Section).

1) For a new tank system or component, prior to its being put into service;

2) For all existing tanks used to store or treat USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027, as defined in 35 Ill. Adm. Code 721.131, within two years after January 12, 1987;

3) For those existing tank systems of known and documentable age, within two years after January 12, 1987, or when the tank systems have reached 15 years of age, whichever come later;

4) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age or within two years of January 12, 1987, whichever comes later; and

5) For tank systems that store or treat materials that become hazardous wastes subsequent to January 12, 1987, within the time intervals required in subsections (a)(1) through (a)(4) of this Section, except that the date that a material becomes a hazardous waste must be used in place of January 12, 1987.

b) Secondary containment systems must be as follows:

1) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

c) To meet the requirements of subsection (b) of this Section, secondary

containment systems must be at a minimum as follows:

1) Constructed of or lined with materials that are compatible with the wastes to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic);

2) Placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;

3) Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that the existing detection technology or site conditions will not allow detection of a release within 24 hours;

4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

BOARD NOTE: If the collected material is a hazardous waste under 35 Ill. Adm. Code 721, it is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 725. If the collected material is discharged through a point source to waters of the State, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.

d) Secondary containment for tanks must include one or more of the following devices:

1) A liner (external to the tank);

2) A vault;

3) A double-walled tank; or

4) An equivalent device as approved by the Board in an adjusted standards proceeding.

e) In addition to the requirements of subsections (b), (c), and (d), secondary containment systems must satisfy the following requirements:

1) External liner systems must be as follows:

A) Designed or operated to contain 100 percent of the capacity of the largest tank within the liner system's boundary;

B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

C) Free of cracks or gaps; and

D) Designed and installed to completely surround the tank and to cover all surrounding earth likely to come into contact with the waste if released from the tanks (i.e., capable of preventing lateral as well as vertical migration of the waste).

2) Vault systems must be as follows:

A) Designed or operated to contain 100 percent of the capacity of the largest tank within the vault system's boundary;

B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

C) Constructed with chemical-resistant water stops in place at all joints (if any);

D) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;

E) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:

i) Meets the definition of ignitable waste under 35 Ill. Adm. Code 721.121; or

ii) Meets the definition of reactive waste under 35 Ill. Adm. Code 721.123 and may form an ignitable or explosive vapor; and

F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3) Double-walled tanks must be as follows:

A) Designed as an integral structure (i.e., an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell;

B) Protected, if constructed of metal, from both corrosion of the primary tank interior and the external surface of the outer shell; and

C) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that the existing leak detection technology or site conditions will not allow detection of a release within 24 hours.

BOARD NOTE: The provisions outlined in the Steel Tank Institute (STI) document "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used as guidelines for aspects of the design of underground steel double-walled tanks.

f) Ancillary equipment must be provided with full secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (c) and (h) of this Section, except for the following:

1) Aboveground piping (exclusive of flanges, joints, valves, and connections) that are visually inspected for leaks on a daily basis;

2) Welded flanges, welded joints, and welded connections that are visually

inspected for leaks on a daily basis;

3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and

4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.

g) Pursuant to Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1], and in accordance with Subpart D of 35 Ill. Adm. Code 104, an adjusted standard will be granted by the Board regarding alternative design and operating practices only if the Board finds either that the alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not receive an adjusted standard from the secondary containment requirements of this Section through a justification in accordance with subsection (g)(2) of this Section.

1) When determining whether to grant alternative design and operating practices based on a demonstration of equivalent protection of groundwater and surface water, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:

A) The nature and quantity of the waste;

B) The proposed alternate design and operation;

C) The hydrogeologic setting of the facility, including the thickness of soils between the tank system and groundwater; and

D) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

2) In deciding whether to grant alternative design and operating practices based on a demonstration of no substantial present or potential hazard, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:

A) The potential adverse effects on groundwater, surface water, and

land quality taking the following into account:

i) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;

ii) The hydrogeological characteristics of the facility and surrounding land;

iii) The potential for health risks caused by human exposure to waste constituents;

iv) The potential for damage to wildlife; crops, vegetation, and physical structures caused by exposure to waste constituents; and

v) The persistence and permanence of the potential adverse effects;

B) The potential adverse effects of a release on groundwater quality, taking the following into account:

i) The quantity and quality of groundwater and the direction of groundwater flow;

ii) The proximity and withdrawal rates of water in the area;

iii) The current and future uses of groundwater in the area; and

iv) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

C) The potential adverse effects of a release on surface water quality, taking the following into account:

i) The quantity and quality of groundwater and the direction of groundwater flow;

ii) The patterns of rainfall in the region;

iii) The proximity of the tank system to surface waters;

iv) The current and future uses of surface waters in the area and water quality standards established for those surface waters; and

v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and

D) The potential adverse effects of a release on the land surrounding the tank system, taking the following into account:

i) The patterns of rainfall in the region; and

ii) The current and future uses of the surrounding land.

3) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1), at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must fulfill the following requirements:

A) It must comply with the requirements of Section 725.296, except Section 725.296(d); and

B) It must decontaminate or remove contaminated soil to the extent necessary to assure the following:

i) It must enable the tank system, for which alternative design and operating practices were granted, to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release; and

ii) It must prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water.

C) If contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B), it must comply with the requirements of Section 725.297(b).

4) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the alternative design and operating practices, must fulfill the following requirements:

A) It must comply with the requirements of Section 725.296(a), (b), (c), and (d); and

B) It must prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of Section 725.297(b);

C) If repairing, replacing, or reinstalling the tank system, it must provide secondary containment in accordance with the requirements of subsections (a) through (f) of this Section, or make the alternative design and operating practices demonstration to the Board again with respect to secondary containment and meet the requirements for new tank systems in Section 725.292 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil is decontaminated or removed, and groundwater or surface water has not been contaminated.

h) In order to make an alternative design and operating practices demonstration, the owner or operator must follow the following procedures, in addition to those specified in Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104:

1) The owner or operator must file a petition for approval of alternative design and operating practices according to the following schedule:

A) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with subsection (a) of this Section; and

B) For new tank systems, at least 30 days prior to entering into a contract for installation of the tank system.

2) As part of the petition, the owner or operator must also submit the following to the Board:

A) A description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in subsection (g)(1) or (g)(2) of this Section; and

B) The portion of the Part B permit application specified in 35 Ill. Adm. Code 703.202.

3) The owner or operator must complete its showing within 180 days after

filing its petition for approval of alternative design and operating practices.

4) The Agency must issue or modify the RCRA permit so as to require the permittee to construct and operate the tank system in the manner that was provided in any Board order approving alternative design and operating practices.

i) All tank systems, until such time as secondary containment meeting the requirements of this Section is provided, must comply with the following:

1) For non-enterable underground tanks, a leak test that meets the requirements of Section 725.291(b)(5) must be conducted at least annually.

2) For other than non-enterable underground tanks and for all ancillary equipment, an annual leak test, as described in subsection (i)(1) of this Section, or an internal inspection or other tank integrity examination, by an independent, qualified, registered professional engineer, that addresses cracks, leaks, corrosion and erosion must be conducted at least annually. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed.

BOARD NOTE: The practices described in API Publication~~,~~ "Guide for Inspection of ~~Refining~~ Refinery Equipment," Chapter XIII, "Atmospheric and Low Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, when applicable, as guidelines for assessing the overall condition of the tank system.

3) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(1) through (i)(3) of this Section.

4) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(1) through (i)(3) of this Section, the owner or operator must comply with the requirements of Section 725.296.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.295 Inspections

a) The owner or operator must inspect the following, where present, at least once each operating day:

1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

2) The aboveground portion of the tank system, if any, to detect corrosion or releases of waste;

3) Data gathered from monitoring equipment (e.g., pressure and temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design; and

4) The construction materials and the area immediately surrounding the externally accessible portion of the tank system including secondary containment structures (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.);

BOARD NOTE: Section 725.115(c) requires the owner or operator to remedy any deterioration or malfunction the owner or operator finds. Section 725.296 requires the owner or operator to notify the Agency within 24 hours of confirming a release. Also, federal 40 CFR 302~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ may require the owner or operator to notify the National Response Center of a release.

b) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation, and annually thereafter; and

2) All sources of impressed current must be inspected or tested, as appropriate, at least every other month.

BOARD NOTE: The practices described in ~~NACE Standard, "Recommended Practice (RP-02-85),~~ "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85, or ~~API Publication 1632,~~ "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

c) The owner or operator must document in the operating record of the facility an inspection of those items in subsections (a) and (b) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.296 Response to Leaks or Spills and Disposition of Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately. The owner or operator must satisfy the following requirements:

a) Cease using; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

b) Removal of waste from tank system or secondary containment system.

1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.

2) If the release was to a secondary containment system, all released materials must be removed within 24 hours to prevent harm to human health and the environment.

c) Containment of visible releases to the environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection, do the following:

1) Prevent further migration of the leak or spill to soils or surface water; and

2) Remove and properly dispose of any visible contamination of the soil or surface water.

d) Notifications; reports.

1) Any release to the environment, except as provided in subsection (d)(2) of this Section, must be reported to the Agency within 24 hours after detection.

2) A leak or spill of hazardous waste is exempted from the requirements of this subsection (d) if the following occur:

A) The spill is less than or equal to a quantity of one pound; and

B) The spill is immediately contained and cleaned-up.

3) Within 30 days after detection of a release to the environment, a report containing the following information must be submitted to the Agency:

A) Likely route of migration of the release;

B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate, etc.);

C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency as soon as they become available;

D) Proximity to downgradient drinking water, surface water, and population areas; and

E) Description of response actions taken or planned.

e) Provision of secondary containment, repair, or closure.

1) Unless the owner or operator satisfies the requirements of subsections (e)(2) through (e)(4) of this Section, the tank system must be closed in accordance with Section 725.297.

2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.

3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.

4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner or operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 725.293 before it is returned to service, unless the source of the leak is an aboveground portion of a tank system. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of subsection (f) of this Section are satisfied. If a component is replaced to comply with the requirements of this subsection (e)(4), that component must satisfy the requirements for new tank systems or components in Sections 725.292 and 725.293. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with Section 725.293

prior to being returned to use.

f) Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (e) of this Section, and the repair has been extensive (e.g., installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel, etc.), the tank system must not be returned to service unless the owner or operator has obtained a certification by an independent qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 702.126(d) that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Agency within seven days after returning the tank system to use.

BOARD NOTE: See Section 725.115(c) for the requirements necessary to remedy a failure. Also, federal 40 CFR 302.6~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ requires the owner or operator to notify the National Response Center of a release of any "reportable quantity."

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.298 Special Requirements for Ignitable or Reactive Wastes

a) Ignitable or reactive waste must not be placed in a tank system, unless either of the following conditions is fulfilled:

1) The waste is treated, rendered or mixed before or immediately after placement in the tank system so that the following two conditions are fulfilled:

A) The resulting waste, mixture, or dissolved material no longer meets the definition of ignitable or reactive waste under 35 Ill. Adm. Code 721.121 or 721.123; and

B) Section 725.117(b) is complied with;

2) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

3) The tank system is used solely for emergencies.

b) The owner or operator of a facility where ignitable or reactive waste is stored or tested in tanks must comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of ~~the National Fire Protection Association's~~ "Flammable and Combustible Liquids Code," NFPA 30, incorporated by reference in 35 Ill.

Adm. Code 720.111(a).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.301 Generators of 100 to 1,000 Kilograms of Hazardous Waste Per Month

a) The requirements of this Section apply to small quantity generators that generate more than 100 kg but less than 1,000 kg of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than 180 days (or 270 days if the generator must ship the waste greater than 200 miles), and that do not accumulate over 6,000 kg on-site at any time.

b) A generator of between 100 and 1,000 kg/mo hazardous waste must comply with the following general operating requirements:

1) Treatment or storage of hazardous waste in tanks must comply with Section 725.117(b);

2) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life;

3) Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank; and

4) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).

BOARD NOTE: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).

c) A generator of between 100 and 1,000 kg/mo accumulating hazardous waste in tanks must inspect the following, where present:

1) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

3) The level of waste in the tank at least once each operating day to ensure compliance with subsection (b)(3) of this Section;

4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

5) The construction materials of and the area immediately surrounding discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

BOARD NOTE: As required by Section 725.115(c), the owner or operator must remedy any deterioration or malfunction the owner or operator finds.

d) A generator of between 100 and 1,000 kg/mo accumulating hazardous waste in tanks must, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures.

BOARD NOTE: At closure, as throughout the operating period, unless the owner or operator demonstrates, in accordance with 35 Ill. Adm. Code 721.103(d) or (e), that any solid waste removed from the tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

e) A generator of between 100 and 1,000 kg/mo must comply with the following special requirements for ignitable or reactive waste:

1) Ignitable or reactive waste must not be placed in a tank unless one of the following conditions are fulfilled:

A) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that the following is true of the waste:

i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 35 Ill. Adm. Code 721.121 or 721.123, and

ii) Section 725.117(b) is complied with;

B) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

C) The tank is used solely for emergencies.

2) The owner or operator of a facility that treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of ~~the National Fire Protection Association's~~ "Flammable and Combustible Liquids Code," NFPA 30, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

f) A generator of between 100 and 1,000 kg/mo must comply with the following special requirements for incompatible wastes:

1) Incompatible wastes or incompatible wastes and materials (see ~~Appendix E~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same tank unless Section 725.117(b) is complied with.

2) Hazardous waste must not be placed in an unwashed tank that previously held an incompatible waste or material unless Section 725.117(b) is complied with.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART K: SURFACE IMPOUNDMENTS

Section 725.324 Containment System

An earthen dike must have a protective cover, such as grass, shale, or rock to minimize wind and water erosion and to preserve its structural integrity.

BOARD NOTE: Two versions of 40 CFR 265.223 exist in the federal regulations. USEPA added the second at 57 Fed. Reg. 3486, January 29, 1992. Section 725.324 is derived from the original version of 40 CFR 265.223.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.330 Special Requirements for Incompatible Wastes

Incompatible wastes, or incompatible waste and materials (see ~~Appendix~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same surface impoundment, unless Section 725.117(b) is complied with.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART L: WASTE PILES

Section 725.357 Special Requirements for Incompatible Wastes

a) Incompatible wastes, or incompatible wastes and materials (see ~~Appendix~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same pile, unless Section 725.117(b) is complied with.

b) A pile of hazardous waste that is incompatible with any waste or other material stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

BOARD NOTE: The purpose of this is to prevent fires, explosions, gaseous emissions, leaching, or other discharge of hazardous waste or hazardous waste constituents that could result from the contact or mixing of incompatible wastes or materials.

c) Hazardous waste must not be piled on the same area where incompatible wastes or materials were previously piled, unless that area has been decontaminated sufficiently to ensure compliance with Section 725.117(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART M: LAND TREATMENT

Section 725.382 Special Requirements for Incompatible Wastes

Incompatible wastes or incompatible wastes and materials (see ~~Appendix~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same land treatment area unless Section 725.117(b) is complied with.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART N: LANDFILLS

Section 725.413 Special Requirements for Incompatible Wastes

Incompatible wastes or incompatible wastes and materials (see ~~Appendix~~ appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same landfill cell, unless Section 725.117(b) is complied with.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.414 Special Requirements for Liquid Wastes

a) This subsection (a) corresponds with 40 CFR 265.314(a), which pertains to the placement of bulk or non-containerized liquid waste or waste containing free liquids in a landfill prior to May 8, 1985. This statement maintains structural consistency with USEPA rules.

b) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.

c) Containers holding free liquids must not be placed in a landfill unless one of the following conditions is fulfilled:

1) One of the following occurs with regard to all free-standing liquid:

A) It has been removed by decanting or other methods;

B) It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or

C) It has been otherwise eliminated;

2) The container is very small, such as an ampule;

3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or

4) The container is a lab pack, as defined in Section 724.416, and is disposed of in accordance with Section 724.416.

d) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method ~~9095~~ 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA ~~Publication No.~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

e) The placement of any liquid that is not a hazardous waste in a landfill is prohibited (35 Ill. Adm. Code 729.311).

f) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are one of the following: materials listed or described in subsection (f)(1) of this Section; materials that pass one of the tests in subsection (f)(2) of this Section; or materials that are determined by the Board to be nonbiodegradable through the adjusted standard

procedure of Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104.

1) Nonbiodegradable sorbents are the following:

   A) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, calcium carbonate (organic free limestone), oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth, perlite (volcanic glass), expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal/activated carbon, etc.); or

   B) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene, and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

   C) Mixtures of these nonbiodegradable materials.

2) Tests for nonbiodegradable sorbents.

   A) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) ~~–~~ " (Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi)," incorporated by reference in 35 Ill. Adm. Code 720.111(a);

   B) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) ~~–~~ " (Standard Practice for Determining Resistance of Plastics to Bacteria)," incorporated by reference in 35 Ill. Adm. Code 720.111(a); or

   C) The sorbent material is determined to be non-biodegradable under OECD ~~test~~ Guideline for Testing of Chemicals, Method 301B (CO_2 Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code 720.111(a).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.416 Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the waste held therein. Inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the USDOT hazardous materials regulations~~,~~ (49 CFR 173 (Shippers--General Requirements for Shipments and Packages), 178 (Specifications for Packagings), and 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111(b)), if those regulations specify a particular inside container for the waste.

b) The inside containers must be overpacked in an open head USDOT-specification metal shipping container~~,~~ (49 CFR 178 (Specifications for Packagings) and 179 (Specifications for Tank Cars)~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~, of no more than 416 liter (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with 35 Ill. Adm. Code 725.414(f) to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and sorbent material.

c) The sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with Section 725.117(b).

d) Incompatible wastes, as defined in 35 Ill. Adm. Code 720.110, must not be placed in the same outside container.

e) Reactive waste, other than cyanide- or sulfide-bearing waste, as defined in 35 Ill. Adm. Code 721.123(a)(5), must be treated or rendered non-reactive prior to packaging in accordance with subsections (a) through (d) of this Section. Cyanide- or sulfide-bearing reactive waste may be packaged in accordance with subsections (a) through (d) of this Section without first being treated or rendered non-reactive.

f) Such disposal is in compliance with the requirements of 35 Ill. Adm. Code 728. Persons that incinerate lab packs according to the requirements of 35 Ill. Adm. Code 728.142(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the USDOT specifications in 49 CFR 173.12 (Exceptions for Shipments of Waste Materials), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and be overpacked according to subsection (b) of this Section.

g) Pursuant to 35 Ill. Adm. Code 729.312, the use of labpacks for disposal of liquid wastes or wastes containing free liquids allowed under this Section is restricted to labwaste and non-periodic waste, as those terms are defined in that Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART O: INCINERATORS

Section 725.440 Applicability

a) The regulations in this Subpart O apply to owners or operators of hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as 35 Ill. Adm. Code 724.101 provides otherwise.

b) Integration of the MACT standards.

1) Except as provided by subsections (b)(2) and (b)(3) of this Section, the standards of this Part no longer apply when an owner or operator demonstrates compliance with the maximum achievable control technology (MACT) requirements of subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, under 40 CFR 63.1207(j) and 63.1210(b), documenting compliance with the requirements of subpart EEE of 40 CFR 63.

2) The MACT standards of subpart EEE of 40 CFR 63 do not replace the closure requirements of Section 724.451 or the applicable requirements of Subparts A through H, BB, and CC of this Part.

3) Section 725.445, generally prohibiting burning of hazardous waste during startup and shutdown, remains in effect if the owner or operator elects to comply with 35 Ill. Adm. Code 703.320(b)(1)(A) to minimize emissions of toxic compounds from startup and shutdown.

BOARD NOTE: Operating conditions used to determine effective treatment of hazardous waste remain effective after the owner or operator demonstrates compliance with the standards of subpart EEE of 40 CFR 63. Sections 9.1 and 39.5 of the Environmental Protection Act [415 ILCS 5/9.1 and 39.5] make the federal MACT standards directly applicable to entities in Illinois and authorize the Agency to issue permits based on the federal standards.

c) An owner or operator of an incinerator that burns hazardous waste is exempt from all of the requirements of this Subpart O, except Section 725.451 (Closure), provided that the owner or operator has documented, in writing, that the waste

would not reasonably be expected to contain any of the hazardous constituents listed in Appendix H to 35 Ill. Adm. Code 721 and such documentation is retained at the facility, if the waste to be burned is one of the following:

1) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721, solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both;

2) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721, solely because it is reactive (Hazard Code R) for characteristics other than those listed in 35 Ill. Adm. Code 721.123(a)(4) and (a)(5), and will not be burned when other hazardous wastes are present in the combustion zone;

3) It is a hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under Subpart C of 35 Ill. Adm. Code 721; or

4) It is a hazardous waste solely because it possesses the reactivity characteristics described by 35 Ill. Adm. Code 721.123 (a)(1), (a)(2), (a)(3), (a)(6), (a)(7), or (a)(8) and will not be burned when other hazardous wastes are present in the combustion zone.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART W: DRIP PADS

Section 725.543 Design and Operating Requirements

a) Drip pads must fulfill the following requirements:

1) Not be constructed of earthen materials, wood, or asphalt, unless the asphalt is structurally supported;

2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;

3) Have a curb or berm around the perimeter;

4) In addition, the drip pad must fulfill the following requirements:

A) Have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per

second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to the existing drip pads and those drip pads for which the owner or operator elects to comply with Section 725.542(a) instead of Section 725.542(b).

B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for in subsection (b) of this Section.

5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

BOARD NOTE: In judging the structural integrity requirement of this subsection (a), the Agency should generally consider applicable standards established by professional organizations generally recognized by the industry, including ACI 318-83 (Building Code Requirements for Reinforced Concrete) or ~~ASTM C94~~ASTM C 94-90, (Standard Specification for Ready-Mixed Concrete), incorporated by reference in 35 Ill. Adm. Code 720.111(a).

b) If an owner or operator elects to comply with Section 725.542(b) instead of Section 725.542(a), the drip pad must have the following features:

1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be constructed as follows:

A) Constructed of materials that have appropriate chemical properties

and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

C) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

2) A leakage detection system immediately above the liner that is designed, constructed, maintained, and operated to detect leakage from the drip pad. The leakage detection system must be constructed as follows:

A) Constructed of materials that fulfill the following requirements:

i) They are chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and

ii) They are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and

B) Designed and operated to function without clogging through the scheduled closure of the drip pad; and

C) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

3) A leakage collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.

c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

BOARD NOTE: See subsection (m) of this Section for remedial action required if

deterioration or leakage is detected.

d) The drip pad and associated collection system must be designed and operated to convey, drain and collect liquid resulting from drippage or precipitation in order to prevent run-off.

e) Unless the drip pad is protected by a structure, as described in Section 725.540(b), the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system.

f) Unless the drip pad is protected by a structure or cover, as described in Section 725.540(b), the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f) of this Section. The owner or operator must obtain a statement from an independent, qualified, registered professional engineer certifying that the drip pad design meets the requirements of this Section.

h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.

i) The drip pad surface must be cleaned thoroughly at least once every seven days using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning, with residues being properly managed, such that accumulated residues of hazardous waste or other materials are removed as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document, in the facility's operating log, the date and time of each cleaning and the cleaning procedure.

j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.

k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad, in accordance with this Section, following treatment.

l) Collection and holding units associated with run-on and run-off control systems

must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

m) Throughout the active life of the drip pad, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must perform the following acts:

A) Enter a record of the discovery in the facility operating log;

B) Immediately remove from service the portion of the drip pad affected by the condition;

C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;

D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.

2) The Agency must: review the information submitted; make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete; and notify the owner or operator of the determination and the underlying rationale in writing.

3) Upon completing all repairs and clean up, the owner or operator must notify the Agency in writing and provide a certification, signed by an independent, qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with subsection (m)(1)(D) of this Section.

n) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices and a description of treated wood storage and handling practices.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 725.933 Standards: Closed-Vent Systems and Control Devices

a) Compliance Required.

1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this Part must comply with the provisions of this Section.

2) Implementation Schedule.

A) The owner or operator of an existing facility that cannot install a closed-vent system and control device to comply with the provisions of this Subpart AA on the effective date that the facility becomes subject to the provisions of this Subpart AA must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this Subpart AA for installation and startup.

B) Any unit that begins operation after December 21, 1990, and which is subject to the provisions of this Subpart AA when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

C) The owner or operator of any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to this Subpart AA must comply with all requirements of this Subpart AA as soon as practicable but no later than 30 months after the effective date of the amendment. When control equipment required by this Subpart AA ~~can not~~ cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator must prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this Subpart AA. The owner or operator must enter

the implementation schedule in the operating record or in a permanent, readily available file located at the facility.

D) An owner or operator of a facility or unit that becomes newly subject to the requirements of this Subpart AA after December 8, 1997, due to an action other than those described in subsection (a)(2)(iii) of this Section must comply with all applicable requirements immediately (i.e., the facility or unit must have control devices installed and operating on the date the facility or unit becomes subject to this Subpart AA; the 30-month implementation schedule does not apply).

b) A control device involving vapor recovery (e.g., a condenser or adsorber) must be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Section 725.932(a)(1) for all affected process vents is attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to three percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760 degrees Celsius (° C). If a boiler or process heater is used as the control device, then the vent stream must be introduced into the flame combustion zone of the boiler or process heater.

d) Flares.

1) A flare must be designed for and operated with no visible emissions as determined by the methods specified in subsection (e)(1) of this Section except for periods not to exceed a total of five minutes during any two consecutive hours.

2) A flare must be operated with a flame present at all times, as determined by the methods specified in subsection (f)(2)(c) of this Section.

3) A flare must be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted, or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2) of this Section.

4) Exit Velocity.

A) A steam-assisted or nonassisted flare must be designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (d)(4)(C) of this Section.

B) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

C) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) of this Section, less than the velocity, V as determined by the method specified in subsection (e)(4) and less than 122 m/s (400 ft/s) is allowed.

5) An air-assisted flare must be designed and operated with an exit velocity less than the velocity, V, as determined by the method specified in subsection (e)(5) of this Section.

6) A flare used to comply with this Section must be steam-assisted, air-assisted, or nonassisted.

e) Compliance determination and equations.

1) Reference Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), must be used to determine the compliance of a flare with the visible emission provisions of this Subpart AA. The observation period is two hours and must be used according to Method 22.

2) The net heating value of the gas being combusted in a flare must be calculated using the following equation:

$$H_T = K \times \sum_{i=1}^{n} C_i \times H_i$$

Where:

H_T ~~is~~ = the net heating value of the sample in MJ/scm; where the

net enthalpy per mole of offgas is based on combustion at 25° C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mole is 20° C~~;~~

K = 1.74×10^{-7} (1/ppm)(g mol/scm)(MJ/kcal) where the standard temperature for (g mol/scm) is 20° C~~;~~

ΣX_i ~~means~~ = the sum of the values of X for each component i, from i=1 to n~~;~~

C_i ~~is~~ = the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), and for carbon monoxide, by ASTM D 1946-90 (Standard Practice for Analysis of Reformed Gas by Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code ~~720.111(a)~~ 720.111~~; and~~

H_i is the net heat of combustion of sample component i, kcal/gmol at 25° C and 760 mm Hg. The heats of combustion must be determined using ASTM D 2382-88 (Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method)), incorporated by reference in 35 Ill. Adm. Code 720.111(a), if published values are not available or cannot be calculated.

3) The actual exit velocity of a flare must be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), or 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

4) The maximum allowed velocity in m/s, V for a flare complying with subsection (d)(4)(C) of this Section must be determined by the following equation:

$$\log_{10}\left(V_{max}\right) = \frac{H_T + 28.8}{31.7}$$

Where:

$\log_{10}$ ~~means~~ = logarithm to the base 10~~; and~~

H_T ~~is~~ = the net heating value as determined in subsection (e)(2) of this Section.

5) The maximum allowed velocity in m/s, $V_,$ for an air-assisted flare must be determined by the following equation:

$$V = 8.706 + 0.7084 H_T$$

Where:

H_T ~~is~~ = the net heating value as determined in subsection (e)(2) of this Section.

f) The owner or operator must monitor and inspect each control device required to comply with this Section to ensure proper operation and maintenance of the control device by implementing the following requirements:

1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor must be installed in the vent stream at the nearest feasible point to the control device inlet but before being combined with other vent streams.

2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation, as specified below:

A) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must have accuracy of ±1 percent of the temperature being monitored in ° C or ± 0.5° C, whichever is greater. The temperature sensor must be installed at a location in the combustion chamber downstream of the combustion zone.

B) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of ±1 percent of the temperature being monitored in ° C or ± 0.5° C, whichever is greater. One temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor must be installed in the vent

stream at the nearest feasible point to the catalyst bed outlet.

C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

D) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of ±1 percent of the temperature being monitored in ° C or ± 0.5° C, whichever is greater. The temperature sensor must be installed at a location in the furnace downstream of the combustion zone.

E) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure parameters that indicate good combustion operating practices are being used.

F) For a condenser, either of the following:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

ii) A temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ±1 percent of the temperature being monitored in degrees Celsius (° C) or ±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

G) For a carbon adsorption system, such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, either of the following:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed; or

ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

3) Inspect the readings from each monitoring device required by subsections (f)(1) and (f)(2) of this Section at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this Section.

g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 725.935(b)(4)(C)(vi).

h) An owner or operator using a carbon adsorption system, such as a carbon canister, that does not regenerate the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Section 725.935(b)(4)(C)(vii), whichever is longer.

2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Section 725.935(b)(4)(C)(vii).

i) An owner or operator of an affected facility seeking to comply with the provisions of this Part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

j) A closed-vent system must meet either of the following design requirements:

1) A closed-vent system must be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background, as determined by the methods specified at Section 725.934(b), and by visual inspections; or

2) A closed-vent system must be designed to operate at a pressure below atmospheric pressure. The system must be equipped with at least one

pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

k) The owner or operator must monitor and inspect each closed-vent system required to comply with this Section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

1) Each closed-vent system that is used to comply with subsection (j)(1) of this Section must be inspected and monitored in accordance with the following requirements:

A) An initial leak detection monitoring of the closed-vent system must be conducted by the owner or operator on or before the date that the system becomes subject to this Section. The owner or operator must monitor the closed-vent system components and connections using the procedures specified in Section 725.934(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

B) After initial leak detection monitoring required in subsection (k)(1)(A) of this Section, the owner or operator must inspect and monitor the closed-vent system as follows:

i) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) must be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The owner or operator must monitor a component or connection using the procedures specified in Section 725.934(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

ii) Closed-vent system components or connections other than those specified in subsection (k)(1)(B)(i) of this Section must be monitored annually and at other times as requested by the Agency, except as provided for in subsection (n) of this Section, using the procedures specified in Section 725.934(b) to demonstrate that the components or connections operate with no detectable emissions.

C) In the event that a defect or leak is detected, the owner or operator must repair the defect or leak in accordance with the requirements of subsection (k)(3) of this Section.

D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 725.935.

2) Each closed-vent system that is used to comply with subsection (j)(2) of this Section must be inspected and monitored in accordance with the following requirements:

A) The closed-vent system must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

B) The owner or operator must perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year.

C) In the event that a defect or leak is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k)(3) of this Section.

D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 725.935.

3) The owner or operator must repair all detected defects as follows:

A) Detectable emissions, as indicated by visual inspection or by an instrument reading greater than 500 ppmv above background, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in subsection (k)(3)(C) of this Section.

B) A first attempt at repair must be made no later than five calendar days after the emission is detected.

C) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair

of such equipment must be completed by the end of the next process unit shutdown.

D) The owner or operator must maintain a record of the defect repair in accordance with the requirements specified in Section 725.935.

l) A closed-vent system or control device used to comply with provisions of this Subpart AA must be operated at all times when emissions may be vented to it.

m) The owner or operator using a carbon adsorption system to control air pollutant emissions must document that all carbon removed that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the volatile organic concentration of the carbon:

1) It is regenerated or reactivated in a thermal treatment unit that meets one of the following:

A) The owner or operator of the unit has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart X of 35 Ill. Adm. Code 724; or

B) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Subparts AA and CC of this Part or 35 Ill. Adm. Code 724; or

C) The unit is equipped with and operating air emission controls in accordance with a federal national emission standard for hazardous air pollutants under 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants) or ~~40 CFR~~ 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) It is incinerated in a hazardous waste incinerator for which the owner or operator has done either of the following:

A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of 35 Ill. Adm. Code 724~~,~~; or

B) The owner or operator has designed and operates the incinerator in accordance with the interim status requirements of Subpart O of this Part.

3) It is burned in a boiler or industrial furnace for which the owner or operator has done either of the following:

A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726~~,~~; or

B) The owner or operator has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726.

n) Any components of a closed-vent system that are designated, as described in Section 725.935(c)(9), as unsafe to monitor are exempt from the requirements of subsection (k)(1)(B)(ii) of this Section if both of the following conditions are fulfilled:

1) The owner or operator of the closed-vent system has determined that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (k)(1)(B)(ii) of this Section; and

2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in subsection (k)(1)(B)(ii) of this Section as frequently as practicable during safe-to-monitor times.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.934 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart AA must comply with the test methods and procedures requirements provided in this Section.

b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 725.933(k), the test must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be:

A) Zero air (less than 10 ppm of hydrocarbon in air).

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The background level must be determined as set forth in Reference Method 21.

6) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible, as described in Reference Method 21.

7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

c) Performance tests to determine compliance with Section 725.932(a) and with the total organic compound concentration limit of Section 725.933(c) must comply with the following:

1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices must be conducted and data reduced in accordance with the following reference methods and calculation procedures:

A) Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for velocity and volumetric flow rate.

B) Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) or 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for organic content. If Method 25A is used, the organic hazardous air pollutant (HAP) used as the calibration gas must be the single HAP that represents the largest percent by volume of the emissions. The use of Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

C) Each performance test must consist of three separate runs, each run conducted for at least 1 hour under the conditions that exist when

the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs applies. The average must be computed on a time-weighed basis.

D) Total organic mass flow rates must be determined by the following equation:

i) For a source utilizing Method 18:

$$E_h = Q_{2sd} \times \left(\sum_{i=1}^{n} C_i \times MW_i \right) \times 0.0416 \times 10^{-6}$$

Where:

E_h = The total organic mass flow rate, kg/h;

Q_{2sd} = The volumetric flow rate of gases entering or exiting control device, dscm/h, as determined by Method 2~~ in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111(b);~~

n = The number of organic compounds in the vent gas~~;~~

C_i = The organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 18~~ in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111(b);~~

MW_i = The molecular weight of organic compound i in the vent gas, kg/kg-mol~~;~~

0.0416 = The conversion factor for molar volume, kg-mol/m^3, at 293 K and 760 mm Hg~~; and~~

10^{-6} = The conversion factor from ppm.

ii) For a source utilizing Method 25A:

$$E_h = Q \times C \times MW \times 0.0416 \times 10^{-6}$$

Where:

E_h = The total organic mass flow rate, kg/h

Q = The volumetric flow rate of gases entering or exiting control device, dscm/h, as determined by Method 2

C = The organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Method 25A

MW = The molecular weight of propane, 44 kg/kg-mol

0.0416 = The conversion factor for molar volume, kg-mol/m^3, at 293 K and 760 mm Hg

10^{-6} = The conversion factor from ppm.

E) The annual total organic emission rate must be determined by the following equation:

$A = F \times H$

Where:

A ~~is~~ = total organic emission rate, kg/y~~;~~

F ~~is~~ = the total organic mass flow rate, kg/h, as calculated in subsection (c)(1)(D) of this Section~~; and~~

H ~~is~~ = the total annual hours of operation for the affected unit.

F) Total organic emissions from all affected process vents at the facility must be determined by summing the hourly total organic mass emissions rates (F, as determined in subsection (c)(1)(D) of this Section) and by summing the annual total organic mass emission rates (A, as determined in subsection (c)(1)(E) of this Section) for all affected process vents at the facility.

2) The owner or operator must record such process information as is necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction do not constitute representative conditions for the purpose of a performance test.

3) The owner or operator of an affected facility must provide, or cause to be provided, performance testing facilities as follows:

A) Sampling ports adequate for the test methods specified in subsection (c)(1) of this Section.

B) Safe sampling platforms.

C) Safe access to sampling platforms.

D) Utilities for sampling and testing equipment.

4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs must apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Agency's approval, be determined using the average of the results of the two other runs.

d) To show that a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this Subpart AA, the owner or operator must make an initial determination that the time-weighted, annual average total organic concentration of the waste managed by the waste management unit is less than 10 ppmw using one of the following two methods:

1) Direct measurement of the organic concentration of the waste using the following procedures:

A) The owner or operator must take a minimum of four grab samples of waste for each wastestream managed in the affected unit under process conditions expected to cause the maximum waste organic concentration.

B) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere, such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or

steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.

C) Each sample must be analyzed and the total organic concentration of the sample must be computed using Method ~~9060~~ 9060A (Total Organic Carbon) ~~or 8260~~ of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference under 35 Ill. Adm. Code 720.111(a), or analyzed for its individual constituents.

D) The arithmetic mean of the results of the analyses of the four samples apply for each wastestream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each waste stream processed and the mean organic concentration of each wastestream managed in the unit.

2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that must be used to support a determination under this subsection (d)(2) include the following:

A) Production process information documenting that no organic compounds are used;

B) Information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a wastestream having a total organic content less than 10 ppmw; or

C) Prior speciation analysis results on the same wastestream where it is documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:

1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the waste is first managed in a waste

management unit, whichever is later; and

2) For continuously generated waste, annually; or

3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.

f) When an owner or operator and the Agency do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, the ~~procedures in Method 8260 in SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), must be used to resolve the dispute~~ dispute may be resolved using direct measurement, as specified in subsection (d)(1) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.935 Recordkeeping Requirements

a) Compliance Required.

1) Each owner or operator subject to the provisions of this Subpart AA must comply with the recordkeeping requirements of this Section.

2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subpart AA may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

b) Owners and operators must record the following information in the facility operating record:

1) For facilities that comply with the provisions of Section 725.933(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be in the facility operating record by the effective date that the facility becomes subject to the provisions of this Subpart AA.

2) Up-to-date documentation of compliance with the process vent standards in Section 725.932, including the following:

A) Information and data identifying all affected process vents, annual throughput and operating hours of each affected unit, estimated

emission rates for each affected vent and for the overall facility (i.e., the total emissions for all affected vents at the facility), and the approximate location within the facility of each affected unit (e.g., identify the hazardous waste management units on a facility plot plan).

B) Information and data supporting determination of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the waste management unit is operating at the highest load or capacity level reasonably expected to occur. If the owner or operator takes any action (e.g., managing a waste of different composition or increasing operating hours of affected waste management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

3) Where an owner or operator chooses to use test date to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan. The test plan must include the following:

A) A description of how it is determined that the planned test is going to be conducted when the hazardous waste management unit is operating at the highest load or capacity level reasonably expected to occur. This must include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

B) A detailed engineering description of the closed-vent system and control device including the following:

i) Manufacturer’s name and model number of control device;

ii) Type of control device;

iii) Dimensions of the control device;

iv) Capacity; and

v) Construction materials.

C) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.

4) Documentation of compliance with Section 725.933 must include the following information:

A) A list of all information references and sources used in preparing the documentation;

B) Records, including the dates of each compliance test required by Section 725.933(j);

C) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: ~~(~~Control of Gaseous Emissions," USEPA publication number EPA-450/2-81-005, incorporated by reference in 35 Ill. Adm. Code 720.111(a)~~)~~, or other engineering texts, approved by the Agency, that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with subsections (b)(4)(C)(i) through (b)(4)(C)(vii) of this Section may be used to comply with this requirement. The design analysis must address the vent stream characteristics and control device operation parameters as specified below.

i) For a thermal vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

ii) For a catalytic vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

iii) For a boiler or process heater, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must

also establish the design minimum and average flame zone temperatures, combustion zone residence time and description of method and location where the vent stream is introduced into the combustion zone.

iv) For a flare, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also consider the requirements specified in Section 725.933(d).

v) For a condenser, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream and design average temperatures of the coolant fluid at the condenser inlet and outlet.

vi) For a carbon adsorption system, such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time and design service life of carbon.

vii) For a carbon adsorption system, such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule;

D) A statement signed and dated by the owner or operator certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is or would be operating at the highest load or capacity level reasonably expected to occur;

E) A statement signed and dated by the owner or operator certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Section 725.932(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Section 725.932(a) for affected process vents at the facility are attained by a control device involving vapor recovery at an efficiency less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement; and

F) If performance tests are used to demonstrate compliance, all test results.

c) Design documentation and monitoring operating and inspection information for each closed-vent system and control device required to comply with the provisions of this Part must be recorded and kept up-to-date in the facility operating record. The information must include the following:

1) Description and date of each modification that is made to the closed-vent system or control device design;

2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 725.933(f)(1) and (f)(2);

3) Monitoring, operating and inspection information required by Section 725.933(f) through (k);

4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis, as specified below:

A) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760° C, any period when the combustion temperature is below 760° C.

B) For a thermal vapor incinerator designed to operate with an

organic emission reduction efficiency of 95 percent or greater, any period when the combustion zone temperature is more than 28° C below the design average combustion zone temperature established as a requirement of subsection (b)(4)(C)(i) of this Section.

C) For a catalytic vapor incinerator, any period when either of the following occurs:

i) Temperature of the vent stream at the catalyst bed inlet is more than 28° C below the average temperature of the inlet vent stream established as a requirement of subsection (b)(4)(C)(ii) of this Section; or

ii) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of subsection (b)(4)(C)(ii) of this Section.

D) For a boiler or process heater, any period when either of the following occurs:

i) Flame zone temperature is more than 28° C below the design average flame zone temperature established as a requirement of subsection (b)(4)(C)(iii) of this Section; or

ii) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of subsection (b)(4)(C)(iii) of this Section.

E) For a flare, period when the pilot flame is not ignited.

F) For a condenser that complies with Section 725.933(f)(2)(F)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of subsection (b)(4)(C)(v) of this Section.

G) For a condenser that complies with Section 725.933(f)(2)(F)(ii), any period when either of the following occurs:

i) Temperature of the exhaust vent stream from the condenser is more than 6° C above the design average exhaust vent stream temperature established as a requirement of subsection (b)(4)(C)(v) of this Section; or

ii) Temperature of the coolant fluid exiting the condenser is more than 6° C above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (b)(4)(C)(v) of this Section.

H) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Section 725.933(f)(2)(G)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (b)(4)(C)(vi) of this Section.

I) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and complies with Section 725.933(f)(2)(G)(ii), any period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (b)(4)(C)(vi) of this Section;

5) Explanation for each period recorded under subsection (c)(4) of this Section of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation;

6) For carbon adsorption systems operated subject to requirements specified in Section 725.933(g) or (h)(2), any date when existing carbon in the control device is replaced with fresh carbon;

7) For carbon adsorption systems operated subject to requirements specified in Section 725.933(h)(1), a log that records:

A) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

B) Date when existing carbon in the control device is replaced with fresh carbon;

8) Date of each control device startup and shutdown;

9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Section 725.933(n) must record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance

with the requirements of Section 725.933(n), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component; and

10) When each leak is detected, as specified in Section 725.933(k), the following information must be recorded:

A) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number;

B) The date the leak was detected and the date of first attempt to repair the leak;

C) The date of successful repair of the leak;

D) Maximum instrument reading measured by Method 21 (Determination of Volatile Organic Compound Leaks) of appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), after it is successfully repaired or determined to be nonrepairable; and

E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

i) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion; and

d) Records of the monitoring, operating and inspection information required by subsections (c)(3) through (c)(10) of this Section must be maintained by the owner or operator for at least three years following the date of each occurrence, measurement, corrective action, or record.

e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating

record.

f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section 725.932, including supporting documentation as required by Section 725.934(d)(2), when application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced is used, must be recorded in a log that is kept in the facility operating record.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 725.950 Applicability

a) The regulations in this Subpart BB apply to owners and operators of facilities that treat, store, or dispose of hazardous wastes (except as provided in Section 725.101).

b) Except as provided in Section 725.964(k), this Subpart BB applies to equipment that contains or contacts hazardous wastes with organic concentrations of at least 10 percent by weight that are managed in one of the following:

1) A unit that is subject to the RCRA permitting requirements of 35 Ill. Adm. Code 702, 703, and 705;

2) A unit (including a hazardous waste recycling unit) that is not exempt from permitting under the provisions of 35 Ill. Adm. Code 722.134(a) (i.e., a hazardous waste recycling unit that is not a "90-day" tank or container) and that is located at a hazardous waste management facility otherwise subject to the permitting requirements of 35 Ill. Adm. Code 702, 703, and 705; or

3) A unit that is exempt from permitting under the provisions of 35 Ill. Adm. Code 722.134(a) (i.e., a "90-day" tank or container) and which is not a recycling unit under the provisions of 35 Ill. Adm. Code 721.106.

c) Each piece of equipment to which this Subpart BB applies must be marked in such a manner that it can be distinguished readily from other pieces of equipment.

d) Equipment that is in vacuum service is excluded from the requirements of Sections 725.952 to 725.960, if it is identified as required in Section 725.964(g)(5).

e) Equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar

year is excluded from the requirements of Sections 725.952 through 725.960 if it is identified as required in Section 725.964(g)(6).

f) This subsection (f) corresponds with 40 CFR 265.1050(f), which relates exclusively to a facility outside Illinois. This statement maintains structural consistency with the corresponding federal regulations.

g) Purged coatings and solvents from surface coating operations subject to the federal national emission standards for hazardous air pollutants (NESHAPs) for the surface coating of automobiles and light-duty trucks at ~~Subpart~~ subpart IIII of 40 CFR 63~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ (National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks) are not subject to the requirements of this Subpart BB.

BOARD NOTE: The requirements of Sections 725.952 through 725.964 apply to equipment associated with hazardous waste recycling units previously exempt under 35 Ill. Adm. Code 721.106(c)(1). Other exemptions under 35 Ill. Adm. Code 721.104 and 725.101(e) are not affected by these requirements.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.963 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart BB must comply with the test methods and procedures requirements provided in this Section.

b) Leak detection monitoring, as required in Sections 725.952 through 725.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

2) The detection instrument must meet the performance criteria of Reference Method 21;

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21;

4) Calibration gases must be as follows:

A) Zero air (less than 10 ppm of hydrocarbon in air);

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane;

and

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 725.952(e), 725.953(i), 725.954, and 725.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) of this Section apply;

2) The background level must be determined as set forth in Reference Method 21;

3) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21; and

4) This arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) In accordance with the waste analysis plan required by Section 725.113(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267-88 (Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography), E 168-88 (Standard Practices for General Techniques of Infrared Quantitative Analysis), E 169-87 (Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis), or E 260-85 (Standard Practice for Packed Column Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code 720.111(a);

2) Method ~~9060~~ 9060A (Total Organic Carbon) ~~or 8260~~ of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), or analyzed for its individual organic constituents; or

3) Application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that

must be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in subsection (d)(1) or (d)(2) of this Section.

f) When an owner or operator and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) of this Section must be used to resolve the dispute.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must either be obtained from standard reference texts or be determined by ASTM D 2879-92 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), incorporated by reference in 35 Ill. Adm. Code 720.111(a).

i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction must comply with the procedures of Section 725.934(c)(1) through (c)(4).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.964 Recordkeeping Requirements

a) Lumping Units.

1) Each owner or operator subject to the provisions of this Subpart BB must comply with the recordkeeping requirements of this Section.

2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subpart BB may comply with the recordkeeping requirements for these hazardous waste management units

in one recordkeeping system if the system identifies each record by each hazardous waste management unit.

b) Owners and operators must record the following information in the facility operating record:

1) For each piece of equipment to which this Subpart BB applies, the following:

A) Equipment identification number and hazardous waste management unit identification;

B) Approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);

C) Type of equipment (e.g., a pump or pipeline valve);

D) Percent-by-weight total organics in the hazardous wastestream at the equipment;

E) Hazardous waste state at the equipment (e.g., gas/vapor or liquid); and

F) Method of compliance with the standard (e.g., "monthly leak detection and repair" or "equipped with dual mechanical seals");

2) For facilities that comply with the provisions of Section 725.933(a)(2), an implementation schedule, as specified in that Section;

3) Where an owner or operator chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan, as specified in Section 725.935(b)(3); and

4) Documentation of compliance with Section 725.960, including the detailed design documentation or performance test results specified in Section 725.935(b)(4).

c) When each leak is detected, as specified in Section 725.952, 725.953, 725.957, or 725.958, the following requirements apply:

1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Section 725.958(a), and the date the leak was detected, must be attached to the leaking equipment;

2) The identification on equipment except on a valve, may be removed after it has been repaired; and

3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Section 725.957(c) and no leak has been detected during those two months.

d) When each leak is detected, as specified in Sections 725.952, 725.953, 725.957, or 725.958, the following information must be recorded in an inspection log and must be kept in the facility operating record:

1) The instrument and operator identification numbers and the equipment identification number;

2) The date evidence of a potential leak was found in accordance with Section 725.958(a);

3) The date the leak was detected and the dates of each attempt to repair the leak;

4) Repair methods applied in each attempt to repair the leak;

5) "Above 10,000," if the maximum instrument reading measured by the methods specified in Section 725.963(b) after each repair attempt is equal to or greater than 10,000 ppm;

6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

7) Documentation supporting the delay of repair of a valve in compliance with Section 725.959(c);

8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown;

9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days; and

10) The date of successful repair of the leak.

e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 725.960 must be recorded and kept up-to-date in the facility operating record as specified in Section 725.935(c)(1) and (c)(2), and monitoring, operating and inspection information in Section 725.935(c)(3) through (c)(8).

f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, monitoring and inspection information indicating proper operation and maintenance of the control device must be recorded in the facility operating record.

g) The following information pertaining to all equipment subject to the requirements in Sections 725.952 through 725.960 must be recorded in a log that is kept in the facility operating record:

1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subpart BB.

2) List of Equipment.

A) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 725.952(e), 725.953(i), and 725.957(f).

B) The designation of this equipment as subject to the requirements of Section 725.952(e), 725.953(i), or 725.957(f) must be signed by the owner or operator.

3) A list of equipment identification numbers for pressure relief devices required to comply with Section 725.954(a).

4) Compliance tests.

A) The dates of each compliance test required in Sections 725.952(e), 725.953(i), 725.954, and 725.957(f).

B) The background level measured during each compliance test.

C) The maximum instrument reading measured at the equipment during each compliance test.

5) A list of identification numbers for equipment in vacuum service.

6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per year.

h) The following information pertaining to all valves subject to the requirements of

Section 725.957(g) and (h) must be recorded in a log that is kept in the facility operating record:

1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

i) The following information must be recorded in the facility operating record for valves complying with Section 725.962:

1) A schedule of monitoring; and

2) The percent of valves found leaking during each monitoring period.

j) The following information must be recorded in a log that is kept in the facility operating record:

1) Criteria required in Sections 725.952(d)(5)(B) and 725.953(e)(2) and an explanation of the criteria; and

2) Any changes to these criteria and the reasons for the changes.

k) The following information must be recorded in a log that is kept in the facility operating record for use in determining exemptions, as provided in Section 725.950 and other specific Subparts:

1) An analysis determining the design capacity of the hazardous waste management unit;

2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Section 725.960 and an analysis determining whether these hazardous wastes are heavy liquids; and

3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sections 725.952 through 725.960. The record must include supporting documentation, as required by Section 725.963(d)(3), when application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in

or contacted by equipment determined not to be subject to the requirements in Sections 725.952 through 725.960, then a new determination is required.

l) Records of the equipment leak information required by subsection (d) of this Section and the operating information required by subsection (e) of this Section need be kept only three years.

m) The owner or operator of any facility with equipment that is subject to this Subpart and to federal regulations at 40 CFR 60, 61, or 63~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ may elect to determine compliance with this Subpart BB by documentation of compliance either pursuant to Section 725.964 or by documentation of compliance with the regulations at 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), pursuant to the relevant provisions of 40 CFR 60, 61, or 63, each incorporated by reference in 35 Ill. Adm. Code 720.111(b). The documentation of compliance under the regulation at 40 CFR 60, 61, or 63 must be kept with or made readily available with the facility operating record.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section 725.980 Applicability

a) The requirements of this Subpart CC apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers that are subject to Subpart I, J, or K of this Part, except as Section 725.101 and subsection (b) of this Section provide otherwise.

b) The requirements of this Subpart CC do not apply to the following waste management units at the facility:

1) A waste management unit that holds hazardous waste placed in the unit before December 6, 1996, and in which no hazardous waste is added to the unit on or after December 6, 1996;

2) A container that has a design capacity less than or equal to 0.1 m^3 (3.5 ft^3 or 26.4 gal);

3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan;

4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan;

5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is placed in the unit as a result of implementing remedial activities required pursuant to the Act or Board regulations or under the corrective action authorities of RCRA sections 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar federal or State authorities;

6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act of 1954 (42 USC 2011 et seq.) and the Nuclear Waste Policy Act of 1982 (42 USC 10101 et seq.);

7) A hazardous waste management unit that the owner or operator certifies is equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), ~~incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~. For the purpose of complying with this subsection (b)(7), a tank for which the air emission control includes an enclosure, as opposed to a cover, must be in compliance with the enclosure and control device requirements of Section 725.985(i), except as provided in Section 725.983(c)(5); and

8) A tank that has a process vent, as defined in 35 Ill. Adm. Code 725.931.

c) For the owner and operator of a facility subject to this Subpart CC that has received a final RCRA permit prior to December 6, 1996, the following requirements apply:

1) The requirements of Subpart CC of 35 Ill. Adm. Code 724 must be incorporated into the permit when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705.

2) Until the date when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705, the owner and operator is subject to the requirements of this Subpart CC.

d) The requirements of this Subpart CC, except for the recordkeeping requirements

specified in Section 725.990(i), are stayed for a tank or container used for the management of hazardous waste generated by organic peroxide manufacturing and its associated laboratory operations, when the owner or operator of the unit meets all of the following conditions:

1) The owner or operator identifies that the tank or container receives hazardous waste generated by an organic peroxide manufacturing process producing more than one functional family of organic peroxides or multiple organic peroxides within one functional family, that one or more of these organic peroxides could potentially undergo self-accelerating thermal decomposition at or below ambient temperatures, and that organic peroxides are the predominant products manufactured by the process. For the purposes of this subsection, "organic peroxide" means an organic compound that contains the bivalent -O-O- structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical;

2) The owner or operator prepares documentation, in accordance with Section 725.990(i), explaining why an undue safety hazard would be created if air emission controls specified in Sections 725.985 through 725.988 are installed and operated on the tanks and containers used at the facility to manage the hazardous waste generated by the organic peroxide manufacturing process or processes meeting the conditions of subsection (d)(1) of this Section; and

3) The owner or operator notifies the Agency in writing that hazardous waste generated by an organic peroxide manufacturing process or processes meeting the conditions of subsection (d)(1) of this Section are managed at the facility in tanks or containers meeting the conditions of subsection (d)(2) of this Section. The notification must state the name and address of the facility and be signed and dated by an authorized representative of the facility owner or operator.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.981 Definitions

As used in this Subpart CC and in 35 Ill. Adm. Code 724, all terms not defined herein will have the meanings given to them in the Act and 35 Ill. Adm. Code 720 through 726.

"Average volatile organic concentration" or "average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous waste, as determined in accordance with the requirements of Section 725.984.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover so that when the device is secured in the closed

position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, and gauge wells) that are necessary for operation, inspection, maintenance, or repair of the unit on which the cover is used. A cover may be a separate piece of equipment that can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

"External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of a hazardous waste being managed in a tank with no fixed roof.

"Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

"Floating roof" means a cover consisting of a double-deck, pontoon single-deck, or internal floating cover that rests upon and is supported by the material being contained, and is equipped with a continuous seal.

"Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

"In light material service" means that the container is used to manage a material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20°C (1.2 inches H_2O at 68°F); and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20°C (1.2

inches H_2O at 68°F) is equal to or greater than 20 percent by weight.

"Internal floating roof" means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

"Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof, continuously around the circumference of the tank.

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure that is caused in part by poor maintenance or careless operation is not a malfunction.

"Maximum organic vapor pressure" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining wastes, etc.) reasonably expected to occur in the tank. For the purpose of this Subpart CC, maximum organic vapor pressure is determined using the procedures specified in Section 725.984(c).

"Metallic shoe seal" means a continuous seal that is constructed of metal sheets that are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and which is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

"No detectable organic emissions" means no escape of organics to the atmosphere, as determined using the procedure specified in Section 725.984(d).

"Point of waste origination" means as follows:

> When the facility owner or operator is the generator of the hazardous waste, the "point of waste origination" means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste, as defined in 35 Ill. Adm. Code 721.
>
> BOARD NOTE: In this case, this term is being used in a manner similar to the use of the term "point of generation" in air standards established for waste management operations under authority of the federal Clean Air Act in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), ~~incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.
>
> When the facility owner and operator are not the generator of the

hazardous waste, "point of waste origination" means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

"Point of waste treatment" means the point where a hazardous waste to be treated in accordance with Section 725.983(c)(2) exits the treatment process. Any waste determination must be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

"Safety device" means a closure device, such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart CC, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted so that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw), as determined by direct measurement or by knowledge of the waste, in accordance with the requirements of Section 725.984. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C (77° F) must be included. Appendix F of this Part presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

"Waste determination" means performing all applicable procedures in accordance with the requirements of Section 725.984 to determine whether a hazardous waste meets standards specified in this Subpart CC. Examples of a waste determination

include performing the procedures in accordance with the requirements of Section 725.984 to determine the average VO concentration of a hazardous waste at the point of waste origination, determining the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste, the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards, or determining the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

"Waste stabilization process" means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method ~~9095~~ 9095B (Paint Filter Liquids Test) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). A waste stabilization process includes mixing the hazardous waste with binders or other materials and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification." This does not include the addition of absorbent materials to the surface of a waste to absorb free liquid without mixing, agitation, or subsequent curing.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.983 Standards: General

a) This Section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this Subpart CC.

b) The owner or operator must control air pollutant emissions from each hazardous waste management unit in accordance with the standards specified in Sections 725.985 through 725.988, as applicable to the hazardous waste management unit, except as provided for in subsection (c) of this Section.

c) A tank, surface impoundment, or container is exempted from standards specified in Sections 725.985 through 725.988, provided that all hazardous waste placed in the waste management unit is one of the following:

1) A tank, surface impoundment, or container for which all hazardous waste entering the unit has an average VO concentration at the point of waste origination of less than 500 parts per million by weight (ppmw). The average VO concentration must be determined by the procedures specified in Section 725.984(a). The owner or operator must review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous waste streams entering

the unit;

2) A tank, surface impoundment, or container for which the organic content of all the hazardous waste entering the waste management unit has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

A) The process removes or destroys the organics contained in the hazardous waste to such a level that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process must be determined using the procedures specified in Section 725.984(b);

B) The process removes or destroys the organics contained in the hazardous waste to such a level that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 100 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 725.984(b);

C) The process removes or destroys the organics contained in the hazardous waste to such a level that the actual organic mass removal rate (MR) for the process is equal to or greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process must be determined using the procedures specified in Section 725.984(b);

D) The process is a biological process that destroys or degrades the organics contained in the hazardous waste so that either of the following conditions is met:

i) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process must be determined using the procedures specified in Section 725.984(b); and

ii) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process must be determined using the procedures specified in Section 725.984(b);

E) The process is one that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

i) From the point of waste origination through the point where the hazardous waste enters the treatment process, the hazardous waste is continuously managed in waste management units that use air emission controls in accordance with the standards specified in Section 725.985 through Section 725.988, as applicable to the waste management unit;

ii) From the point of waste origination through the point where the hazardous waste enters the treatment process, any transfer of the hazardous waste is accomplished through continuous hard-piping or other closed system transfer that does not allow exposure of the waste to the atmosphere;

BOARD NOTE: The USEPA considers a drain system that meets the requirements of federal subpart RR of 40 CFR 63~~,~~ ~~"~~(National Emission Standards for Individual Drain Systems)~~,"~~ to be a closed system.

iii) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual hazardous waste streams entering the process or 500 ppmw, whichever value is lower. The average VO concentration of each individual hazardous waste stream at the point of waste origination must be determined using the procedures specified in Section 725.984(a). The average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 725.984(b);

F) A process that removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction

efficiency (R) for the process is equal to or greater than 95 percent and the owner or operator certifies that the average VO concentration at the point of waste origination for each of the individual waste streams entering the process is less than 10,000 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste origination must be determined using the procedures specified in Section 724.983(b) and Section 724.983(a), respectively;

G) A hazardous waste incinerator for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of 35 Ill. Adm. Code 724; or

ii) The owner or operator has designed and operates the incinerator in accordance with the interim status requirements of Subpart O of this Part;

H) A boiler or industrial furnace for which either of the following conditions is true:

i) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

ii) The owner or operator has designed and operates the industrial furnace or incinerator in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726; and

I) For the purpose of determining the performance of an organic destruction or removal process in accordance with the conditions in each of subsections (c)(2)(A) through (c)(2)(F) of this Section, the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the following VO concentration:

i) If Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), is used for the analysis, one-half the blank value determined in the method at Section 4.4 of Method 25D or a value of 25 ppmw,

whichever is less; and

ii) If any other analytical method is used, one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C;

3) A tank or surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of subsection (c)(2)(D) of this Section;

4) A tank, surface impoundment, or container for which all hazardous waste placed in the unit fulfills either of the following two conditions:

A) It meets the numerical concentration limits for organic hazardous constituents, applicable to the hazardous waste, as specified in Table T to 35 Ill. Adm. Code 728; or

B) The organic hazardous constituents in the waste have been treated by the treatment technology established by USEPA for the waste, as set forth in 35 Ill. Adm. Code 728.142(a), or treated by an equivalent method of treatment approved by the Agency pursuant to 35 Ill. Adm. Code 728.142(b); or

5) A tank used for bulk feed of hazardous waste to a waste incinerator, and all of the following conditions are met:

A) The tank is located inside an enclosure vented to a control device that is designed and operated in accordance with all applicable requirements specified under federal subpart FF of 40 CFR 61~~,~~ ~~"~~(National Emission Standards for Benzene Waste Operations)~~,"~~ incorporated by reference in 35 Ill. Adm. Code ~~720.111(a)~~ 720.111(b), for a facility at which the total annual benzene quantity from the facility waste is equal to or greater than 10 megagrams (11 tons) per year;

B) The enclosure and control device serving the tank were installed and began operation prior to November 25, 1996; and

C) The enclosure is designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~

(VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical or electrical equipment; or to direct air flow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" annually.

d) The Agency may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container that is exempted from using air emission controls under the provisions of this Section as follows:

1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination must be performed using direct measurement in accordance with the applicable requirements of Section 725.984(a). The waste determination for a hazardous waste at the point of waste treatment must be performed in accordance with the applicable requirements of Section 725.984(b);

2) In performing a waste determination pursuant to subsection (d)(1) of this Section, the sample preparation and analysis must be conducted as follows:

A) In accordance with the method used by the owner or operator to perform the waste analysis, except in the case specified in subsection (d)(2)(B) of this Section; and

B) If the Agency determines that the method used by the owner or operator was not appropriate for the hazardous waste managed in the tank, surface impoundment, or container, then the Agency may choose an appropriate method;

3) Where the owner or operator is requested to perform the waste determination, the Agency may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis;

4) Where the results of the waste determination performed or requested by the Agency do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of subsection (d)(1) of this Section must be used to establish compliance with the requirements of this Subpart CC; and

5) Where the owner or operator has used an averaging period greater than one hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Agency may elect to establish compliance with this Subpart CC by performing or requesting that the owner or operator perform a waste determination using direct measurement, based on waste samples collected within a 1-hour period as follows:

A) The average VO concentration of the hazardous waste at the point of waste origination must be determined by direct measurement in accordance with the requirements of Section 725.984(a);

B) Results of the waste determination performed or requested by the Agency showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 500 ppmw must constitute noncompliance with this Subpart CC, except in a case as provided for in subsection (d)(4)(C) of this Section; and

C) Where the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than one hour to be less than 500 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 500 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Sections 725.984(a) and 725.990 must be considered by the Agency together with the results of the waste determination performed or requested by the Agency in establishing compliance with this Subpart CC.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.984 Waste Determination Procedures

a) Waste determination procedure for volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

1) An owner or operator must determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Section 725.983(c)(1) from using air emission controls in accordance with standards specified in

Section 725.985 through Section 725.988, as applicable to the waste management unit.

A) An owner or operator must make an initial determination of the average VO concentration of the waste stream before the first time any portion of the material in the hazardous waste stream is placed in a waste management unit exempted under the provisions of Section 725.983(c)(1) from using air emission controls. Thereafter, an owner or operator must make an initial determination of the average VO concentration of the waste stream for each averaging period that a hazardous waste is managed in the unit.

B) An owner or operator must perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the VO concentration limits specified in Section 725.983(c)(1).

2) For a waste determination that is required by subsection (a)(1) of this Section, the average VO concentration of a hazardous waste at the point of waste origination must be determined using either direct measurement, as specified in subsection (a)(3) of this Section, or by knowledge of the waste, as specified in subsection (a)(4) of this Section.

3) Direct measurement to determine average VO concentration of a hazardous waste at the point of waste origination.

A) Identification. The owner or operator must identify and record the point of waste origination for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste origination in such a manner that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four

samples, must be collected for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures ~~in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), or~~ in Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii) of this Section, must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with ~~one or more of the methods listed in subsections (a)(3)(C)(i) through (a)(3)(C)(ix) of this Section, including the appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration. If~~ Method 25D in appendix A to 40 CFR 60~~, appendix A, incorporated by reference~~

~~in 35 Ill. Adm. Code 720.111(b), is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination~~ for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C (77° F). ~~Each of the analytical methods listed in subsections (a)(3)(C)(ii) through (a)(3)(C)(vii) of this Section has an associated list of approved chemical compounds for which USEPA considers the method appropriate for measurement. If an owner or operator uses USEPA Method 624, 625, 1624, or 1625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b), to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR 136.4 and 136.5, incorporated by reference in 35 Ill. Adm. Code 720.111(b), must be followed. If an owner or operator uses USEPA Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), to analyze one or more compounds that are not on that method's published list, the procedures in subsection (a)(3)(C)(viii) of this Section must be followed.~~ At the owner's or operator's discretion, the owner or operator may adjust test data measured by ~~a~~ any appropriate method ~~other than Method 25D to the corresponding average VO concentration value that would have been obtained, had the waste samples been analyzed using Method 25D~~ to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25° C (77° F). To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25° C contained in the waste. Constituent-specific adjustment factors (f_{m25D}) can be obtained by contacting the USEPA, Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) of this Section and provided the requirement is met to reflect all organic compounds in the waste with Henry's law constant values greater

than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m_3) at 25° C.

~~i) Method 25D in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~ii) Method 624 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~iii) Method 625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b). Perform corrections to the compounds for which the analysis is being conducted based on the "accuracy as recovery" using the factors in Table 7 of the method.~~

~~iv) Method 1624 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~v) Method 1625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~vi) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program must include the elements set forth in subsection (a)(3)(F) of this Section.~~

~~vii) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program must include the elements set forth in subsection (a)(3)(F) of this Section.~~

~~viii) Any other USEPA standard method that has been validated in accordance with "Alternative Validation Procedure for USEPA Waste and Wastewater Methods," 40 CFR 63, appendix D, incorporated by reference in 35 Ill. Adm. Code 720.111(b). As an alternative, other USEPA standard methods may be validated by the procedure specified in subsection (a)(3)(C)(ix) of this Section.~~

~~ix) Any other analysis method that has been validated in~~

~~accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR 63, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other Sections of Method 301 are not required.~~

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63 (Alternative Validation Procedure for EPA Waste and Wastewater Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b); or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations.

i) The average VO concentration ($\overline{C}$) on a mass-weighted basis must be calculated by using the results for all waste determinations conducted in accordance with subsections (a)(3)(B) and (a)(3)(C) of this Section and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

$\overline{C}$ = Average VO concentration of the hazardous

waste at the point of waste origination on a mass-weighted basis, in ppmw~~;~~

i = Individual waste determination "i" of the hazardous waste~~;~~

n = Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed one year)~~;~~

Q_i = Mass quantity of the hazardous waste stream represented by C_i, in kg/hr~~;~~

Q_T = Total mass quantity of the hazardous waste during the averaging period, in kg/hr~~; and~~

C_i = Measured VO concentration of waste determination "i," as determined in accordance with subsection (a)(3)(C) of this Section (i.e., the average of the four or more samples specified in subsection (a)(3)(B)(ii) of this Section), in ppmw.

ii) For the purpose of determining C_i, for individual waste samples analyzed in accordance with subsection (a)(3)(C) of this Section, the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the VO concentration determined according to subsection (a)(3)(G) of this Section.

E) Provided that the test method is appropriate for the waste as required under subsection (a)(3)(C) of this Section, the Agency must determine compliance based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

F) The quality assurance program elements required under subsections (a)(3)(C)(vi) and (a)(3)(C)(vii) of this Section are as follows:

i) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps.

ii) Measurement of the overall accuracy and precision of the

specific procedures.

BOARD NOTE: Subsections (a)(3)(F)(i) and (a)(3)(F)(ii) are derived from 40 CFR 265.984(a)(3)(iii)(F)(1), (a)(3)(iii)(F)(2), (a)(3)(iii)(G)(1), and (a)(3)(iii)(G)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

G) VO concentrations below the limit of detection must be considered to be as follows:

i) If Method 25D ~~in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ is used for the analysis, the VO concentration must be considered to be one-half the blank value determined in the method at Section 4.4 of Method 25D ~~in 40 CFR 60, appendix A~~.

ii) If any other analytical method is used, the VO concentration must be considered to be one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C.

BOARD NOTE: Subsections (a)(3)(G)(i) and (a)(3)(G)(ii) are derived from 40 CFR 265.984(a)(3)(iv)(A)(1) and (a)(3)(iv)(A)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

4) Use of owner or operator knowledge to determine average VO concentration of a hazardous waste at the point of waste origination.

A) Documentation must be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that may be used as the basis for knowledge include the following: material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

B) If test data are used as the basis for knowledge, then the owner or operator must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 ~~in 40 CFR 63, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b),~~ as the basis for knowledge of the waste.

C) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value that would have been obtained had the waste samples been analyzed using Method 25D ~~in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).

D) In the event that the Agency and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement, as specified in subsection (a)(3) of this Section, must be used to establish compliance with the applicable requirements of this Subpart CC. The Agency may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of subsection (a)(3)(C) of this Section.

b) Waste determination procedures for treated hazardous waste.

1) An owner or operator must perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of Section 725.983(c)(2)(A) through (c)(2)(F) from using air emission controls in accordance with the standards specified in Sections 725.985 through 725.988, as applicable to the waste management unit.

A) An owner or operator must make an initial determination of the average VO concentration of the waste stream before the first time any portion of the material in the treated waste stream is placed in the waste management unit exempt under Section 725.983(c)(2),

(c)(3), or (c)(4) from using air emission controls. Thereafter, an owner or operator must update the information used for the waste determination at least once every 12 months following the date of the initial waste determination.

B) An owner or operator must perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to such a level that the applicable treatment conditions specified in Section 725.983 (c)(2), (c)(3), or (c)(4) are not achieved.

2) The owner or operator must designate and record the specific provision in Section 725.983(c)(2) under which the waste determination is being performed. The waste determination for the treated hazardous waste must be performed using the applicable procedures specified in subsections (b)(3) through (b)(9) of this Section.

3) Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.

A) Identification. The owner or operator must identify and record the point of waste treatment for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste treatment in such a manner that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four samples, must be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the hazardous waste stream. One or more waste determinations may be required to represent

the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process generating or treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of an acceptable ~~sampling plan includes a plan incorporating sample collection and handling procedures in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication No. SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), or~~ sample collection and handling procedures for a total organic constituent concentration may be found in Method 25D ~~in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii) of this Section, must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with ~~one or more of the methods listed in subsections (b)(3)(C)(i) through (b)(3)(C)(ix) of this Section, including appropriate quality assurance and quality control (QA/QC) checks and use of target compounds for calibration~~ Method 25D for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed, and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6}

atmospheres/gram-mole/m^3) at 25°C (75° F). When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of 35 Ill. Adm. Code 724.982(c)(2)(A) through (c)(2)(F) or Section 725.983(c)(2)(A) through (c)(2)(F) are met, then the waste samples must be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. ~~If Method 25D in 40 CFR 60, appendix A is not used, then one or more methods should be chosen that are appropriate to ensure that the waste determination accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 degrees Celsius. Each of the analytical methods listed in subsections (b)(3)(C)(ii) through (b)(3)(C)(vii) of this Section has an associated list of approved chemical compounds, for which USEPA considers the method appropriate for measurement. If an owner or operator uses USEPA Method 624, 625, 1624, or 1625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b), to analyze one or more compounds that are not on that method's published list, the Alternative Test Procedure contained in 40 CFR 136.4 and 136.5, incorporated by reference in 35 Ill. Adm. Code 720.111(b), must be followed. If an owner or operator uses USEPA Method 8260 or 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), to analyze one or more compounds that are not on that method's published list, the procedures in subsection (b)(3)(C)(viii) of this Section must be followed.~~ At the owner's or operator's discretion, the owner or operator may adjust test data ~~measured~~ obtained by ~~a~~ any appropriate method ~~other than Method 25D to the corresponding average VO concentration value that would have been obtained, had the waste samples been analyzed using Method 25D~~ to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25° C. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (f_{m25D}). If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25° C contained in the waste. Constituent-

specific adjustment factors (f_{m25D}) can be obtained by contacting the USEPA, Waste and Chemical Processes Group, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) of this Section and provided the requirement is met to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C.

~~i) Method 25D in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~ii) Method 624 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~iii) Method 625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b). Perform corrections to the compounds for which the analysis is being conducted based on the "accuracy as recovery" using the factors in Table 7 of the method.~~

~~iv) Method 1624 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~v) Method 1625 in 40 CFR 136, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b).~~

~~vi) Method 8260 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). Maintain a formal quality assurance program consistent with the requirements of Method 8260. The quality assurance program must include the elements set forth in subsection (b)(3)(E) of this Section.~~

~~vii) Method 8270 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). Maintain a formal quality assurance program consistent with the requirements of Method 8270. The quality assurance program must include the elements set forth in subsection (b)(3)(E) of this Section.~~

~~viii) Any other USEPA standard method that has been validated in accordance with "Alternative Validation Procedure for~~

~~EPA Waste and Wastewater Methods," 40 CFR 63, appendix D, incorporated by reference in 35 Ill. Adm. Code 720.111(b). As an alternative, other USEPA standard methods may be validated by the procedure specified in subsection (b)(3)(C)(ix) of this Section.~~

~~ix) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 in 40 CFR 63, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other Sections of Method 301 are not required.~~

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63; or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301. The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations. The average VO concentration ($\overline{C}$) on a mass-weighted basis must be calculated by using the results for all samples analyzed in accordance with subsection (b)(3)(C) of this Section and the following equation:

$$\overline{C} = \frac{1}{Q_T} x \sum_{i=1}^{n} (Q_i x C_i)$$

Where:

$\overline{C}$ = Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, in ppmw~~;~~

i = Individual determination "i" of the hazardous waste~~;~~

n = Total number of waste determinations of the hazardous waste collected for the averaging period (not to exceed one year)~~;~~

Q_i = Mass quantity of the hazardous waste stream represented by C_i, in kg/hr~~;~~

Q_T = Total mass quantity of hazardous waste during the averaging period, in kg/hr~~; and~~

C_i = Measured VO concentration of waste determinations "i," as determined in accordance with the requirements of subsection (b)(3)(C) of this Section (i.e., the average of the four or more samples specified in subsection (b)(3)(B)(ii) of this Section), in ppmw.

E) Provided that the test method is appropriate for the waste as required under subsection (b)(3)(C) of this Section, compliance must be determined based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

4) Procedure to determine the exit concentration limit (C_t) for a treated hazardous waste.

A) The point of waste origination for each hazardous waste treated by the process at the same time must be identified.

B) If a single hazardous waste stream is identified in subsection (b)(4)(A) of this Section, then the exit concentration limit (C_t) must be 500 ppmw.

C) If more than one hazardous waste stream is identified in subsection (b)(4)(A) of this Section, then the average VO concentration of each hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a) of this Section. The exit concentration limit (C_t) must be calculated by using the results determined for each individual hazardous waste stream and the following equation:

$$C_t = \frac{\sum_{x=1}^{m} (Q_x \times \overline{C}_x) + \sum_{y=1}^{n} (Q_y \times 500\text{ppmw})}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

Where:

C_t = Exit concentration limit for treated hazardous waste, in ppmw~~;~~

x = Individual hazardous waste stream "x" that has an average VO concentration less than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a) of this Section~~;~~

y = Individual hazardous waste stream "y" that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a) of this Section~~;~~

m = Total number of "x" hazardous waste streams treated by process~~;~~

n = Total number of "y" hazardous waste streams treated by process~~;~~

Q_x = Annual mass quantity of hazardous waste stream "x," in kg/yr~~;~~

Q_y = Annual mass quantity of hazardous waste stream "y," in kg/yr~~; and~~

$\overline{C}_x$ = Average VO concentration of hazardous waste stream "x" at the point of waste origination, as determined in accordance with the requirements of subsection (a) of this Section, in ppmw.

5) Procedure to determine the organic reduction efficiency (R) for a treated hazardous waste.

A) The organic reduction efficiency (R) for a treatment process must be determined based on results for a minimum of three consecutive runs.

B) All hazardous waste streams entering the process and all hazardous waste streams exiting the treatment process must be identified. The owner or operator must prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.

C) For each run, information must be determined for each hazardous waste stream identified in subsection (b)(5)(B) of this Section, using the following procedures:

i) The mass quantity of each hazardous waste stream entering the process (Q_b) and the mass quantity of each hazardous waste stream exiting the process (Q_a) must be determined; and

ii) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process (C_b) during the run must be determined in accordance with the requirements of subsection (a)(3) of this Section. The average VO concentration at the point of waste treatment of each hazardous waste stream exiting the process (C_a) during the run must be determined in accordance with the requirements of subsection (b)(3) of this Section.

D) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) must be calculated by using the results determined in accordance with subsection (b)(5)(C) of this Section and the following equations:

$$E_b = \frac{1}{10^6} \sum_{j=1}^{m} (Q_{bj} x \overline{C_{bj}})$$

$$E_a = \frac{1}{10^6} \sum_{j=1}^{m} (Q_{aj} x \overline{C_{aj}})$$

Where:

E_a = Waste volatile organic mass flow exiting the process, in kg/hr~~;~~

E_b = Waste volatile organic mass flow entering the process, in kg/hr~~;~~

m = Total number of runs (at least 3);

j = Individual run "j"~~;~~

Q_{bj} = Mass quantity of hazardous waste entering the process during run "j," in kg/hr~~;~~

Q_{aj} = Average mass quantity of waste exiting the process during run "j," in kg/hr~~;~~

$\overline{C_{aj}}$ = Average VO concentration of hazardous waste exiting the process during run "j," as determined in accordance with the requirements of subsection (b)(3) of this Section, in ppmw~~; and~~

$\overline{C_{bj}}$ = Average VO concentration of hazardous waste entering the process during run "j," as determined in accordance with the requirements of subsection 725.984 (a)(3) of this Section, in ppmw.

E) The organic reduction efficiency of the process must be calculated by using the results determined in accordance with subsection (b)(5)(D) of this Section and the following equation:

$$R = \frac{E_b - E_a}{E_b} x100\%$$

Where:

R = Organic reduction efficiency, in percent~~;~~

E_b = Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D) of this Section, in kg/hr~~; and~~

E_a = Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D) of this

Section, in kg/hr.

6) Procedure to determine the organic biodegradation efficiency (R_{bio}) for a treated hazardous waste.

A) The fraction of organics biodegraded (F_{bio}) must be determined using the procedure specified in appendix C to 40 CFR 63~~,~~ ~~appendix C~~ (Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

B) The organic biodegradation efficiency (R_{bio}) must be calculated by using the following equation:

$$R_{bio} = F_{bio} \times 100\%$$

Where:

R_{bio} = Organic biodegradation efficiency, in percent~~; and~~

F_{bio} = Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(6)(A) of this Section.

7) Procedure to determine the required organic mass removal rate (RMR) for a treated hazardous waste.

A) All of the hazardous waste streams entering the treatment process must be identified.

B) The average VO concentration of the hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a) of this Section.

C) For each individual hazardous waste stream that has an average volatile organic concentration equal to or greater than 500 ppmw at the point of waste origination, the average volumetric flow rate of hazardous waste and the density of the hazardous waste stream at the point of waste origination must be determined.

D) The required organic mass removal rate (RMR) for the hazardous waste must be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the following equation:

$$RMR = \sum_{y=1}^{n} \left[V_y \times k_y \times \frac{(\overline{C}_y - 500\text{ppmw})}{10^6} \right]$$

Where:

RMR = Required organic mass removal rate, in kg/hr~~;~~

y = Individual hazardous waste stream "y" that has an average volatile organic (VO) concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a) of this Section~~;~~

n = Total number of "y" hazardous waste streams treated by process~~;~~

V_y = Average volumetric flow rate of hazardous waste stream "y" at the point of waste origination, in m^3/hr~~;~~

k_y = Density of hazardous waste stream "y," in kg/m^3~~;~~ ~~and~~

$\overline{C}_y$ = Average VO concentration of hazardous waste stream "y" at the point of waste origination, as determined in accordance with the requirements of subsection (a) of this Section, in ppmw.

8) Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.

A) The actual organic mass removal rate (MR) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) must be determined in accordance with the requirements of subsection (b)(5)(D) of this Section.

C) The actual organic mass removal rate (MR) must be calculated by using the mass flow rate determined in accordance with the requirements of subsection (b)(8)(B) of this Section and the following equation:

$$MR = E_b - E_a$$

Where:

MR = Actual organic mass removal rate, in kg/hr~~;~~

E_b = Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D) of this Section, in kg/hr~~; and~~

E_a = Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D) of this Section, in kg/hr.

9) Procedure to determine the actual organic mass biodegradation rate (MR_{bio}) for a treated hazardous waste.

A) The actual organic mass biodegradation rate (MR_{bio}) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste organic mass flow entering the process (E_b) must be determined in accordance with the requirements of subsection (b)(5)(D) of this Section.

C) The fraction of organic biodegraded (F_{bio}) must be determined using the procedure specified in appendix C to 40 CFR 63~~; appendix C, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~ (Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit).

D) The actual organic mass biodegradation rate (MR_{bio}) must be calculated by using the mass flow rates and fraction of organic biodegraded, as determined in accordance with the requirements of subsections (b)(9)(B) and (b)(9)(C) of this Section, respectively, and the following equation:

$$MR_{bio} = E_b \times F_{bio}$$

Where:

MR_{bio} = Actual organic mass biodegradation rate, in kg/hr~~;~~

E_b = Waste organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D) of this Section, in kg/hr~~; and~~

F_{bio} = Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(9)(C) of this Section.

c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

1) An owner or operator must determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with standards specified in Section 725.985(c).

2) An owner or operator must use either direct measurement, as specified in subsection (c)(3) of this Section, or knowledge of the waste, as specified by subsection (c)(4) of this Section, to determine the maximum organic vapor pressure that is representative of the hazardous waste composition stored or treated in the tank.

3) Direct measurement to determine the maximum organic vapor pressure of a hazardous waste.

A) Sampling. A sufficient number of samples must be collected to be representative of the waste contained in the tank. All samples must be conducted and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste are collected so that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of ~~an~~ acceptable ~~sampling plan includes a plan incorporating~~ sample collection and handling procedures ~~in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication No. SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), or~~ may be found in Method 25D ~~in 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.

B) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:

i) Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples) in appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

ii) Methods described in ~~American Petroleum Institute Publication~~ API publication 2517 (Evaporative Loss from External Floating-Roof Tanks), incorporated by reference in 35 Ill. Adm. Code 720.111(a);

iii) Methods obtained from standard reference texts;

iv) ASTM Method D 2879-92 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or

v) Any other method approved by the Agency.

4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous waste. Documentation must be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in Section 725.985(b)(1)(A) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

d) The procedure for determining no detectable organic emissions for the purpose of complying with this Subpart CC is as follows:

1) The test must be conducted in accordance with the procedures specified in Method 21 (Determination of Volatile Organic Compound Leaks) of appendix A to 40 CFR 60~~, appendix A~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices must be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to, any of the following: the interface of the cover and its foundation mounting, the periphery of any opening on the cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure relief valve.

2) The test must be performed when the unit contains a hazardous waste having an organic concentration representative of the range of concentrations for the hazardous waste expected to be managed in the unit. During the test, the cover and closure devices must be secured in the closed position.

3) The detection instrument must meet the performance criteria of Method 21 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~, except the instrument response factor criteria in Section 3.1.2(a) of Method 21 must be for the average composition of the organic constituents in the hazardous waste placed in the waste management unit, not for each individual organic constituent.

4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Method 21 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.

5) Calibration gases must be as follows:

   A) Zero air (less than 10 ppmv hydrocarbon in air), and

   B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

6) The background level must be determined according to the procedures in Method 21 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~.

7) Each potential leak interface must be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Method 21 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~. In the case when the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface must be sampled. In the case when the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet must be placed at approximately the center of the exhaust area to the atmosphere.

8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison must be as specified in subsection (d)(9) of this Section. If

the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.985 Standards: Tanks

a) The provisions of this Section apply to the control of air pollutant emissions from tanks for which Section 725.983(b) references the use of this Section for such air emission control.

b) The owner or operator must control air pollutant emissions from each tank subject to this Section in accordance with the following requirements, as applicable:

1) For a tank that manages hazardous waste that meets all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C) of this Section, the owner or operator must control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in subsection (c) of this Section or the Tank Level 2 controls specified in subsection (d) of this Section.

A) The hazardous waste in the tank has a maximum organic vapor pressure that is less than the maximum organic vapor pressure limit for the tank's design capacity category, as follows:

i) For a tank design capacity equal to or greater than 151 m^3 (5333 ft^3 or 39,887 gal), the maximum organic vapor pressure limit for the tank is 5.2 kPa (0.75 psia or 39 mm Hg);

ii) For a tank design capacity equal to or greater than 75 m^3 (2649 ft^3 or 19,810 gal) but less than 151 m^3 (5333 ft^3 or 39,887 gal), the maximum organic vapor pressure limit for the tank is 27.6 kPa (4.0 psia or 207 mm Hg); or

iii) For a tank design capacity less than 75 m^3 (2649 ft^3 or 19,810 gal), the maximum organic vapor pressure limit for the tank is 76.6 kPa (11.1 psia or 574 mm Hg).

B) The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous waste is determined for the purpose of complying with subsection (b)(1)(A) of this Section.

C) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process, as defined in Section 725.981.

2) For a tank that manages hazardous waste that does not meet all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C) of this Section, the owner or operator must control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of subsection (d) of this Section. Examples of tanks required to use Tank Level 2 controls include the following: a tank used for a waste stabilization process and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category, as specified in subsection (b)(1)(A) of this Section.

c) An owner or operator controlling air pollutant emissions from a tank using Tank Level 1 controls must meet the requirements specified in subsections (c)(1) through (c)(4) of this Section:

1) The owner or operator must determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 725.984(c). Thereafter, the owner or operator must perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in subsection (b)(1)(A) of this Section, as applicable to the tank.

2) The tank must be equipped with a fixed roof designed to meet the following specifications:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

B) The fixed roof must be installed in such a manner that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

C) Either of the following must be true of each opening in the fixed roof and of any manifold system associated with the fixed roof must be either:

i) The opening or manifold system is equipped with a closure device designed to operate so that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

ii) The opening or manifold system is connected by a closed-vent system that is vented to a control device. The control device must remove or destroy organics in the vent stream, and it must be operating whenever hazardous waste is managed in the tank, except as provided for in subsection (c)(2)(E).

D) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and which will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the following: organic vapor permeability; the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

E) The control device operated pursuant to subsection (c)(2)(C) of this Section needs not remove or destroy organics in the vent stream under the following conditions:

i) During periods when it is necessary to provide access to the tank for performing the activities of subsection (c)(2)(E)(ii) of this Section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner

or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device; and

ii) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for the removal of accumulated sludge or other residues from the bottom of the tank.

BOARD NOTE: Subsections (c)(2)(E)(i) and (c)(2)(E)(ii) are derived from 40 CFR 265.985(c)(2)(iii)(B)(1) and (c)(2)(iii)(B)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

3) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position, except as follows:

A) Opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of tank.

B) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations; applicable regulations; fire protection and prevention codes; standard

engineering codes and practices; or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

C) Opening of a safety device, as defined in Section 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator must inspect the air emission control equipment in accordance with the following requirements.

A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The owner or operator must perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year, except under the special conditions provided for in subsection (l) of this Section.

C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.

D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(b).

d) An owner or operator controlling air pollutant emissions from a tank using Tank Level 2 controls must use one of the following tanks:

1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in subsection (e) of this Section;

2) A tank equipped with an external floating roof in accordance with the requirements specified in subsection (f) of this Section;

3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (g) of this Section;

4) A pressure tank designed and operated in accordance with the requirements specified in subsection (h) of this Section; or

5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in subsection (i) of this Section.

e) The owner or operator that controls air pollutant emissions from a tank using a fixed roof with an internal floating roof must meet the requirements specified in subsections (e)(1) through (e)(3) of this Section.

1) The tank must be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

A) The internal floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The internal floating roof must be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

i) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Section 725.981; or

ii) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

C) The internal floating roof must meet the following specifications:

i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface;

ii) Each opening in the internal floating roof must be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains;

iii) Each penetration of the internal floating roof for the purpose of sampling must have a slit fabric cover that

covers at least 90 percent of the opening;

iv) Each automatic bleeder vent and rim space vent must be gasketed;

v) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover; and

vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.

2) The owner or operator must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical;

B) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports; and

C) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof must be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

3) The owner or operator must inspect the internal floating roof in accordance with the procedures specified as follows:

A) The floating roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, the following: when the internal floating roof is not floating on the surface of the liquid inside the tank; when liquid has accumulated on top of the internal floating roof; when any portion of the roof seals have detached from the roof rim; when holes, tears, or other openings are visible in the seal fabric; when the gaskets no longer close off the hazardous waste surface from the atmosphere; or when the slotted membrane has more than 10 percent open area;

B) The owner or operator must inspect the internal floating roof components as follows, except as provided in subsection (e)(3)(C)

of this Section:

i) Visually inspect the internal floating roof components through openings on the fixed roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and

ii) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least once every 10 years;

C) As an alternative to performing the inspections specified in subsection (e)(3)(B) of this Section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years;

D) Prior to each inspection required by subsection (e)(3)(B) or (e)(3)(C) of this Section, the owner or operator must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The owner or operator must notify the Agency of the date and location of the inspection as follows:

i) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned, as provided for in subsection (e)(3)(D)(ii) of this Section; and

ii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least seven calendar days before refilling the tank;

E) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section; and

F) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(b).

4) Safety devices, as defined in Section 725.981, may be installed and operated as necessary on any tank complying with the requirements of this subsection (e).

f) The owner or operator that controls air pollutant emissions from a tank using an external floating roof must meet the requirements specified in subsections (f)(1) through (f)(3) of this Section.

1) The owner or operator must design the external floating roof in accordance with the following requirements:

A) The external floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports;

B) The floating roof must be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) The primary seal must be a liquid-mounted seal or a metallic shoe seal, as defined in Section 725.981. The total area of the gaps between the tank wall and the primary seal must not exceed 212 square centimeters (cm^2) per meter (10.0 in^2 per foot) of tank diameter, and the width of any portion of these gaps must not exceed 3.8 centimeters (cm) (1.5 inches). If a metallic shoe seal is used for the primary seal, the metallic shoe seal must be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 centimeters (24 inches) above the liquid surface.

ii) The secondary seal must be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal must not exceed 21.2 cm^2 per meter (1.0 in^2 per foot) of tank diameter, and the width of any portion of these gaps must not exceed 1.3 cm

(0.5 inch); and

C) The external floating roof must meet the following specifications:

i) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof must provide a projection below the liquid surface;

ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal, or lid;

iii) Each access hatch and each gauge float well must be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position;

iv) Each automatic bleeder vent and each rim space vent must be equipped with a gasket;

v) Each roof drain that empties into the liquid managed in the tank must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening;

vi) Each unslotted and slotted guide pole well must be equipped with a gasketed sliding cover or a flexible fabric sleeve seal;

vii) Each unslotted guide pole must be equipped with a gasketed cap on the end of the pole;

viii) Each slotted guide pole must be equipped with a gasketed float or other device that closes off the liquid surface from the atmosphere; and

ix) Each gauge hatch and each sample well must be equipped with a gasketed cover.

2) The owner or operator must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical;

B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be secured and maintained in a closed position at all times except when the closure device must be open for access;

C) Covers on each access hatch and each gauge float well must be bolted or fastened when secured in the closed position;

D) Automatic bleeder vents must be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports;

E) Rim space vents must be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting;

F) The cap on the end of each unslotted guide pole must be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank;

G) The cover on each gauge hatch or sample well must be secured in the closed position at all times except when the hatch or well must be opened for access; and

H) Both the primary seal and the secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

3) The owner or operator must inspect the external floating roof in accordance with the procedures specified as follows:

A) The owner or operator must measure the external floating roof seal gaps in accordance with the following requirements:

i) The owner or operator must perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every five years;

ii) The owner or operator must perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year;

iii) If a tank ceases to hold hazardous waste for a period of one year or more, subsequent introduction of hazardous waste into the tank must be considered an initial operation for the purposes of subsections (f)(3)(A)(i) and (f)(3)(A)(ii) of this Section;

iv) The owner or operator must determine the total surface area of gaps in the primary seal and in the secondary seal individually using the procedure set forth in subsection (f)(4)(D) of this Section;

v) In the event that the seal gap measurements do not conform to the specifications in subsection (f)(1)(B) of this Section, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section; and

vi) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(b);

B) The owner or operator must visually inspect the external floating roof in accordance with the following requirements:

i) The floating roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to any of the following: holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices;

ii) The owner or operator must perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (l) of this Section;

iii) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements

of subsection (k) of this Section; and

iv) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(b);

C) Prior to each inspection required by subsection (f)(3)(A) or (f)(3)(B) of this Section, the owner or operator must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The owner or operator must notify the Agency of the date and location of the inspection as follows:

i) Prior to each inspection to measure external floating roof seal gaps as required under subsection (f)(3)(A) of this Section, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before the date the measurements are scheduled to be performed;

ii) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before refilling the tank except when an inspection is not planned, as provided for in subsection (f)(3)(C)(iii) of this Section; and

iii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Regional Administrator at least seven calendar days before refilling the tank;~~ and~~

D) Procedure for determining gaps in the primary seal and in the secondary seal for the purposes of subsection (f)(3)(A)(iv) of this Section:

i) The seal gap measurements must be performed at one or

more floating roof levels when the roof is floating off the roof supports;

ii) Seal gaps, if any, must be measured around the entire perimeter of the floating roof in each place where a 0.32-cm (¼-inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location;

iii) For a seal gap measured under this subsection (f)(3), the gap surface area must be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; and

iv) The total gap area must be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type, as specified in subsection (f)(1)(B) of this Section; and

BOARD NOTE: Subsections (f)(3)(D)(i) through (f)(3)(D)(iv) are derived from 40 CFR 265.1085(f)(3)(i)(D)(1) through (f)(3)(i)(D)(4), which the Board has codified here to comport with Illinois Administrative Code format requirements.

4) Safety devices, as defined in Section 725.981, may be installed and operated as necessary on any tank complying with the requirements of this subsection (f).

g) The owner or operator that controls air pollutant emissions from a tank by venting the tank to a control device must meet the requirements specified in subsections (g)(1) through (g)(3) of this Section.

1) The tank must be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the tank;

B) Each opening in the fixed roof not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate so that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions;

C) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the following: organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed; and

D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 725.988.

2) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank; and

ii) To remove accumulated sludge or other residues from the bottom of a tank; and

B) Opening of a safety device, as defined in Section 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to any of the following: visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices;

B) The closed-vent system and control device must be inspected and monitored by the owner or operator in accordance with the procedures specified in Section 725.988;

C) The owner or operator must perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (l) of this Section;

D) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section; and

E) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(b).

h) The owner or operator that controls air pollutant emissions by using a pressure tank must meet the following requirements:

1) The tank must be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity;

2) All tank openings must be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Section 725.984(d); and

3) Whenever a hazardous waste is in the tank, the tank must be operated as a closed-vent system that does not vent to the atmosphere, except under either of the following two conditions:

A) The tank does not need to be operated as a closed-vent system at those times when the opening of a safety device, as defined in Section 725.981, is required to avoid an unsafe condition; and

B) The tank does not need to be operated as a closed-vent system at those times when the purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section 724.987.

i) The owner or operator that controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device must meet the requirements specified in subsections (i)(1) through (i)(4) of this Section.

1) The tank must be located inside an enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~ (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually;

2) The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section 725.988;

3) Safety devices, as defined in Section 725.981, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of subsections (i)(1) and (i)(2) of this Section; and

4) The owner or operator must inspect and monitor the closed-vent system

and control device, as specified in Section 725.988.

j) The owner or operator must transfer hazardous waste to a tank subject to this Section in accordance with the following requirements:

1) Transfer of hazardous waste, except as provided in subsection (j)(2) of this Section, to the tank from another tank subject to this Section or from a surface impoundment subject to Section 725.986 must be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63~~,~~ ~~"~~(National Emission Standards for Individual Drain Systems)~~,"~~ incorporated by reference in 35 Ill. Adm. Code 720.111(b); and

2) The requirements of subsection (j)(1) of this Section do not apply when transferring a hazardous waste to the tank under any of the following conditions:

A) The hazardous waste meets the average VO concentration conditions specified in Section 725.983(c)(1) at the point of waste origination;

B) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Section 725.983(c)(2); and

C) The hazardous waste meets the requirements of Section 725.983(c)(4).

k) The owner or operator must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(4), (e)(3), (f)(3), or (g)(3) of this Section as follows:

1) The owner or operator must make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible but no later than 45 calendar days after detection except as provided in subsection (k)(2) of this Section; and

2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous waste normally managed in the tank. In this case, the owner or operator must repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect must be

completed before the process or unit resumes operation.

l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year under the following special conditions:

1) Where inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the owner or operator may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

A) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required; and

B) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable Section of this Subpart CC, as frequently as practicable during those times when a worker can safely access the cover; and

2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this Section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.986 Standards: Surface Impoundments

a) The provisions of this Section apply to the control of air pollutant emissions from surface impoundments for which Section 725.983(b) of this Subpart CC references the use of this Section for such air emission control.

b) The owner or operator must control air pollutant emissions from the surface impoundment by installing and operating either of the following:

1) A floating membrane cover in accordance with the provisions specified in subsection (c) of this Section; or

2) A cover that is vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (d) of this Section.

c) The owner or operator that controls air pollutant emissions from a surface

impoundment using a floating membrane cover must meet the requirements specified in subsections (c)(1) through (c)(3) of this Section.

1) The surface impoundment must be equipped with a floating membrane cover designed to meet the following specifications:

A) The floating membrane cover must be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid;

B) The cover must be fabricated from a synthetic membrane material that is either of the following:

i) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm) (0.10 inch); or

ii) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in subsection (c)(1)(B)(i) of this Section and chemical and physical properties that maintain the material integrity for the intended service life of the material;

C) The cover must be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings;

D) Except as provided for in subsection (c)(1)(E) of this Section, each opening in the floating membrane cover must be equipped with a closure device so designed as to operate that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device;

E) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal; and

F) The closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and

designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover must float on the liquid and each closure device must be secured in the closed position, except as follows:

A) Opening of closure devices or removal of the cover is allowed at the following times:

i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly replace the cover and secure the closure device in the closed position, as applicable; or

ii) To remove accumulated sludge or other residues from the bottom of surface impoundment; and

B) Opening of a safety device, as defined in Section 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect the floating membrane cover in accordance with the following procedures:

A) The floating membrane cover and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices;

B) The owner or operator must perform an initial inspection of the floating membrane cover and its closure devices on or before the

date that the surface impoundment becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (g) of this Section;

C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (f) of this Section; and

D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(c).

d) The owner or operator that controls air pollutant emissions from a surface impoundment using a cover vented to a control device must meet the requirements specified in subsections (d)(1) through (d)(3) of this Section.

1) The surface impoundment must be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:

A) The cover and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment;

B) Each opening in the cover not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions using the procedure specified in Section 725.984(d);

C) The cover and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere to the extent practical and which will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface

impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the cover is installed; and

D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 725.988.

2) Whenever a hazardous waste is in the surface impoundment, the cover must be installed with each closure device secured in the closed position and the vapor headspace underneath the cover vented to the control device, except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the cover is allowed at the following times:

i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the surface impoundment; or

ii) To remove accumulated sludge or other residues from the bottom of the surface impoundment; and

B) Opening of a safety device, as defined in Section 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The owner or operator must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The surface impoundment cover and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices;

B) The closed-vent system and control device must be inspected and monitored by the owner or operator in accordance with the procedures specified in Section 725.988;

C) The owner or operator must perform an initial inspection of the air emission control equipment on or before the date that the surface impoundment becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (g) of this Section;

D) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (f) of this Section; and

E) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 725.990(c).

e) The owner or operator must transfer hazardous waste to a surface impoundment subject to this Section in accordance with the following requirements:

1) Transfer of hazardous waste, except as provided in subsection (e)(2) of this Section, to the surface impoundment from another surface impoundment subject to this Section or from a tank subject to Section 725.985 must be conducted using continuous hard-piping or another closed system that does not allow exposure of the waste to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63~~,~~ ~~"~~(National Emission Standards for Individual Drain Systems)~~,"~~ incorporated by reference in 35 Ill. Adm. Code 720.111(b); and

2) The requirements of subsection (e)(1) of this Section do not apply when transferring a hazardous waste to the surface impoundment under any of the following conditions:

A) The hazardous waste meets the average VO concentration conditions specified in Section 725.983(c)(1) at the point of waste origination;

B) The hazardous waste has been treated by an organic destruction or removal process to meet the requirements in Section 725.983(c)(2); or

C) The hazardous waste meets the requirements of Section 725.983(c)(4).

f) The owner or operator must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(3) or (d)(3) of this Section as follows:

1) The owner or operator must make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible but no later than 45 calendar days after detection except as provided in subsection (f)(2) of this Section; and

2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator must repair the defect the next time the process or unit that is generating the hazardous waste managed in the tank stops operation. Repair of the defect must be completed before the process or unit resumes operation.

g) Following the initial inspection and monitoring of the cover, as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required; and

2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable Section of this Subpart CC as frequently as practicable during those times when a worker can safely access the cover.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.987 Standards: Containers

a) The provisions of this Section apply to the control of air pollutant emissions from containers for which Section 725.983(b) references the use of this Section for such air emission control.

b) General requirements.

1) The owner or operator must control air pollutant emissions from each container subject to this Section in accordance with the following requirements, as applicable to the container, except when the following special provisions for waste stabilization processes specified in subsection (b)(2) of this Section apply to the container:

A) For a container having a design capacity greater than 0.1 m^3 (26 gal) and less than or equal to 0.46 m^3 (120 gal), the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c) of this Section;

B) For a container having a design capacity greater than 0.46 m^3 (120 gal) that is not in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c) of this Section; and

C) For a container having a design capacity greater than 0.46 m^3 (120 gal) that is in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in subsection (d) of this Section.

2) When a container having a design capacity greater than 0.1 m^3 (26 gal) is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in subsection (e) of this Section at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.

c) Container Level 1 standards.

1) A container using Container Level 1 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in subsection (f) of this Section;

B) A container equipped with a cover and closure devices that form a continuous barrier over the container openings so that when the cover and closure devices are secured in the closed position there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-

off box) or may be an integral part of the container structural design (e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap); and

C) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous waste in the container so that no hazardous waste is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

2) A container used to meet the requirements of subsection (c)(1)(B) or (c)(1)(C) of this Section must be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity for as long as it is in service. Factors to be considered in selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of contact with the hazardous waste or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

3) Whenever a hazardous waste is in a container using Container Level 1 controls, the owner or operator must install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container, as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation; and

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the

loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first;

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

i) For the purpose of meeting the requirements of this Section, an empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container); and

ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, as defined in 35 Ill. Adm. Code 721.107(b), the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first;

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container;

D) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the container internal pressure in accordance with the design specifications of the container. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating

range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations; and

E) Opening of a safety device, as defined in Section 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator of containers using Container Level 1 controls must inspect the containers and their covers and closure devices as follows:

A) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., it does not meet the conditions for an empty container as specified in 35 Ill. Adm. Code 721.107(b)), the owner or operator must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility (i.e., the date when the container becomes subject to the Subpart CC container standards). For the purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest ~~incorporated by reference in Appendix A to 35 Ill. Adm. Code 722~~, as set forth in the appendix to 40 CFR 262 (~~USEPA~~ Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and ~~8700-22A~~ 8700–22a and Their Instructions)), incorporated by reference in 35 Ill. Adm. Code 720.111(b), as required under Section 725.171. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (c)(4)(C) of this Section;

B) In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator must visually inspect the container and its cover and

closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (c)(4)(C) of this Section; and

C) When a defect is detected in the container, cover, or closure devices, the owner or operator must make first efforts at repair of the defect no later than 24 hours after detection, and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage hazardous waste until the defect is repaired.

5) The owner or operator must maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 (120 gal) or greater which do not meet applicable USDOT regulations, as specified in subsection (f) of this Section, are not managing hazardous waste in light material service.

d) Container Level 2 standards.

1) A container using Container Level 2 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation as specified in subsection (f) of this Section;

B) A container that operates with no detectable organic emissions, as defined in Section 725.981, and determined in accordance with the procedure specified in subsection (g) of this Section; and

C) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Using Pressure-Vacuum Test) in appendix A to 40 CFR 60~~, appendix A, Method 27~~ (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), in accordance with the procedure specified in subsection (h) of this Section.

2) Transfer of hazardous waste into or out of a container using Container Level 2 controls must be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical, considering the physical properties of the hazardous waste and good

engineering and safety practices for handling flammable, ignitable, explosive, reactive or other hazardous materials. Examples of container loading procedures that the USEPA considers to meet the requirements of this subsection (d)(2) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

3) Whenever a hazardous waste is in a container using Container Level 2 controls, the owner or operator must install all covers and closure devices for the container, and secure and maintain each closure device in the closed position, except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous waste or other material to the container as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the owner or operator must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation; and

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first;

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container as follows:

i) For the purpose of meeting the requirements of this Section, an empty container as defined in 35 Ill. Adm. Code 721.107(b) may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be

secured in the closed position on an empty container); and

ii) In the case when discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container as defined in 35 Ill. Adm. Code 721.107(b), the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first;

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container;

D) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the owner or operator based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations; and

E) Opening of a safety device, as defined in Section 725.981, is

allowed at any time conditions require doing so to avoid an unsafe condition.

4) The owner or operator of containers using Container Level 2 controls must inspect the containers and their covers and closure devices as follows:

A) In the case when a hazardous waste already is in the container at the time the owner or operator first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., it does not meet the conditions for an empty container as specified in 35 Ill. Adm. Code 721.107(b)), the owner or operator must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date on which the container is accepted at the facility (i.e., the date when the container becomes subject to the Subpart CC container standards). For the purposes of this requirement, the date of acceptance is the date of signature that the facility owner or operator enters on Item 20 of the Uniform Hazardous Waste Manifest, in the appendix to 40 CFR 262 ~~incorporated by reference in Appendix A to 35 Ill. Adm. Code 722~~ (Uniform Hazardous Waste Manifest and Instructions (USEPA Forms 8700-22 and ~~8700-22A~~ 8700-22a and Their Instructions)), as required under Section 725.171. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (d)(4)(C) of this Section;

B) In the case when a container used for managing hazardous waste remains at the facility for a period of one year or more, the owner or operator must visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (d)(4)(C) of this Section; and

C) When a defect is detected in the container, cover, or closure devices, the owner or operator must make first efforts at repair of the defect no later than 24 hours after detection, and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous waste must be removed from the container and the container must not be used to manage

hazardous waste until the defect is repaired.

e) Container Level 3 standards.

1) A container using Container Level 3 controls is one of the following:

A) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of subsection (e)(2)(B) of this Section; or

B) A container that is vented inside an enclosure that is exhausted through a closed-vent system to a control device in accordance with the requirements of subsections (e)(2)(A) and (e)(2)(B) of this Section.

2) The owner or operator must meet the following requirements, as applicable to the type of air emission control equipment selected by the owner or operator:

A) The container enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~ (VOM Measurement Techniques for Capture Efficiency). The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure, as specified in Section 5.0 to "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually; and

B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 725.988.

3) Safety devices, as defined in Section 725.981, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of subsection (e)(1) of this Section.

4) Owners and operators using Container Level 3 controls in accordance with the provisions of this Subpart CC must inspect and monitor the closed-vent systems and control devices, as specified in Section 725.988.

5) Owners and operators that use Container Level 3 controls in accordance with the provisions of this Subpart CC must prepare and maintain the records specified in Section 725.990(d).

6) The transfer of hazardous waste into or out of a container using Container Level 3 controls must be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA considers to meet the requirements of this subsection (e)(6) include using any one of the following: the use of a submerged-fill pipe or other submerged-fill method to load liquids into the container; the use of a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or the use of a fitted opening in the top of a container through which the hazardous waste is filled and subsequently purging the transfer line before removing it from the container opening.

f) For the purpose of compliance with subsection (c)(1)(A) or (d)(1)(A) of this Section, containers must be used that meet the applicable USDOT regulations on packaging hazardous materials for transportation as follows:

1) The container meets the applicable requirements specified by USDOT in 49 CFR 178~~,~~ ~~"~~(Specifications for Packaging),~~"~~ or 49 CFR 179~~,~~ ~~"~~(Specifications for Tank Cars),~~"~~ ~~both~~ each incorporated by reference in 35 Ill. Adm. Code 720.111(b);

2) Hazardous waste is managed in the container in accordance with the applicable requirements specified by USDOT in subpart B of 49 CFR 107~~,~~ ~~"~~(Exemptions~~";~~), 49 CFR 172~~,~~ ~~"~~(Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements~~";~~), 49 CFR 173~~,~~ ~~"~~(Shippers—General Requirements for Shipments and Packages~~";~~), and 49 CFR 180~~,~~ ~~"~~(Continuing Qualification and Maintenance of Packagings),~~"~~ each incorporated by reference in 35 Ill. Adm. Code 720.111(b);

3) For the purpose of complying with this Subpart CC, no exceptions to the federal 49 CFR 178 or 179 regulations are allowed, except as provided for in subsection (f)(4) of this Section; and

4) For a lab pack that is managed in accordance with the USDOT requirements of 49 CFR 178 (Specifications for Packagings) for the purpose of complying with this Subpart CC, an owner or operator may comply with the exceptions for combination packagings specified by

USDOT in 49 CFR 173.12(b) (Exceptions for Shipments of Waste Materials), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

g) To determine compliance with the no detectable organic emissions requirements of subsection (d)(1)(B) of this Section, the procedure specified in Section 725.984(d) must be used.

1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, must be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

2) The test must be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous wastes expected to be managed in this type of container. During the test, the container cover and closure devices must be secured in the closed position.

h) The procedure for determining a container to be vapor-tight using Method 27 ~~of 40 CFR 60, appendix A~~ for the purpose of complying with subsection (d)(1)(C) of this Section is as follows:

1) The test must be performed in accordance with Method 27 ~~of 40 CFR 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~;

2) A pressure measurement device must be used that has a precision of ±2.5 mm (0.10 inch) water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness; and

3) If the test results determined by Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals (0.11 psig) within five minutes after it is pressurized to a minimum of 4,500 Pascals (0.65 psig), then the container is determined to be vapor-tight.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.990 Recordkeeping Requirements

a) Each owner or operator of a facility subject to the requirements in this Subpart CC must record and maintain the information specified in subsections (b) through (j) of this Section, as applicable to the facility. Except for air emission control equipment design documentation and information required by subsection (j) of this Section, records required by this Section must be maintained in the operating

record for a minimum of three years. Air emission control equipment design documentation must be maintained in the operating record until the air emission control equipment is replaced or is otherwise no longer in service. Information required by subsections (i) and (j) of this Section must be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sections 725.985 through 725.988, in accordance with the conditions specified in Section 725.980(d) or (b)(7), respectively.

b) The owner or operator of a tank using air emission controls in accordance with the requirements of Section 725.985 must prepare and maintain records for the tank that include the following information:

1) For each tank using air emission controls in accordance with the requirements of Section 725.985 of this Subpart CC, the owner or operator must record the following information:

A) A tank identification number (or other unique identification description as selected by the owner or operator); and

B) A record for each inspection required by Section 725.985 that includes the following information:

i) Date inspection was conducted; and

ii) For each defect detected during the inspection, the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 725.985, the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected; and

2) In addition to the information required by subsection (b)(1) of this Section, the owner or operator must record the following information, as applicable to the tank:

A) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 725.985(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Section 725.985(c). The records must include the date and time the samples were collected, the analysis method used, and the analysis results;

B) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Section 725.985(e) must prepare and maintain documentation describing the floating roof design;

C) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 725.985(f) must prepare and maintain the following records:

i) Documentation describing the floating roof design and the dimensions of the tank; and

ii) Records for each seal gap inspection required by Section 725.985(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 725.985(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

D) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Section 725.985(i) must prepare and maintain the following records:

i) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B~~ (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b); and

ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.

c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section 725.986 must prepare and maintain records for the surface impoundment that include the following information:

1) A surface impoundment identification number (or other unique

identification description as selected by the owner or operator);

2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Section 725.986(c);

3) A record for each inspection required by Section 725.986 that includes the following information:

A) Date inspection was conducted; and

B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 725.986(f), the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected; and

4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator must prepare and maintain the records specified in subsection (e) of this Section.

d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section 725.987 must prepare and maintain records that include the following information:

1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T— Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741~~, appendix B, incorporated by reference in 35 Ill. Adm. Code 720.111(b)~~ (VOM Measurement Techniques for Capture Efficiency); and

2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.

e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section 725.988 must prepare and maintain records that include the following information:

1) Documentation for the closed-vent system and control device that includes

the following ~~documentation~~:

A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in subsection (e)(1)(B) of this Section or by performance tests as specified in subsection (e)(1)(C) of this Section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur;

B) If a design analysis is used, then design documentation, as specified in Section 725.935(b)(4). The documentation must include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 725.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications;

C) If performance tests are used, then a performance test plan as specified in Section 725.935(b)(3) and all test results;

D) Information as required by Section 725.935(c)(1) and (c)(2), as applicable;

E) An owner or operator must record, on a semiannual basis, the following information for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable:

i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods; and

ii) A description of the planned routine maintenance that was performed for the control device during the previous six-month period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance;

F) An owner or operator must record the following information for

those unexpected control device system malfunctions that would require the control device not to meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable:

i) The occurrence and duration of each malfunction of the control device system;

ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning; and

iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation; and

G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 725.988(c)(3)(B).

f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Section 725.983(c) must prepare and maintain the following records, as applicable:

1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Section 725.983 (c)(1) or 725.984(c)(2)(A) through (c)(2)(F), the owner or operator must record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator must record the date, time, and location that each waste sample is collected in accordance with the applicable requirements of Section 725.984; and

2) For tanks, surface impoundments, or containers exempted under the provisions of Section 725.983(c)(2)(G) or (c)(2)(H), the owner or operator must record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

g) An owner or operator designating a cover as “unsafe to inspect and monitor” pursuant to Section 725.985(l) must record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as “unsafe to inspect and monitor,” the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

h) The owner or operator of a facility that is subject to this Subpart CC and to the control device standards in federal subpart VV of 40 CFR 60 (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), or subpart V of 40 CFR 61 (National Emission Standard for Equipment Leaks (Fugitive Emission Sources), each incorporated by reference in 35 Ill. Adm. Code 270.111, may elect to demonstrate compliance with the applicable Sections of this Subpart by documentation either pursuant to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60 or subpart V of 40 CFR 61, to the extent that the documentation required by 40 CFR 60 or 61 duplicates the documentation required by this Section.

i) For each tank or container not using air emission controls specified in Sections 725.985 through 725.988 in accordance with the conditions specified in Section 725.980(d), the owner or operator must record and maintain the following information:

1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Section 725.980(d)(1);

2) A description of how the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) are managed at the facility in tanks and containers. This description must include the following information:

A) For the tanks used at the facility to manage this hazardous waste, sufficient information must be provided to describe each tank: a facility identification number for the tank, the purpose and placement of this tank in the management train of this hazardous waste, and the procedures used to ultimately dispose of the hazardous waste managed in the tanks; and

B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to describe the following for each container: a facility identification number for the container or group of containers; the purpose and placement of this container or group of containers in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers; and

3) An explanation of why managing the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) of this Section in the tanks or containers identified pursuant to subsection (i)(2) of this Section would create an undue safety hazard if the air emission controls specified in Sections 725.985 through 725.988 were installed and operated on these waste management units. This explanation

must include the following information:

A) For tanks used at the facility to manage this hazardous waste, sufficient information must be provided to explain: how use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides; and

B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to explain: how use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.

j) For each hazardous waste management unit not using air emission controls specified in Sections 725.985 through 725.988 in accordance with the provisions of Section 725.980(b)(7), the owner and operator must record and maintain the following information:

1) The certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63; and

2) An identification of the specific federal requirements codified under 40 CFR 60, 61, or 63 with which the waste management unit is in compliance.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART DD: CONTAINMENT BUILDINGS

Section 725.1101 Design and Operating Standards

a) All containment buildings must comply with the following design and operating standards:

1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g. precipitation, wind, run on) and to assure containment of managed wastes;

2) The floor and containment walls of the unit, including the secondary containment system if required under subsection (b) of this Section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The containment building must meet the structural integrity requirements established by professional organizations generally recognized by the industry such as the American Concrete Institute [ACI] and the American Society of Testing Materials [ASTM]. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet these criteria:

A) They provide an effective barrier against fugitive dust emissions under subsection (c)(1)(D) of this Section; and

B) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings;

3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail; and

4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include the following design features:

1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).

2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building:

A) The primary barrier must be sloped to drain liquids to the associated collection system; and

B) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.

3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.

A) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, as follows:

i) It is constructed with a bottom slope of 1 percent or more; and

ii) It is constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m^2/sec or more.

B) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.

C) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and

thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Section 725.293(d)(1). In addition, the containment building must meet the requirements of subsections 725.293(b) and (c) to be an acceptable secondary containment system for a tank.)

4) For existing units other than 90-day generator units, USEPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart DD. In making this demonstration, the owner or operator must do each of the following:

A) Provide written notice to USEPA of their request by November 16, 1992. This notification must describe the unit and its operating practices with specific reference to the performance of existing systems, and specific plans for retrofitting the unit with secondary containment;

B) Respond to any comments from USEPA on these plans within 30 days; and

C) Fulfill the terms of the revised plans, if such plans are approved by USEPA.

c) Owners or operators of all containment buildings must do each of the following:

1) Use controls and practice to ensure containment of the hazardous waste within the unit, and at a minimum do each of the following:

A) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;

B) Maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

C) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and

D) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60~~, appendix A, Method 22 (Test Methods) – Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares)~~, incorporated by reference in 35 Ill. Adm. Code 720.111(b). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices (see 40 CFR 60 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit;

BOARD NOTE: At 40 CFR 264.1101(c)(1)(iv)~~ (2004)~~ (2005), USEPA cites "40 CFR part 60, subpart 292." At 57 Fed. Reg. 37217 (Aug. 18, 1992), USEPA repeats this citation in the preamble discussion of adoption of the rules. No such provision exists in the Code of Federal Regulations. While section 40 CFR 60.292 of the federal regulations pertains to control of fugitive dust emissions, that provision is limited in its application to glass melting furnaces. The Board has chosen to use the ~~more~~ general citation: "40 CFR 60."

2) Obtain certification by a qualified registered professional engineer (PE) that the containment building design meets the requirements of subsections (a) through (c) of this Section. For units placed into operation prior to February 18, 1993, this certification must be placed in the facility's operating record (on-site files for generators that are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit;

3) Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, must repair the condition promptly. In addition, however, the owner or operator must do the following:

A) Upon detection of a condition that has caused to a release of hazardous wastes (e.g., upon detection of leakage from the primary barrier) the owner or operator must do the following:

i) Enter a record of the discovery in the facility operating

record;

ii) Immediately remove the portion of the containment building affected by the condition from service;

iii) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and

iv) Within seven days after the discovery of the condition, notify the Agency in writing of the condition, and within 14 working days, provide a written notice to the Agency with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work;

B) The Agency must review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing; and

C) Upon completing all repairs and cleanup the owner and operator must notify the Agency in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with subsection (c)(3)(A)(iv) of this Section; and

4) Inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring equipment and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste.

d) For containment buildings that contain areas both with and without secondary containment, the owner or operator must do the following:

1) Design and operate each area in accordance with the requirements enumerated in subsections (a) through (c) of this Section;

2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and

3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without

secondary containment.

e) Notwithstanding any other provision of this Subpart DD, the Agency must not require secondary containment for a permitted containment building where the owner operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.Appendix A Recordkeeping Instructions

See appendix I to 40 CFR 265 (Recordkeeping Instructions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.Appendix C USEPA Interim Primary Drinking Water Standards

See appendix III to 40 CFR 265 (EPA Interim Primary Drinking Water Standards), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.Appendix D Tests for Significance

See appendix IV to 40 CFR 265 (Tests for Significance), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 725.Appendix E Examples of Potentially Incompatible Wastes

See appendix V to 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 726
STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS

WASTE AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section

726.120 Applicability

726.121 Standards Applicable to Generators and Transporters of Materials Used in a Manner that Constitutes Disposal

726.122 Standards Applicable to Storers, Who Are Not the Ultimate Users, of Materials that Are To Be Used in a manner that Constitutes Disposal

726.123 Standards Applicable to Users of Materials that Are Used in a Manner that Constitutes Disposal

SUBPART D: HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY

Section

726.130 Applicability (Repealed)

726.131 Prohibitions (Repealed)

726.132 Standards applicable to generators of hazardous waste fuel (Repealed)

726.133 Standards applicable to transporters of hazardous waste fuel (Repealed)

726.134 Standards applicable to marketers of hazardous waste fuel (Repealed)

726.135 Standards applicable to burners of hazardous waste fuel (Repealed)

726.136 Conditional exemption for spent materials and by-products exhibiting a characteristic of hazardous waste (Repealed)

SUBPART E: USED OIL BURNED FOR ENERGY RECOVERY

Section

726.140 Applicability (Repealed)

726.141 Prohibitions (Repealed)

726.142 Standards applicable to generators of used oil burned for energy recovery (Repealed)

726.143 Standards applicable to marketers of used oil burned for energy recovery (Repealed)

726.144 Standards applicable to burners of used oil burned for energy recovery (Repealed)

SUBPART F: RECYCLABLE MATERIALS UTILIZED FOR PRECIOUS METAL RECOVERY

Section

726.170 Applicability and Requirements

SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED

Section

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726.Appendix A Tier I and Tier II Feed Rate and Emissions Screening Limits for Metals
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726.Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride
726.Appendix D Reference Air Concentrations
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726.Appendix K Lead-Bearing Materials that May be Processed in Exempt Lead Smelters
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726.Appendix M Mercury-Bearing Wastes that May Be Processed in Exempt Mercury Recovery Units
726.Table A Exempt Quantities for Small Quantity Burner Exemption

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R85-22 at 10 Ill. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 Ill. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 Ill. Reg. 18606, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14533, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9727, effective June 17, 1991; amended in R91-13 at 16 Ill. Reg. 9858, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20904, effective November 22, 1993; amended in R94-7 at 18 Ill. Reg. 12500, effective July 29, 1994; amended in R95-6 at 19 Ill. Reg. 10006, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11263, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 754, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 18042, effective September 28, 1998; amended in R99-15 at 23 Ill. Reg. 9482, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9853, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6667, effective April 22, 2002; amended in

R03-7 at 27 Ill. Reg. 4200, effective February 14, 2003; amended in R03-18 at 27 Ill. Reg. 12916, effective July 17, 2003; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section 726.120 Applicability

a) The regulations of this Subpart C apply to recyclable materials that are applied to or placed on the land in either of the following ways:

1) Without mixing with any other substances; or

2) After mixing or combination with any other substances. These materials will be referred to throughout this Subpart C as "materials used in a manner that constitutes disposal."

b) A product produced for the general public's use that is used in a manner that constitutes disposal and which contains recyclable material is not presently subject to regulation under this Subpart C if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in Subpart D of 35 Ill. Adm. Code 728 (or applicable prohibition levels in 35 Ill. Adm. Code 728.132 or 728.139, where no treatment standards have been established) for each ~~recycable~~ recyclable material (i.e., hazardous waste) that it contains.

c) Anti-skid and deicing uses of slags that are generated from high temperature metals recovery (HTMR) processing of hazardous wastes K061, K062, and F006 in a manner constituting disposal are not covered by the exemption in subsection (b) of this Section, and such uses of these materials remain subject to regulation.

d) Fertilizers that contain recyclable materials are not subject to regulation provided that the following conditions are fulfilled:

1) They are zinc fertilizers excluded from the definition of solid waste according to 35 Ill. Adm. Code 721.104(a)(21); or

2) They meet the applicable treatment standards in Subpart D of 35 Ill. Adm. Code 728 for each hazardous waste that they contain.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

Section 726.200 Applicability

a) The regulations of this Subpart H apply to hazardous waste burned or processed in a boiler or industrial furnace (BIF) (as defined in 35 Ill. Adm. Code 720.110) irrespective of the purpose of burning or processing, except as provided by subsections (b), (c), (d), (g), and (h) of this Section. In this Subpart H, the term "burn" means burning for energy recovery or destruction or processing for materials recovery or as an ingredient. The emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 apply to facilities operating under interim status or under a RCRA permit, as specified in Sections 726.202 and 726.203.

b) Integration of the MACT standards.

1) Except as provided by subsection (b)(2) of this Section, the standards of this Part no longer apply when an affected source demonstrates compliance with the maximum achievable control technology (MACT) requirements of federal subpart EEE of 40 CFR 63~~, subpart EEE~~ (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, under 40 CFR 63.1207(j) (What are the performance testing requirements?) and 63.1210(b) (What are the notification requirements?), documenting compliance with the requirements of federal subpart EEE of 40 CFR 63~~, subpart EEE~~. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of this Part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

2) The following standards continue to apply:

A) If an owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Section 726.202(e)(1), requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Section 726.202(e)(2)(C), requiring compliance with the emission standards and operating requirements, during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;

B) The closure requirements of Sections 726.202(e)(11) and 726.203(l);

C) The standards for direct transfer of Section 726.211;

D) The standards for regulation of residues of Section 726.312; and

E) The applicable requirements of Subparts A through H, BB, and CC of 35 Ill. Adm. Code 724 and 725.

BOARD NOTE: Sections 9.1 and 39.5 of the Environmental Protection Act [415 ILCS 5/9.1 and 39.5] make the federal MACT standards directly applicable to entities in Illinois and authorize the Agency to issue permits based on the federal standards. In adopting this subsection (b), USEPA stated as follows (at 64 Fed Reg. 52828, 52975 (September 30, 1999)):

> Under [the approach adopted by USEPA as a] final rule, MACT air emissions and related operating requirements are to be included in ~~title~~ Title V permits; RCRA permits will continue to be required for all other aspects of the combustion unit and the facility that are governed by RCRA (e.g., corrective action, general facility standards, other combustor-specific concerns such as materials handling, risk-based emissions limits and operating requirements, as appropriate, and other hazardous waste management units).

c) The following hazardous wastes and facilities are not subject to regulation under this Subpart H:

1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Such used oil is subject to regulation under 35 Ill. Adm. Code 739, rather than this Subpart;

2) Gas recovered from hazardous or solid waste landfills, when such gas is burned for energy recovery;

3) Hazardous wastes that are exempt from regulation under 35 Ill. Adm. Code 721.104 and 721.106(a)(3)(C) and (a)(3)(D) and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators under 35 Ill. Adm. Code 721.105; and

4) Coke ovens, if the only hazardous waste burned is USEPA hazardous waste no. K087 decanter tank tar sludge from coking operations.

d) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices, such as cupolas, sintering machines, roasters, and foundry

furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation under this Subpart H, except for Sections 726.201 and 726.212.

1) To be exempt from Sections 726.202 through 726.211, an owner or operator of a metal recovery furnace or mercury recovery furnace must comply with the following requirements, except that an owner or operator of a lead or a nickel-chromium recovery furnace or a metal recovery furnace that burns baghouse bags used to capture metallic dust emitted by steel manufacturing must comply with the requirements of subsection (d)(3) of this Section, and an owner or operator of a lead recovery furnace that is subject to regulation under the Secondary Lead Smelting NESHAP of federal subpart X of 40 CFR 63~~, subpart X~~ (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) must comply with the requirements of subsection (h) of this Section:

   A) Provide a one-time written notice to the Agency indicating the following:

      i) The owner or operator claims exemption under this subsection;

      ii) The hazardous waste is burned solely for metal recovery consistent with the provisions of subsection (d)(2) of this Section;

      iii) The hazardous waste contains recoverable levels of metals; and

      iv) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this subsection (d);

   B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection (d) ~~under procedures specified by "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator must use the best available method~~ using appropriate methods; and

   C) Maintain at the facility for at least three years records to document compliance with the provisions of this subsection (d), including limits

on levels of toxic organic constituents and Btu value of the waste and levels of recoverable metals in the hazardous waste compared to normal non-hazardous waste feedstocks.

2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

A) The hazardous waste has a total concentration of organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 exceeding 500 ppm by weight, as fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited, and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section; or

B) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and is so considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section.

3) To be exempt from Sections 726.202 through 726.211, an owner or operator of a lead, nickel-chromium, or mercury recovery furnace, except for an owner or operator of a lead recovery furnace that is subject to regulation under the Secondary Lead Smelting NESHAP of subpart X of 40 CFR 63~~, subpart X~~, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must provide a one-time written notice to the Agency identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste under this subsection (d)(3) or subsection (d)(1) of this Section. The owner or operator must comply with the requirements of subsection (d)(1) of this Section for those wastes claimed to be exempt under that subsection and must comply with the following requirements for those wastes claimed to be exempt under this subsection (d)(3):

A) The hazardous wastes listed in Appendices K, L, and M of this Part and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (d)(1) of this Section, provided the following are true:

i) A waste listed in Appendix K of this Part must contain

recoverable levels of lead, a waste listed in Appendix L of this Part must contain recoverable levels of nickel or chromium, a waste listed in Appendix M of this Part must contain recoverable levels of mercury and contain less than 500 ppm of Appendix H to 35 Ill. Adm. Code 721 organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;

ii) The waste does not exhibit the toxicity characteristic of 35 Ill. Adm. Code 721.124 for an organic constituent;

iii) The waste is not a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 because it is listed for an organic constituent, as identified in Appendix G of 35 Ill. Adm. Code 721; and

iv) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of subsection (d)(3) of this Section and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis must be conducted according to subsection (d)(1)(B) of this Section, and records to document compliance with subsection (d)(3) of this Section must be kept for at least three years.

B) The Agency may decide, on a case-by-case basis, that the toxic organic constituents in a material listed in Appendix K, Appendix L, or Appendix M of this Part that contains a total concentration of more than 500 ppm toxic organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart H. Under these circumstances, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart H when burning that material. In making the hazard determination, the Agency must consider the following factors:

i) The concentration and toxicity of organic constituents in the material;

ii) The level of destruction of toxic organic constituents provided by the furnace; and

iii) Whether the acceptable ambient levels established in

Appendix D or E of this Part will be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

e) The standards for direct transfer operations under Section 726.211 apply only to facilities subject to the permit standards of Section 726.202 or the interim status standards of Section 726.203.

f) The management standards for residues under Section 726.212 apply to any BIF burning hazardous waste.

g) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals are conditionally exempt from regulation under this Subpart H, except for Section 726.212. To be exempt from Sections 726.202 through 726.211, an owner or operator must do the following:

1) Provide a one-time written notice to the Agency indicating the following:

A) The owner or operator claims exemption under this Section,

B) The hazardous waste is burned for legitimate recovery of precious metal, and

C) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this Section;

2) Sample and analyze the hazardous waste, as necessary, to document that the waste is burned for recovery of <u>economically significant amounts of the metals and that the treatment recovers</u> economically significant amounts of precious metal~~, using procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator must use the best available method~~; and

3) Maintain, at the facility for at least three years, records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.

h) An owner or operator of a lead recovery furnace that processes hazardous waste for recovery of lead and which is subject to regulation under the Secondary Lead

Smelting NESHAP of subpart X of 40 CFR 63~~, subpart X~~, is conditionally exempt from regulation under this Subpart, except for Section 726.201. To become exempt, an owner or operator must provide a one-time notice to the Agency identifying each hazardous waste burned and specifying that the owner or operator claims an exemption under this subsection (h). The notice also must state that the waste burned has a total concentration of non-metal compounds listed in Appendix H to 35 Ill. Adm. Code 721 of less than 500 ppm by weight, as fired and as provided in subsection (d)(2)(A) of this Section, or is listed in Appendix K to this Part.

i) Abbreviations and definitions. The following definitions and abbreviations are used in this Subpart H:

"APCS" means air pollution control system.

"BIF" means boiler or industrial furnace.

"Carcinogenic metals" means arsenic, beryllium, cadmium, and chromium.

"CO" means carbon monoxide.

"Continuous monitor" is a monitor that continuously samples the regulated parameter without interruption, that evaluates the detector response at least once each 15 seconds, and that computes and records the average value at least every 60 seconds.

"DRE" means destruction or removal efficiency.

"cu m" or "m^3" means cubic meters.

"E" means "ten to the power." For example, "XE-Y" means "X times ten to the -Y power."

"Feed rates" are measured as specified in Section 726.202(e)(6).

"Good engineering practice stack height" is as defined by federal 40 CFR 51.100(ii) (Definitions), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"Hourly rolling average" means the arithmetic mean of the 60 most recent one-minute average values recorded by the continuous monitoring system.

"K" means Kelvin.

"kVA" means kilovolt amperes.

"MEI" means maximum exposed individual.

"MEI location" means the point with the maximum annual average off-site (unless on-site is required) ground level concentration.

"Noncarcinogenic metals" means antimony, barium, lead, mercury, thallium, and silver.

"One hour block average" means the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of the preceding clock hour.

"PIC" means product of incomplete combustion.

"PM" means particulate matter.

"POHC" means principal organic hazardous constituent.

"ppmv" means parts per million by volume.

"QA/QC" means quality assurance and quality control.

"Rolling average for the selected averaging period" means the arithmetic mean of one hour block averages for the averaging period.

"RAC" means reference air concentration, the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart. RACs are specified in Appendix D of this Part.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E of this Part.

"SSU" means "Saybolt Seconds Universal," a unit of viscosity measured by ASTM D 88-87 (Standard Test Method for Saybolt Viscosity) or D 2161-87 (Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity), each incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

"TCLP test" means ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA

publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), as used for the purposes of 35 Ill. Adm. Code 721.124.

"TESH" means terrain-adjusted effective stack height (in meters).

"Tier I." See Section 726.206(b).

"Tier II." See Section 726.206(c).

"Tier III." See Section 726.206(d).

"Toxicity equivalence" is estimated, pursuant to Section 726.204(e), using ~~"~~section 4.0 (Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners) in federal appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations),~~"~~ incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part).

"mg" means microgram.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.202 Permit Standards for Burners

a) Applicability.

1) General. An owner or operator of a BIF that burns hazardous waste and which does not operate under interim status must comply with the requirements of this Section and 35 Ill. Adm. Code 703.208 and 703.232, unless exempt under the small quantity burner exemption of Section 726.208.

2) Applicability of 35 Ill. Adm. Code 724 standards. An owner or operator of a BIF that burns hazardous waste is subject to the following provisions of 35 Ill. Adm. Code 724, except as provided otherwise by this Subpart H:

A) In Subpart A (General), 35 Ill. Adm. Code 724.104;

B) In Subpart B (General facility standards), 35 Ill. Adm. Code 724.111 through 724.118;

C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 724.131 through 724.137;

D) In Subpart D (Contingency plan and emergency procedures), 35 Ill. Adm. Code 724.151 through 724.156;

E) In Subpart E (Manifest system, recordkeeping and reporting), the applicable provisions of 35 Ill. Adm. Code 724.171 through 724.177;

F) In Subpart F (Corrective Action), 35 Ill. Adm. Code 724.190 and 724.201;

G) In Subpart G (Closure and post-closure), 35 Ill. Adm. Code 724.211 through 724.215;

H) In Subpart H (Financial requirements), 35 Ill. Adm. Code 724.241, 724.242, 724.243, and 724.247 through 724.251, except that the State of Illinois and the federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 724; and

I) Subpart BB (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 724.950(a).

b) Hazardous waste analysis.

1) The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in Appendix H of 35 Ill. Adm. Code 721 that is reasonably expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by using appropriate analytical procedures ~~prescribed by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by reference, see 35 Ill. Adm. Code 720.111)~~. ~~Alternative methods that meet or exceed the method performance capabilities of SW-846 methods may be used. If SW-846 does not prescribe a method for a particular determination, the owner or operator must use the best available method.~~ The constituents listed in Appendix H of 35 Ill. Adm. Code 721 ~~constituents~~ that are excluded from this analysis must be identified and the basis for their exclusion explained. This analysis must provide all information required by this Subpart H and 35 Ill. Adm. Code 703.208 and 703.232 and must enable the Agency to prescribe such permit conditions as are necessary to protect human health and the environment. Such analysis must be included as a portion of the Part B permit application, or, for facilities operating under the interim status standards of this Subpart H, as a portion of the trial burn plan that may be submitted before the Part B application under provisions of 35 Ill. Adm. Code 703.232(g), as well as any other analysis required by the Agency. ~~Owners and operators~~ The owner or operator of ~~BIFs~~ a BIF not operating under the interim status standards must provide the information required by 35 Ill. Adm. Code 703.208 and 703.232 in the Part B application to the greatest extent possible.

2) Throughout normal operation, the owner or operator must conduct sampling

and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the BIF are within the physical and chemical composition limits specified in the permit.

c) Emissions standards. ~~Owners and operators~~ An owner or operator must comply with emissions standards provided by Sections 726.204 through 726.207.

d) Permits.

1) The owner or operator must burn only hazardous wastes specified in the facility permit and only under the operating conditions specified under subsection (e) of this Section, except in approved trial burns under the conditions specified in 35 Ill. Adm. Code 703.232.

2) Hazardous wastes not specified in the permit must not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes must be based on either trial burn results or alternative data included with Part B of a permit application under 35 Ill. Adm. Code 703.208.

3) BIFs operating under the interim status standards of Section 726.203 are permitted under procedures provided by 35 Ill. Adm. Code 703.232(g).

4) A permit for a new BIF (those BIFs not operating under the interim status standards) must establish appropriate conditions for each of the applicable requirements of this Section, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of subsection (e) of this Section, in order to comply with the following standards:

A) For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the operating requirements must be those most likely to ensure compliance with the emission standards of Sections 726.204 through 726.207, based on the Agency's engineering judgment. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation must include those specified by the applicable provisions of Section 726.204, Section 726.205, Section 726.206, or Section 726.207. The Agency must extend the duration of this period for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

B) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the emissions standards of Sections 726.204 through 726.207 and must be in accordance with the approved trial burn plan;

C) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, submission of the trial burn results by the applicant, review of the trial burn results, and modification of the facility permit by the Agency to reflect the trial burn results, the operating requirements must be those most likely to ensure compliance with the emission standards Sections 726.204 through 726.207 based on the Agency's engineering judgment.

D) For the remaining duration of the permit, the operating requirements must be those demonstrated in a trial burn or by alternative data specified in 35 Ill. Adm. Code 703.208, as sufficient to ensure compliance with the emissions standards of Sections 726.204 through 726.207.

e) Operating requirements.

1) General. A BIF burning hazardous waste must be operated in accordance with the operating requirements specified in the permit at all times when there is hazardous waste in the unit.

2) Requirements to ensure compliance with the organic emissions standards.

A) DRE (destruction or removal efficiency) standard. Operating conditions must be specified in either of the following ways: on a case-by-case basis for each hazardous waste burned, which conditions must be demonstrated (in a trial burn or by alternative data, as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a), or as special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived under Section 726.204(a)(4), each set of operating requirements must specify the composition of the hazardous waste (including acceptable variations in the physical and chemical properties of the hazardous waste that will not affect compliance with the DRE performance standard) to which the operating requirements apply. For each such hazardous waste, the permit must specify acceptable operating limits including, but not limited to, the following conditions, as appropriate:

i) Feed rate of hazardous waste and other fuels measured and

specified as prescribed in subsection (e)(6) of this Section;

ii) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Appropriate controls of the hazardous waste firing system;

iv) Allowable variation in BIF system design or operating procedures;

v) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured, and specified as prescribed in subsection (e)(6) of this Section;

vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6) of this Section, unless documentation is provided under 35 Ill. Adm. Code 703.232 demonstrating adequate combustion gas residence time; and

vii) Such other operating requirements as are necessary to ensure that the DRE performance standard of Section 726.204(a) is met.

B) CO and hydrocarbon (HC) standards. The permit must incorporate a CO limit and, as appropriate, a HC limit as provided by Section 726.204(b), (c), (d), (e), and (f). The permit limits must be specified as follows:

i) When complying with the CO standard of Section 726.204(b)(1), the permit limit is 100 ppmv;

ii) When complying with the alternative CO standard under Section 726.204(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run; and, the permit limit for HC is 20 ppmv (as defined in Section 726.204(c)(1)), except as provided in Section 726.204(f); or

iii) When complying with the alternative HC limit for industrial furnaces under Section 726.204(f), the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by that subsection.

C) Start-up and shut-down. During start-up and shut-down of the BIF, hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements under Sections 726.204(a)(5), 726.205, 726.206, and 726.207) must not be fed into the device, unless the device is operating within the conditions of operation specified in the permit.

3) Requirements to ensure conformance with the particulate matter (PM) standard.

A) Except as provided in subsections (e)(3)(B) and (e)(3)(C) of this Section, the permit must specify the following operating requirements to ensure conformance with the PM standard specified in Section 726.205:

i) Total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in subsection (e)(6) of this Section;

ii) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system (APCS);

iv) Allowable variation in BIF system design including any APCS or operating procedures; and

v) Such other operating requirements as are necessary to ensure that the PM standard in Section 726.211(b) is met.

B) Permit conditions to ensure conformance with the PM standard must not be provided for facilities exempt from the PM standard under Section 726.205(b);

C) For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the PM standard must not limit the ash content of hazardous waste or other feed materials.

4) Requirements to ensure conformance with the metals emissions standard.

A) For conformance with the Tier I (or adjusted Tier I) metals feed rate

screening limits of Section 726.206(b) or (e), the permit must specify the following operating requirements:

i) Total feed rate of each metal in hazardous waste, other fuels and industrial furnace feedstocks measured and specified under provisions of subsection (e)(6) of this Section;

ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and

iii) A sampling and metals analysis program for the hazardous waste, other fuels and industrial furnace feedstocks;

B) For conformance with the Tier II metals emission rate screening limits under Section 726.206(c) and the Tier III metals controls under Section 726.206(d), the permit must specify the following operating requirements:

i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6) of this Section: total feed streams; total hazardous waste feed; and total pumpable hazardous waste feed;

iv) Total feed rate of chlorine and chloride in total feed streams measured and specified as prescribed in subsection (e)(6) of this Section;

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;

viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

ix) Allowable variation in BIF system design including any APCS or operating procedures; and

x) Such other operating requirements as are necessary to ensure that the metals standards under Sections 726.206(c) or (d) are met.

C) For conformance with an alternative implementation approach approved by the Agency under Section 726.206(f), the permit must specify the following operating requirements:

i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsection (e)(6) of this Section: total hazardous waste feed; and total pumpable hazardous waste feed;

iv) Total feed rate of chlorine and chloride in total feed streams measured and specified prescribed in subsection (e)(6) of this Section;

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;

viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

ix) Allowable variation in BIF system design including any APCS or operating procedures; and

x) Such other operating requirements as are necessary to ensure that the metals standards under Sections 726.206(c) or (d) are met.

5) Requirements to ensure conformance with the HCl and chlorine gas standards.

A) For conformance with the Tier I total chlorine and chloride feed rate screening limits of Section 726.207(b)(1), the permit must specify the following operating requirements:

i) Feed rate of total chlorine and chloride in hazardous waste, other fuels and industrial furnace feedstocks measured and specified as prescribed in subsection (e)(6) of this Section;

ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and

iii) A sampling and analysis program for total chlorine and chloride for the hazardous waste, other fuels and industrial furnace feedstocks;

B) For conformance with the Tier II HCl and chlorine gas emission rate screening limits under Section 726.207(b)(2) and the Tier III HCl and chlorine gas controls under Section 726.207(c), the permit must specify the following operating requirements:

i) Maximum emission rate for HCl and for chlorine gas specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6) of this Section;

iv) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;

v) Appropriate controls on operation and maintenance of the

hazardous waste firing system and any APCS;

vi) Allowable variation in BIF system design including any APCS or operating procedures; and

vii) Such other operating requirements as are necessary to ensure that the HCl and chlorine gas standards under Section 726.207(b)(2) or (c) are met.

6) Measuring parameters and establishing limits based on trial burn data.

A) General requirements. As specified in subsections (e)(2) through (e)(5) of this Section, each operating parameter must be measured, and permit limits on the parameter must be established, according to either of the following procedures:

i) Instantaneous limits. A parameter is measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or

ii) Hourly rolling average. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The permit limit for the parameter must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

B) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (as defined in Section 726.200(i)) and lead must be established either on an hourly rolling average basis, as prescribed by subsection (e)(6)(A) of this Section, or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours, the following requirements apply:

i) The feed rate of each metal must be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis;

ii) Terms are as defined in Section 726.200(i); and

iii) The permit limit for the feed rate of each metal must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run.

C) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (e)(6)(A) and (e)(6)(B) of this Section.

D) Conduct of trial burn testing.

i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters under this Section, the unit must operate under trial burn conditions for a sufficient period to reach steady-state operations. However, industrial furnaces that recycle collected PM back into the furnace and that comply with an alternative implementation approach for metals under Section 726.206(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

iii) Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by this subsection (e).

7) General requirements.

A) Fugitive emissions. Fugitive emissions must be controlled in one of the following ways:

i) By keeping the combustion zone totally sealed against fugitive emissions; ~~or~~

ii) By maintaining the combustion zone pressure lower than atmospheric pressure; or

iii) By an alternative means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

B) Automatic waste feed cutoff. A BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under this Section. In addition, the following requirements apply:

i) The permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber~~,~~;

ii) Exhaust gases must be ducted to the APCS operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and

iii) Operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the permit limits. For parameters that are monitored on an instantaneous basis, the Agency must establish a minimum period of time after a waste feed cutoff during which the parameter must not exceed the permit limit before the hazardous waste feed is restarted.

C) Changes. A BIF must cease burning hazardous waste when combustion properties or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits as specified in the permit.

8) Monitoring and Inspections.

A) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

i) If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks and feed rates of ash, metals, and total chlorine

and chloride;

ii) If specified by the permit, CO, HCs, and oxygen on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in subsection (e)(2)(B) of this Section. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I of this Part~~.~~; and

iii) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate), residues, and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.

B) All monitors must record data in units corresponding to the permit limit unless otherwise specified in the permit.

C) The BIF and associated equipment (pumps, values, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

D) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Agency that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing must be conducted at least once every 30 days.

E) These monitoring and inspection data must be recorded and the records must be placed in the operating record required by 35 Ill. Adm. Code 724.173.

9) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner and operator must comply with Section 726.211.

10) Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by this Section until closure of the facility.

11) Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the BIF.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.203 Interim Status Standards for Burners

a) Purpose, scope, and applicability.

1) General.

A) The purpose of this Section is to establish minimum national standards for owners and operators of "existing" BIFs that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of this Section apply to owners and operators of existing facilities until either a permit is issued under Section 726.202(d) or until closure responsibilities identified in this Section are fulfilled.

B) "Existing" or "in existence" means a BIF for which the owner or operator filed a certification of precompliance with USEPA pursuant to federal 40 CFR 266.103(b)~~, incorporated by reference in subsection (b) of this Section~~; provided, however, that USEPA has not determined that the certification is invalid.

C) If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator must comply with the applicable regulations dealing with permit modifications in 35 Ill. Adm. Code 703.280 or changes in interim status in 35 Ill. Adm. Code 703.155.

2) Exemptions. The requirements of this Section do not apply to hazardous waste and facilities exempt under Section 726.200(b) or 726.208.

3) Prohibition on burning dioxin-listed wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes must not be burned in a BIF operating under interim status: USEPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.

4) Applicability of 35 Ill. Adm. Code 725 standards. An owner or operator of a BIF that burns hazardous waste and which is operating under interim status is subject to the following provisions of 35 Ill. Adm. Code 725, except as provided otherwise by this Section:

A) In Subpart A of 35 Ill. Adm. Code 725 (General), 35 Ill. Adm. Code 725.104;

B) In Subpart B of 35 Ill. Adm. Code 725 (General facility standards), 35 Ill. Adm. Code 725.111 through 725.117;

C) In Subpart C of 35 Ill. Adm. Code 725 (Preparedness and prevention), 35 Ill. Adm. Code 725.131 through 725.137;

D) In Subpart D of 35 Ill. Adm. Code 725 (Contingency plan and emergency procedures), 35 Ill. Adm. Code 725.151 through 725.156;

E) In Subpart E of 35 Ill. Adm. Code 725 (Manifest system, recordkeeping and reporting), 35 Ill. Adm. Code 725.171 through 725.177, except that 35 Ill. Adm. Code 725.171, 725.172 and 725.176 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;

F) In Subpart G of 35 Ill. Adm. Code 725 (Closure and post-closure), 35 Ill. Adm. Code 725.211 through 725.215;

G) In Subpart H of 35 Ill. Adm. Code 725 (Financial requirements), 35 Ill. Adm. Code 725.241, 725.242, 725.243, and 725.247 through 725.251, except that the State of Illinois and the ~~Federal~~ federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 725; and

H) In Subpart BB of 35 Ill. Adm. Code 725 (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 725.950(a).

5) Special requirements for furnaces. The following controls apply during interim status to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see subsection (a)(5)(B) of this Section) at any location other than the hot end where products are normally discharged or where fuels are normally fired:

A) Controls.

i) The hazardous waste must be fed at a location where combustion gas temperature is at least 1800° F;

ii) The owner or operator must determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;

iii) For cement kiln systems, the hazardous waste must be fed into the kiln; and

iv) The HC controls of Section 726.204(f) or subsection (c)(5) of this Section apply upon certification of compliance under subsection (c) of this Section, irrespective of the CO level achieved during the compliance test.

B) Burning hazardous waste solely as an ingredient. A hazardous waste is burned for a purpose other than "solely as an ingredient" if it meets either of the following criteria:

i) The hazardous waste has a total concentration of nonmetal compounds listed in Appendix H of 35 Ill. Adm. Code 721, exceeding 500 ppm by weight, as fired and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the facility record; or

ii) The hazardous waste has a heating value of 5,000 Btu/lb or more, as fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly blended must be retained in the facility record.

6) Restrictions on burning hazardous waste that is not a fuel. Prior to certification of compliance under subsection (c) of this Section, an owner or operator must not feed hazardous waste that has a heating value less than 5000 Btu/lb, as generated, (except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a BIF, except that the following may occur:

A) Hazardous waste may be burned solely as an ingredient;

B) Hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours;

C) Such waste may be burned if the Agency has documentation to show that the following was true prior to August 21, 1991:

i) The BIF was operating under the interim status standards for incinerators or thermal treatment units, Subparts O or P of 35 Ill. Adm. Code 725;

ii) The BIF met the interim status eligibility requirements under 35 Ill. Adm. Code 703.153 for Subparts O or P of 35 Ill. Adm. Code 725; and

iii) Hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or

D) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under 35 Ill. Adm. Code 721.102(e) prior to February 21, 1991, and documentation is kept on file supporting this claim.

7) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner or operator must comply with Section 726.211.

b) Certification of precompliance. This subsection corresponds with 40 CFR 266.103(b), under which USEPA required certain owners and operators to file a certification of precompliance by August 21, 1991. No similar filing with the Agency was required, so the Board did not incorporate the federal filing requirement into the Illinois regulations. This statement maintains structural parity with the federal regulations.

c) Certification of compliance. The owner or operator must conduct emissions testing to document compliance with the emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section under the procedures prescribed by this subsection (c), except under extensions of time provided by subsection (c)(7) of this Section. Based on the compliance test, the owner or operator must submit to the Agency, on or before August 21, 1992, a complete and accurate "certification of compliance" (under subsection (c)(4) of this Section) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1) of this Section.

1) Limits on operating conditions. The owner or operator must establish limits

on the following parameters based on operations during the compliance test (under procedures prescribed in subsection (c)(4)(D) of this Section) or as otherwise specified and include these limits with the certification of compliance. The BIF must be operated in accordance with these operating limits and the applicable emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section at all times when there is hazardous waste in the unit.

A) Feed rate of total hazardous waste and (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)), pumpable hazardous waste;

B) Feed rate of each metal in the following feedstreams:

i) Total feedstreams, except that industrial furnaces which must comply with the alternative metals implementation approach under subsection (c)(3)(B) of this Section must specify limits on the concentration of each metal in collected PM in lieu of feed rate limits for total feedstreams; and facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metal feed rate screening limits determined under subsection 726.206(b) or (e) of this Section;

BOARD NOTE: Federal subsections 266.103(c)(1)(ii)(A)(1) and (c)(1)(ii)(A)(2) are condensed into subsection (c)(1)(B)(i).

ii) Total hazardous waste feed (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)); and

iii) Total pumpable hazardous waste feed (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

C) Total feed rate of total chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chloride feed rate screening limits determined under Section 726.207(b)(1) or (e);

D) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

E) CO concentration, and where required, HC concentration in stack

gas. When complying with the CO controls of Section 726.204(b), the CO limit is 100 ppmv, and when complying with the HC controls of Section 726.204(c), the HC limit is 20 ppmv. When complying with the CO controls of Section 726.204(c), the CO limit is established based on the compliance test;

F) Maximum production rate of the device in appropriate units when producing normal product unless complying with Tier I or Adjusted Tier I feed rate screening limits for chlorine under Section 726.207(b)(1) or (e) and for all metals under Section 726.207(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under Section 726.205;

G) Maximum combustion chamber temperature where the temperature measurement is as close to the combustion zone as possible and is upstream of any quench water injection, (unless complying with the Tier I adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

H) Maximum flue gas temperature entering a PM control device (unless complying with Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

I) For systems using wet scrubbers, including wet ionizing scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum liquid to flue gas ratio;

ii) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and

iii) Minimum pH level of the scrubber water;

J) For systems using venturi scrubbers, the minimum differential gas pressure across the venturi (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e));

K) For systems using dry scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum caustic feed rate; and

ii) Maximum flue gas flow rate;

L) For systems using wet ionizing scrubbers or electrostatic precipitators (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum electrical power in kVA to the precipitator plates; and

ii) Maximum flue gas flow rate;

M) For systems using fabric filters (baghouses), the minimum pressure drop (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)).

2) Prior notice of compliance testing. At least 30 days prior to the compliance testing required by subsection (c)(3) of this Section, the owner or operator must notify the Agency and submit the following information:

A) General facility information including:

i) USEPA facility ID number;

ii) Facility name, contact person, telephone number, and address;

iii) Person responsible for conducting compliance test, including company name, address, and telephone number, and a statement of qualifications;

iv) Planned date of the compliance test;

B) Specific information on each device to be tested, including the following:

i) A Description of BIF;

ii) A scaled plot plan showing the entire facility and location of the BIF;

iii) A description of the APCS;

iv) Identification of the continuous emission monitors that are installed, including the following: CO monitor; Oxygen monitor; HC monitor, specifying the minimum temperature of the system, and, if the temperature is less than 150° C, an explanation of why a heated system is not used (see subsection (c)(5) of this Section) and a brief description of the sample gas conditioning system;

v) Indication of whether the stack is shared with another device that will be in operation during the compliance test; and

vi) Other information useful to an understanding of the system design or operation; and

C) Information on the testing planned, including a complete copy of the test protocol and QA/QC plan, and a summary description for each test providing the following information at a minimum:

i) Purpose of the test (e.g., demonstrate compliance with emissions of PM); and

ii) Planned operating conditions, including levels for each pertinent parameter specified in subsection (c)(1) of this Section.

3) Compliance testing.

A) General. Compliance testing must be conducted under conditions for which the owner or operator has submitted a certification of precompliance under subsection (b) of this Section and under conditions established in the notification of compliance testing required by subsection (c)(2) of this Section. The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar on-site unit. To support the request, the owner or operator must provide a comparison of the hazardous waste burned and other feedstreams, and the design, operation, and maintenance of both the tested unit and the similar unit. The Agency must provide a written approval to use compliance test data in lieu of testing a similar unit if the Agency finds that the hazardous wastes, devices and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of this subsection (c).

B) Special requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must comply with one of the following procedures for testing to determine compliance with the metals standards of Section 726.206(c) or (d):

i) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in Appendix I to this Part;

ii) Stack emissions testing for a minimum of six hours each day while hazardous waste is burned during interim status. The testing must be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the APCS is operated under normal conditions. During interim status, hazardous waste analysis for metals content must be sufficient for the owner or operator to determine if changes in metals content affect the ability of the unit to meet the metals emissions standards established under Section 726.206(c) or (d). Under this option, operating limits (under subsection (c)(1) of this Section) must be established during compliance testing under this subsection (c)(3) only on the following parameters: feed rate of total hazardous waste; total feed rate of total chlorine and chloride in total feed streams; total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; CO concentration, and where required, HC concentration in stack gas; and maximum production rate of the device in appropriate units when producing normal product; or

iii) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of subsection (c)(1) of this Section only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test must be fed at the feed rates that will be fed during the compliance test.

C) Conduct of compliance testing.

i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating

conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii) Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters under this Section, the facility must operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected PM back into the furnace and that comply with subsection (c)(3)(B)(i) or (c)(3)(B)(ii) of this Section, however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals.

iii) Compliance test data on the level of an operating parameter for which a limit must be established in the certification of compliance must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (c)(1) of this Section.

4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator must certify to the Agency compliance with the emissions standards of Sections 726.204(b), (c) and (e); 726.205; 726.206; 726.207; and subsection (a)(5)(A)(iv) of this Section. The certification of compliance must include the following information:

A) General facility and testing information, including the following:

i) USEPA facility ID number;

ii) Facility name, contact person, telephone number, and address;

iii) Person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

iv) Dates of each compliance test;

v) Description of BIF tested;

vi) Person responsible for QA/QC, title and telephone number, and statement that procedures prescribed in the QA/QC plan

submitted under Section 726.203(c)(2)(C) have been followed, or a description of any changes and an explanation of why changes were necessary;

vii) Description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why the changes were necessary;

viii) Description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why the changes were necessary; and

ix) The complete report on results of emissions testing.

B) Specific information on each test, including the following:

i) Purposes of test (e.g., demonstrate conformance with the emissions limits for PM, metals, HCl, chlorine gas, and CO);

ii) Summary of test results for each run and for each test including the following information: date of run; duration of run; time-weighted average and highest hourly rolling average CO level for each run and for the test; highest hourly rolling average HC level, if HC monitoring is required for each run and for the test; if dioxin and furan testing is required under Section 726.204(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor (defined in Section 726.200(i)); time-weighted average PM emissions for each run and for the test; time-weighted average HCl and chlorine gas emissions for each run and for the test; time-weighted average emissions for the metals subject to regulation under Section 726.206 for each run and for the test; and QA/QC results.

C) Comparison of the actual emissions during each test with the emissions limits prescribed by Sections 726.204(b), (c), and (e); 726.205; 726.206; and 726.207 and established for the facility in the certification of precompliance under subsection (b) of this Section.

D) Determination of operating limits based on all valid runs of the

compliance test for each applicable parameter listed in subsection (c)(1) of this Section using one of the following procedures:

i) Instantaneous limits. A parameter must be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the operating limit specified as the time-weighted average during all runs of the compliance test.

ii) Hourly rolling average basis. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The operating limit for the parameter must be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.

iii) Rolling average limits for carcinogenic metals (as defined in Section 726.200(i)) and lead. Feed rate limits for the carcinogenic metals and lead must be established either on an hourly rolling average basis as prescribed by subsection (c)(4)(D)(ii) of this Section or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from two to 24 hours the following must occur: the feed rate of each metal must be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis; the operating limit for the feed rate of each metal must be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run; and the continuous monitor and the rolling average for the selected averaging period are as defined in Section 726.200(i).

iv) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (c)(4)(D)(i) through (c)(4)(D)(iii) of this Section.

E) Certification of compliance statement. The following statement must accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance

with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results, and other information used to determine conformance with the requirements of 35 Ill. Adm. Code 726.203(c) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manage the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established pursuant to 35 Ill. Adm. Code 726.203(c)(4)(D) are enforceable limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted."

5) Special requirements for HC monitoring systems. When an owner or operator is required to comply with the HC controls provided by Section 726.204(c) or subsection (a)(5)(A)(iv) of this Section, a conditioned gas monitoring system may be used in conformance with specifications provided in Appendix I to this Part provided that the owner or operator submits a certification of compliance without using extensions of time provided by subsection (c)(7) of this Section.

6) Special operating requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must do the following:

A) When complying with the requirements of subsection (c)(3)(B)(i) of this Section, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in Appendix I to this Part; and

B) When complying with the requirements of subsection (c)(3)(B)(ii) of this Section, comply with the operating requirements prescribed by that subsection.

7) Extensions of time.

A) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of Sections

726.204, 726.205, 726.206, and 726.207 by August 21, 1992, the owner or operator must do the following:

i) Stop burning hazardous waste and begin closure activities under subsection (l) of this Section for the hazardous waste portion of the facility;

ii) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Agency by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or

iii) Obtain a case-by-case extension of time under subsection (c)(7)(B) of this Section.

B) Case-by-case extensions of time. See Section 726.219.

8) Revised certification of compliance. The owner or operator may submit at any time a revised certification of compliance (recertification of compliance) under the following procedures:

A) Prior to submittal of a revised certification of compliance, hazardous waste must not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning must be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207;

B) At least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator must notify the Agency and submit the following information:

i) USEPA facility ID number, and facility name, contact person, telephone number, and address;

ii) Operating conditions that the owner or operator is seeking to revise and description of the changes in facility design or operation that prompted the need to seek to revise the operating conditions;

iii) A determination that, when operating under the revised operating conditions, the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 are not likely to be exceeded. To document this determination, the owner or operator must submit the applicable information required under subsection (b)(2) of this Section; and

iv) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 when operating under revised operating conditions. The protocol must include a schedule of pre-testing and compliance testing. If the owner or operator revises the scheduled date for the compliance test, the owner or operator must notify the Agency in writing at least 30 days prior to the revised date of the compliance test;

C) Conduct a compliance test under the revised operating conditions and the protocol submitted to the Agency to determine compliance with the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207; and

D) Submit a revised certification of compliance under subsection (c)(4) of this Section.

d) Periodic Recertifications. The owner or operator must conduct compliance testing and submit to the Agency a recertification of compliance under provisions of subsection (c) of this Section within three years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, the owner or operator must comply with the requirements of subsection (c)(8) of this Section.

e) Noncompliance with certification schedule. If the owner or operator does not comply with the interim status compliance schedule provided by subsections (b), (c), and (d) of this Section, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l) of this Section, and hazardous waste burning must not resume except under an operating permit issued under 35 Ill. Adm. Code 703.232. For purposes of compliance with the closure provisions of subsection (l) of this Section and 35 Ill. Adm. Code 725.212(d)(2) and 725.213, the BIF has received "the known final volume of hazardous waste" on the date the deadline is missed.

f) Start-up and shut-down. Hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine) must not be fed into the device during start-up and shut-down of the BIF, unless the device is operating within the conditions of operation specified in

the certification of compliance.

g) Automatic waste feed cutoff. During the compliance test required by subsection (c)(3) of this Section and upon certification of compliance under subsection (c) of this Section, a BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in subsections (c)(1)(A) and (c)(1)(E) through (c)(1)(M) of this Section deviate from those established in the certification of compliance. In addition, the following must occur:

1) To minimize emissions of organic compounds, the minimum combustion chamber temperature (or the indicator of combustion chamber temperature) that occurred during the compliance test must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either of the following:

A) If compliance with the combustion chamber temperature limit is based on a hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

B) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and

2) Operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.

h) Fugitive emissions. Fugitive emissions must be controlled as follows:

1) By keeping the combustion zone totally sealed against fugitive emissions; or

2) By maintaining the combustion zone pressure lower than atmospheric pressure; or

3) By an alternative means of control that the owner or operator demonstrates provides fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration must be included in the operating record.

i) Changes. A BIF must cease burning hazardous waste when combustion properties, or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or

the BIF design or operating conditions deviate from the limits specified in the certification of compliance.

j) Monitoring and Inspections.

1) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

A) Feed rates and composition of hazardous waste, other fuels, and industrial furnace feed stocks and feed rates of ash, metals, and total chlorine and chloride as necessary to ensure conformance with the certification of precompliance or certification of compliance;

B) CO, oxygen, and, if applicable, HC on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I to this Part; and

C) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feed stocks as appropriate) and the stack gas emissions must be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.

2) The BIF and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when they contain hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

3) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the owner or operator can demonstrate that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration must be included in the operating record. At a minimum, operational testing must be conducted at least once every 30 days.

4) These monitoring and inspection data must be recorded and the records must be placed in the operating log.

k) Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by this Section until closure of the BIF unit.

l) Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF and must comply with 35 Ill. Adm. Code 725.211 through 725.215.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.204 Standards to Control Organic Emissions

a) DRE standard.

1) General. Except as provided in subsection (a)(3) of this Section, a BIF burning hazardous waste must achieve a DRE of 99.99 percent for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99 percent DRE must be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated (under subsection (a)(2) of this Section) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = 100\frac{(I - O)}{I}$$

Where:

I = Mass feed rate of one POHC in the hazardous waste fired to the BIF; and

O = Mass emission rate of the same POHC present in stack gas prior to release to the atmosphere.

2) Designation of POHCs. POHCs are those compounds for which compliance with the DRE requirements of this Section must be demonstrated in a trial burn in conformance with procedures prescribed in 35 Ill. Adm. Code 703.232. One or more POHCs must be designated by the Agency for each waste feed to be burned. POHCs must be designated based on the degree of difficulty of destruction of the organic constituents in the waste and on their concentrations or mass in the waste feed considering the results of waste analyses submitted with Part B of the permit application. POHCs are most likely to be selected from among those compounds listed in Appendix H to 35 Ill. Adm. Code 721 that are also present in the normal waste feed. However, if the applicant demonstrates to the Agency that a compound not listed in Appendix H to 35 Ill. Adm. Code 721 or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this Section, that compound must be designated as a POHC. Such POHCs need not be toxic or organic compounds.

3) Dioxin-listed waste. A BIF burning hazardous waste containing (or derived from) USEPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each POHC designated (under subsection (a)(2) of this Section) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1) of this Section. In addition, the owner or operator of the BIF must notify the Agency of intent to burn USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027.

4) Automatic waiver of DRE trial burn. Owners and operators of boilers operated under the special operating requirements provided by Section 726.210 are considered to be in compliance with the DRE standard of subsection (a)(1) of this Section and are exempt from the DRE trial burn.

5) Low risk waste. Owners and operators of BIFs that burn hazardous waste in compliance with the requirements of Section 726.209(a) are considered to be in compliance with the DRE standard of subsection (a)(1) of this Section and are exempt from the DRE trial burn.

b) CO standard.

1) Except as provided in subsection (c) of this Section, the stack gas concentration of CO from a BIF burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis (i.e., over any 60 minute period), continuously corrected to seven percent oxygen, dry gas basis.

2) CO and oxygen must be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in Appendix I to this Part.

3) Compliance with the 100 ppmv CO limit must be demonstrated during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test must not exceed 100 ppmv.

c) Alternative CO standard.

1) The stack gas concentration of CO from a BIF burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of HCs do not exceed 20 ppmv, except as provided by subsection (f) of this Section for certain industrial furnaces.

2) HC limits must be established under this Section on an hourly rolling average basis (i.e., over any 60 minute period), reported as propane, and continuously corrected to seven percent oxygen, dry gas basis.

3) HC must be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in Appendix I to this Part. CO and oxygen must be continuously monitored in conformance with subsection (b)(2) of this Section.

4) The alternative CO standard is established based on CO data during the trial burn (for a new facility) and the compliance test (for an interim status facility). The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to seven percent oxygen, dry gas basis.

d) Special requirements for furnaces. Owners and operators of industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see Section 726.203(a)(5)(B)) at any location other than the end where products are normally discharged and where fuels are normally fired must comply with the HC limits provided by subsection (c) or (f) of this Section irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of subsection (b) of this Section.

e) Controls for dioxins and furans. Owners and operators of BIFs that are equipped with a dry PM control device that operates within the temperature range of 450º through 750° F, and industrial furnaces operating under an alternative HC limit established under subsection (f) of this Section must conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-p-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1×10^{-5} (1 in 100,000):

1) During the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 0023A~~, "~~(Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans Emissions from Stationary Sources~~,"~~) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a);

2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners using ~~"~~section 4.0 (Procedures for Estimating the

Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners~~"~~) in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I to this Part). Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

3) Conduct dispersion modeling using methods recommended in federal appendix W to 40 CFR 51~~, Appendix W, as incorporated by reference at 35 Ill. Adm. Code 720.111~~ (~~"~~Guideline on Air Quality Models ~~(Revised)" (1986) and its supplements~~), ~~the "~~ in section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure~~,")~~ ~~provided in Appendix I~~ in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), or in "Screening Procedures for Estimating Air Quality Impact of Stationary Sources, Revised," ~~(~~USEPA publication number EPA-454/R-92-019, each incorporated by reference in 35 Ill. Adm. Code 720.111~~),~~ to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under subsection (e)(2) of this Section. The maximum annual average on-site concentration must be used when a person resides on-site; and

4) The ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose (RSD) for 2,3,7,8-TCDD provided in Appendix E to this Part (2.2×10^{-7}) must not exceed 1.0.

f) Monitoring CO and HC in the by-pass duct of a cement kiln. Cement kilns may comply with the CO and HC limits provided by subsections (b), (c), and (d) of this Section by monitoring in the by-pass duct provided that the following conditions are fulfilled:

1) Hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and

2) The by-pass duct diverts a minimum of 10 percent of kiln off-gas into the duct.

g) Use of emissions test data to demonstrate compliance and establish operating limits. Compliance with the requirements of this Section must be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of this Section or to establish alternative CO or HC limits under this Section must be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under subsection (e) of this Section and comprehensive organic emissions testing under subsection (f) of this Section is conducted.

h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 et seq.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.205 Standards to Control PM

a) A BIF burning hazardous waste must not emit PM in excess of 180 mg/dry standard m^3 (0.08 grains/dry standard cubic foot) after correction to a stack gas concentration of seven percent oxygen, using procedures prescribed in the following methods in appendix A to 40 CFR 60~~, Appendix A, methods 1 through 5~~ (Test Methods), each incorporated by reference in 35 Ill. Adm. Code ~~720.111,~~ 720.111(b) ~~and incorporated by reference in~~ (see Appendix I of this Part): Method 1 (Sample and Velocity Traverses for Stationary Sources), Method 2 (Determination of Volatile Organic Compound Leaks), Method 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), Method 2B (Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators), Method 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), Method 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts), Method 2E (Determination of Landfill Gas Production Flow Rate), Method 2F (Determination of Stack Gas Velocity and Volumetric Flow Rate with Three-Dimensional Probes), Method 2G (Determination of Stack Gas Velocity and Volumetric Flow Rate with Two-Dimensional Probes), Method 2H (Determination of Stack Gas Velocity Taking into Account Velocity Decay Near the Stack Wall), Method 3 (Gas Analysis for the Determination of Dry Molecular Weight), Method 3A (Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)), Method 3B (Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air), Method 3C (Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources), Method 4 (Determination of Moisture Content in Stack Gases), Method 5 (Determination of Particulate Matter Emissions from Stationary Sources), Method 5A (Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry), Method 5B (Determination of Nonsulfuric Acid Particulate Matter Emissions from Stationary Sources), Method 5D (Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters), Method 5E (Determination of Particulate Matter Emissions from the Wool Fiberglass Insulation Manufacturing Industry), Method 5F (Determination of Nonsulfate Particulate Matter Emissions from Stationary Sources), Method 5G (Determination of Particulate Matter Emissions from Wood Heaters (Dilution Tunnel Sampling Location)), Method 5H (Determination of Particulate Emissions

from Wood Heaters from a Stack Location), and Method 5I (Determination of Low Level Particulate Matter Emissions from Stationary Sources).

b) An owner or operator meeting the requirements of Section 726.209(b) for the low risk waste exemption is exempt from the PM standard.

c) Oxygen correction.

1) Measured pollutant levels must be corrected for the amount of oxygen in the stack gas according to the following formula:

$$P_c = P_m \times 14/(E - Y)$$

Where:

P_c = ~~is~~ the corrected concentration of the pollutant in the stack gas~~,~~

P_m = ~~is~~ the measured concentration of the pollutant in the stack gas~~,~~

E = ~~is~~ the oxygen concentration on a dry basis in the combustion air fed to the device~~, and~~

Y = ~~is~~ the measured oxygen concentration on a dry basis in the stack.

2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion (that is, air with an oxygen concentration exceeding 21 percent), the value of E will be the concentration of oxygen in the enriched air.

3) Compliance with all emission standards provided by this Subpart H must be based on correcting to seven percent oxygen using this procedure.

d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.206 Standards to Control Metals Emissions

a) General. The owner or operator must comply with the metals standards provided by subsections (b), (c), (d), (e), or (f) of this Section for each metal listed in subsection (b) of this Section that is present in the hazardous waste at detectable levels using appropriate analytical procedures ~~specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111~~.

b) Tier I feed rate screening limits. Feed rate screening limits for metals are specified in Appendix A to this Part as a function of terrain-adjusted effective stack height (TESH) and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b)(7) of this Section.

1) Noncarcinogenic metals. The feed rates of the noncarcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the screening limits specified in Appendix A to this Part.

A) The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either of the following:

i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii); or

ii) An instantaneous limit not to be exceeded at any time.

B) The feed rate screening limit for lead is based on one of the following:

i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii);

ii) An averaging period of 2 to 24 hours, as defined in Section 726.202(e)(6)(B) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or

iii) An instantaneous limit not to be exceeded at any time.

2) Carcinogenic metals.

A) The feed rates of carcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed values derived from the screening limits specified in

Appendix A to this Part. The feed rate of each of these metals is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{A_i}{F_i} \leq 1.0$$

Where:

$\Sigma A_i/F_i$ = ~~means~~ the sum of the values of A/F for each metal "i," from i = 1 to n~~.~~

n = number of carcinogenic metals~~.~~

A_i = the actual feed rate to the device for metal "i~~.~~"

F_i = the feed rate screening limit provided by Appendix A to this Part for metal "i."

B) The feed rate screening limits for the carcinogenic metals are based on either:

i) An hourly rolling average; or

ii) An averaging period of two to 24 hours, as defined in Section 726.202(e)(6)(B), with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.

3) TESH (terrain adjusted effective stack height).

A) The TESH is determined according to the following equation:

TESH = H + P - T

Where:

H = Actual physical stack height (m).

P = Plume rise (in m) as determined from Appendix F to this Part as a function of stack flow rate and stack gas exhaust temperature.

T = Terrain rise (in m) within five kilometers of the stack.

B) The stack height (H) must not exceed good engineering practice stack height, as defined in Section 726.200(i).

C) If the TESH calculated pursuant to subsection (b)(3)(A) of this Section is not listed in Appendix A through Appendix C to this Part, the values for the nearest lower TESH listed in the table must be used. If the TESH is four meters or less, a value based on four meters must be used.

4) Terrain type. The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within five kilometers of the stack equals or exceeds the elevation of the physical stack height (H) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.

5) Land use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, procedures provided in Appendix I or Appendix J to this Part must be used.

6) Multiple stacks. An ~~owners~~ owner or operator of a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA permit or interim status controls must comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The stack with the lowest value of K is the worst-case stack. K is determined from the following equation as applied to each stack:

$$K = H \times V \times T$$

Where:

K = a parameter accounting for relative influence of stack height and plume rise~~;~~

H = physical stack height (meters)~~;~~

V = stack gas flow rate (m^3/sec (cubic meters per second)~~; and~~

T = exhaust temperature (degrees K).

7) Criteria for facilities not eligible for screening limits. If any criteria below are met, the Tier I (and Tier II) screening limits do not apply. Owners and operators of such facilities must comply with either the Tier III standards provided by subsection (d) of this Section or with the adjusted Tier I feed rate screening limits provided by subsection (e) of this Section.

A) The device is located in a narrow valley less than one kilometer wide;

B) The device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;

C) The device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake; or

D) The physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building.

8) Implementation. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate screening limits are not exceeded.

c) Tier II emission rate screening limits. Emission rate screening limits are specified in Appendix A to this Part as a function of TESH and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b)(7) of this Section.

1) Noncarcinogenic metals. The emission rates of noncarcinogenic metals must not exceed the screening limits specified in Appendix A to this Part.

2) Carcinogenic metals. The emission rates of carcinogenic metals must not exceed values derived from the screening limits specified in Appendix A to this Part. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{A_i}{E_i} \leq 1.0$$

Where:

$\Sigma A_i/E_i$ ~~means~~ = the sum of the values of A/E for each metal "i," from i = 1 to n~~.~~

n = number of carcinogenic metals~~.~~

A_i = the actual emission rate to the device for metal "i~~.~~"

E_i = the emission rate screening limit provided by Appendix A to this Part for metal "i."

3) Implementation. The emission rate limits must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.

4) Definitions and limitations. The definitions and limitations provided by subsection (b) of this Section and 726.200(g) for the following terms also apply to the Tier II emission rate screening limits provided by this subsection (c): TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

5) Multiple stacks.

A) An owner or operator of a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must comply with the emissions screening limits for any such stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

B) The worst-case stack is determined by procedures provided in subsection (b)(6) of this Section.

C) For each metal, the total emissions of the metal from those stacks must not exceed the screening limit for the worst-case stack.

d) Tier III site-specific risk assessment. The requirements of this subsection (d) apply to facilities complying with either the Tier III or Adjusted Tier I except where specified otherwise.

1) General. Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either Tier III or Adjusted Tier I metals controls must be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal and a demonstration that acceptable ambient levels are not exceeded.

2) Acceptable ambient levels. Appendix D and Appendix E to this Part list the acceptable ambient levels for purposes of this Subpart H. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 1×10^{-5} RSDs are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD, as described in subsection (d)(3) of this Section.

3) Carcinogenic metals. For the carcinogenic metals the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on site) to the RSD for all carcinogenic metals emitted must not exceed 1.0 as determined by the following equation:

$$\sum_{i=1}^{n} \frac{P_i}{R_i} \leq 1.0$$

Where:

$\Sigma P_i/R_i$ ~~means~~ = the sum of the values of P/R for each metal "i," from i = 1 to n~~.~~

n = number of carcinogenic metals~~.~~

P_i = the predicted ambient concentration for metal i~~.~~

R_i = the RSD for metal i.

4) Noncarcinogenic metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal must not exceed the RAC.

5) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must conduct emissions testing (except that facilities complying with Adjusted Tier I controls need not conduct emissions testing) and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedence of the acceptable ambient levels.

6) Implementation. Under Tier III, the metals controls must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.

e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limits provided by Appendix A to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient levels provided by Appendix D and Appendix E to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in subsection (b)(2) of this Section.

f) Alternative implementation approaches.

1) Pursuant to subsection (f)(2) of this Section the Agency must approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by subsection (c) or (d) of this Section alternative to monitoring the feed rate of metals in each feedstream.

2) The emission limits provided by subsection (d) of this Section must be determined as follows:

A) For each noncarcinogenic metal, by back-calculating from the RAC provided in Appendix D to this Part to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and

B) For each carcinogenic metal by the following methods:

i) By back-calculating from the RSD provided in Appendix E to this Part to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and

ii) If more than one carcinogenic metal is emitted, by selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by subsection (f)(2)(B)(i) of this Section, such that the sum for all carcinogenic metals of the ratios of the selected emission limit to the emission rate determined by that subsection does not exceed 1.0.

g) Emission testing.

1) General. Emission testing for metals must be conducted using Method 0060~~,~~ ~~"~~(Determinations of Metals in Stack Emissions~~,"~~) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

2) Hexavalent chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in Method 0061~~,~~ ~~"~~(Determination of Hexavalent Chromium Emissions from Stationary Sources~~,"~~) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

h) Dispersion modeling. Dispersion modeling required under this Section must be conducted according to methods recommended in federal appendix W to 40 CFR 51~~, appendix W~~ (~~"~~Guideline on Air Quality Models ~~(Revised)" (1986) and its supplements~~), ~~the "~~ in section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure~~,"~~) ~~described in Appendix I to this Part~~ in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," ~~(~~USEPA publication number EPA-454/R-92-019, each incorporated by reference in 35 Ill. Adm. Code 720.111~~),~~ to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.

i) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.207 Standards to Control HCl and Chlorine Gas Emissions

a) General. The owner or operator must comply with the HCl and chlorine gas controls provided by subsection (b), (c), or (e) of this Section.

b) Screening limits.

1) Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in Appendix B to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the levels specified.

2) Tier II emission rate screening limits. Emission rate screening limits for HCl and chlorine gas are specified in Appendix C to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and chlorine gas must not exceed the levels specified.

3) Definitions and limitations. The definitions and limitations provided by Sections 726.200(i) and 726.206(b) for the following terms also apply to the screening limits provided by this subsection: TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

4) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

A) The worst-case stack is determined by procedures provided in Section 726.206(b)(6).

B) Under Tier I, the total feed rate of chlorine and chloride to all subject devices must not exceed the screening limit for the worst-case stack.

C) Under Tier II, the total emissions of HCl and chlorine gas from all subject stacks must not exceed the screening limit for the worst-case stack.

c) Tier III site-specific risk assessments.

1) General. Conformance with the Tier III controls must be demonstrated by emissions testing to determine the emission rate for HCl and chlorine gas, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.

2) Acceptable ambient levels. Appendix D to this Part lists the RACs for HCl (7 ~~ug/m³~~ µg/m^3) and chlorine gas (0.4 ~~ug/m³~~ µg/m^3).

3) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedence of the acceptable ambient levels for HCl and chlorine gas.

d) Averaging periods. The HCl and chlorine gas controls are implemented by limiting the feed rate of total chlorine and chloride in all feedstreams, including hazardous waste, fuels, and industrial furnace feed stocks. Under Tier I, the feed rate of total chlorine and chloride is limited to the Tier I Screening Limits. Under Tier II and Tier III, the feed rate of total chlorine and chloride is limited to the feed rates during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate limits are based on either of the following:

1) An hourly rolling average, as defined in Sections 726.200(i) and 726.202(e)(6); or

2) An instantaneous basis not to be exceeded at any time.

e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limit provided by Appendix B to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for chlorine gas provided by Appendix D to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I

feed rate screening limit.

f) Emissions testing. Emissions testing for HCl and chlorine gas (Cl_2) must be conducted using the procedures described in Method 0050 or 0051, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

g) Dispersion modeling. Dispersion modeling must be conducted according to the provisions of Section 726.206(h).

h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.211 Standards for Direct Transfer

a) Applicability. The regulations in this Section apply to owners and operators of BIFs subject to Section 726.202 or 726.203 if hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit.

b) Definitions.

1) When used in this Section, terms have the following meanings:

"Direct transfer equipment" means any device (including but not limited to, such devices as piping, fittings, flanges, valves and pumps) that is used to distribute, meter or control the flow of hazardous waste between a container (i.e., transport vehicle) and a BIF.

"Container" means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars) and containers placed on or in a transport vehicle.

2) This Section references several requirements provided in Subparts I and J of 35 Ill. Adm. Code 724 and Subparts I and J of 35 Ill. Adm. Code 725. For purposes of this Section, the term "tank systems" in those referenced requirements means direct transfer equipment, as defined in subsection (b)(1) of this Section.

c) General operating requirements.

1) No direct transfer of a pumpable hazardous waste must be conducted from an open-top container to a BIF.

2) Direct transfer equipment used for pumpable hazardous waste must always be closed, except when necessary to add or remove the waste, and must not be opened, handled, or stored in a manner that could cause any rupture or leak.

3) The direct transfer of hazardous waste to a BIF must be conducted so that it does not do any of the following:

A) Generate extreme heat or pressure, fire, explosion, or violent reaction;

B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

D) Damage the structural integrity of the container or direct transfer equipment containing the waste;

E) Adversely affect the capability of the BIF to meet the standards provided by Sections 726.204 through 726.207; or

F) Threaten human health or the environment.

4) Hazardous waste must not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.

5) The owner or operator of the facility must use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include the following at a minimum:

A) Spill prevention controls (e.g., check valves, dry discount couplings, etc.); and

B) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.

d) Areas where direct transfer vehicles (containers) are located. Applying the definition of container under this Section, owners and operators must comply with the following requirements:

1) The containment requirements of 35 Ill. Adm. Code 724.275;

2) The use and management requirements of Subpart I of 35 Ill. Adm. Code 725, except for Sections 725.270 and 725.274, and except that in lieu of the special requirements of 35 Ill. Adm. Code 725.276 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon, as required in Tables 2-1 through 2-6 of "Flammable and Combustible Liquids Code," NFPA 30, (incorporated by reference in 35 Ill. Adm. Code ~~720.111)~~ 720.111(a). The owner or operator must obtain and keep on file at the facility a written certification by the local Fire Marshal that the installation meets the subject NFPA Codes; and

3) The closure requirements of 35 Ill. Adm. Code 724.278.

e) Direct transfer equipment. Direct transfer equipment must meet the following requirements:

1) Secondary containment. Owners and operators must comply with the secondary containment requirements of 35 Ill. Adm. Code 725.293, except for Sections 725.293(a), (d), (e), and (i), as follows:

A) For all new direct transfer equipment, prior to their being put into service; and

B) For existing direct transfer equipment, by August 21, 1993.

2) Requirements prior to meeting secondary containment requirements.

A) For existing direct transfer equipment that does not have secondary containment, the owner or operator must determine whether the equipment is leaking or is unfit for use. The owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 703.126(d) that attests to the equipment's integrity by August 21, 1992.

B) This assessment must determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the wastes to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this

assessment must consider the following:

i) Design standards, if available, according to which the direct transfer equipment was constructed;

ii) Hazardous characteristics of the wastes that have been or will be handled;

iii) Existing corrosion protection measures;

iv) Documented age of the equipment, if available, (otherwise, an estimate of the age); and

v) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion and erosion are accounted for.

C) If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator must comply with the requirements of 35 Ill. Adm. Code 725.296(a) and (b).

3) Inspections and recordkeeping.

A) The owner or operator must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the BIF:

i) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;

ii) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation, etc.); and

iii) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to its design.

B) The owner or operator must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by 35 Ill. Adm. Code 725.295(b).

C) Records of inspections made under this subsection must be

maintained in the operating record at the facility, and available for inspection for at least three years from the date of the inspection.

4) Design and installation of new ancillary equipment. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.292.

5) Response to leaks or spills. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.296.

6) Closure. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.297, except for 35 Ill. Adm. Code 725.297(c)(2) through (c)(4).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.212 Regulation of Residues

A residue derived from the burning or processing of hazardous waste in a BIF is not excluded from the definition of a hazardous waste under 35 Ill. Adm. Code 721.104(b)(4), (b)(7), or (b)(8), unless the device and the owner or operator meet the following requirements:

a) The device meets the following criteria:

1) Boilers. Boilers must burn at least 50 percent coal on a total heat input or mass basis, whichever results in the greater mass feed rate of coal;

2) Ore or mineral furnaces. Industrial furnaces subject to 35 Ill. Adm. Code 721.104(b)(7) must process at least 50 percent by weight of normal, nonhazardous raw materials;

3) Cement kilns. Cement kilns must process at least 50 percent by weight of normal cement-production raw materials;

b) The owner or operator demonstrates that the hazardous waste does not significantly affect the residue by demonstrating conformance with either of the following criteria:

1) Comparison of waste-derived residue with normal residue. The waste-derived residue must not contain constituents listed in Appendix H to 35 Ill. Adm. Code 721 ~~constituents~~ (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of concern) include toxic constituents in the hazardous waste, and the organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 that may be PICs. ~~Sampling and analyses must be in conformance with procedures prescribed~~

~~in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).~~ For polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans, analyses must be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in section 4.0 of the documents referenced in Appendix I of this Part.

A) Normal residue. Concentrations of toxic constituents of concern in normal residue must be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95 percent confidence with a 95 percent proportion of the sample distribution) of the concentration in the normal residue must be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner or operator must use statistical procedures prescribed in "section 7.0 (Statistical Methodology for Bevill Residue Determinations,") in federal appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), USEPA publication number EPA-454/R-92-019, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part).

B) Waste-derived residue. Waste derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under subsection (b)(1)(A) of this Section. If so, hazardous waste burning has significantly affected the residue and the residue is not excluded from the definition of "hazardous waste." Concentrations of toxic constituents in waste-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent must be the arithmetic mean of the concentrations in the samples. No results can be disregarded; or

2) Comparison of waste-derived residue concentrations with health-based limits.

A) Nonmetal constituents. The concentration of each nonmetal toxic constituent of concern (specified in subsection (b)(1) of this Section) in the waste-derived residue must not exceed the health-based level specified in Appendix G of this Part, or the level of detection ~~(using analytical procedures prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111)~~, whichever is higher. If a health-based limit for a constituent of concern is not listed in Appendix G of this Part, then a limit of 0.002 mg/kg or the level of detection (using appropriate analytical procedures ~~prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111~~), whichever is higher, must be used. The levels specified in Appendix G of this Part (and the default level of 0.002 mg/kg or the level of detection for constituents, as identified in Note 1 of Appendix G of this Part) are administratively stayed under the condition, for those constituents specified in subsection (b)(1) of this Section, that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 and Table B to 35 Ill. Adm. Code 728 for F039 nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of the best good-faith efforts, as defined by applicable USEPA guidance and standards, the owner or operator is deemed to be in compliance for that constituent. Until USEPA develops new guidance or standards, the owner or operator may demonstrate such good-faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above (ten times) the level provided by 35 Ill. Adm. Code 728.143 and Table B to 35 Ill. Adm. Code 728 for F039 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (D/F), analyses must be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins, and total tetrachlorodibenzofurans;

BOARD NOTE: In a note to corresponding 40 CFR 266.112(b)(2)(i) ~~(2002)~~, USEPA stated as follows:

> The administrative stay, under the condition that the owner or operator complies with alternative levels

defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 for F039 nonwastewaters, remains in effect until further administrative action is taken and notice is published in the Federal Register and the Code of Federal Regulations.

Under Section 3006(b) and (g) of RCRA, 42 USC 6926(b) and (g), federal amendments do not go into effect in Illinois until the State of Illinois incorporates them into the State program. This applies unless the authority under which USEPA adopted the amendments is the Hazardous and Solid Waste Amendments of 1984 (HSWA), in which case the federal amendments become effective in Illinois on their federal effective date.

B) Metal constituents. The concentration of metals in an extract obtained using the TCLP test must not exceed the levels specified in Appendix G of this Part;

C) Sampling and analysis. Wastewater-derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels. Concentrations of concern in the wastewater-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent is the arithmetic mean of the concentrations of the samples. No results can be disregarded; and

c) Records sufficient to document compliance with the provisions of this Section must be retained until closure of the BIF unit. At a minimum, the following must be recorded:

1) Levels of constituents in Appendix H to 35 Ill. Adm. Code 721 that are present in waste-derived residues;

2) If the waste-derived residue is compared with normal residue under subsection (b)(1) of this Section:

A) The levels of constituents in Appendix H to 35 Ill. Adm. Code 721 that are present in normal residues; and

B) Data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART M: MILITARY MUNITIONS

Section 726.303 Standards Applicable to the Transportation of Solid Waste Military Munitions

a) Criteria for hazardous waste regulation of waste non-chemical military munitions in transportation.

1) Waste military munitions that are being transported and which exhibit a hazardous waste characteristic or which are listed as hazardous waste under 35 Ill. Adm. Code 721 are subject to regulation under 35 Ill. Adm. Code 702, 703, 705, 720 through 726, and 728, unless the munitions meet all the following conditions:

A) The waste military munitions are not chemical agents or chemical munitions;

B) The waste military munitions are transported in accordance with the Department of Defense shipping controls applicable to the transport of military munitions;

C) The waste military munitions are transported from a military-owned or -operated installation to a military-owned or -operated treatment, storage, or disposal facility; and

D) The transporter of the waste must provide oral notice to the Agency within 24 hours from the time when either the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) of this Section occurs that may endanger human health or the environment. In addition, a written submission describing the circumstances must be provided within five days from the time when the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) of this Section occurs.

2) If any waste military munitions shipped under subsection (a)(1) of this Section are not received by the receiving facility within 45 days after the day the waste was shipped, the owner or operator of the receiving facility

must report this non-receipt to the Agency within five days.

3) The conditional exemption from regulation as hazardous waste in subsection (a)(1) of this Section must apply only to the transportation of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to storage, treatment, or disposal.

4) The conditional exemption in subsection (a)(1) of this Section applies only so long as all of the conditions in subsection (a)(1) of this Section are met.

b) Reinstatement of conditional exemption.

1) If any waste military munition loses its conditional exemption under subsection (a)(1) of this Section, the transporter may file with the Agency an application for reinstatement of the conditional exemption from hazardous waste transportation regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of subsection (a)(1) of this Section.

2) If the Agency finds that reinstatement of the conditional exemption is appropriate, it must reinstate the conditional exemption of subsection (a)(1) of this Section in writing. The Agency's decision to reinstate or not to reinstate the conditional exemption must be based on the nature of the risks to human health and the environment posed by the waste and either the transporter's provision of a satisfactory explanation of the circumstances of the violation or any demonstration that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. In reinstating the conditional exemption under subsection (a)(1) of this Section, the Agency may specify additional conditions as are necessary to ensure and document proper transportation to protect human health and the environment. If the Agency does not take action on the reinstatement application within 60 days after receipt of the application, then reinstatement must be deemed granted, retroactive to the date of the application.

3) The Agency may terminate a conditional exemption reinstated by default under the preceding sentence in writing if it finds that reinstatement is inappropriate based on its consideration of the factors set forth in subsection (b)(2) of this Section. If the Agency terminates a reinstated exemption, it must transmit to the applicant specific, detailed statements in writing as to the reasons it terminated the reinstated exemption.

4) The applicant under this subsection (b) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with

conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

c) Amendments to DOD shipping controls. The Department of Defense shipping controls applicable to the transport of military munitions referenced in subsection (a)(1)(B) of this Section are Government Bill of Lading (GBL) (GSA Standard Form 1109), Requisition Tracking Form (DD Form 1348), the Signature and Talley Record (DD Form 1907), Special Instructions for Motor Vehicle Drivers (DD Form 836), and the Motor Vehicle Inspection Report (DD Form 626) in effect on November 8, 1995, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

BOARD NOTE: Corresponding federal provision 40 CFR 266.203(c)~~, as added at 62 Fed. Reg. 6655 (Feb. 12, 1997),~~ (2005) further provides as follows: "Any amendments to the Department of Defense shipping controls must become effective for purposes of paragraph (a)(1) of this section on the date the Department of Defense publishes notice in the Federal Register that the shipping controls referenced in paragraph (a)(1)(ii) of this section have been amended." (40 CFR 266.203(a)(1)(ii) corresponds with 35 Ill. Adm. Code 726.303(a)(1)(B).) Section 5-75 of the Illinois Administrative Procedure Act [5 ILCS 100/5-75] prohibits the incorporation of later amendments and editions by reference. For this reason, interested members of the regulated community will need to notify the Board of any amendments of these references before those amendments can become effective under Illinois law.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART N: CONDITIONAL EXEMPTION FOR LOW-LEVEL MIXED WASTE STORAGE, TREATMENT, TRANSPORTATION AND DISPOSAL

Section 726.310 Definitions

Terms are defined as follows for the purposes of this Subpart N:

"CERCLA reportable quantity" means that quantity of a particular substance designated by USEPA in federal 40 CFR 302.4 pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC 9601 et seq.) for which notification is required upon a release to the environment.

"Certified delivery" means certified mail with return receipt requested, equivalent courier service, or other means that provides the sender with a receipt confirming delivery.

"Director" is as defined in 35 Ill. Adm. Code 702.110.

~~"DNS" means the Department of Nuclear Safety, the State of Illinois agency~~

~~charged with regulating source, by-product, and special nuclear material in Illinois in accordance with an agreement between the State and the federal Nuclear Regulatory Commission (NRC) under section 274(b) of the federal Atomic Energy Act of 1954, as amended (42 USC 2021(b)).~~

~~BOARD NOTE: In addition to the materials regulated under this Part, the DNS regulates radioactive materials under the Radiation Protection Act of 1990 [420 ILCS 40] that are not licensed by the federal NRC. For the purposes of notices to the DNS required under this Subpart N, the address is as follows:~~

~~Illinois Department of Nuclear Safety~~
~~1035 Outer Park Drive~~
~~Springfield, Illinois 62704~~

"Eligible naturally occurring or accelerator-produced radioactive material" means naturally occurring or accelerator-produced radioactive material (NARM) that is eligible for a transportation and disposal conditional exemption. It is a NARM waste that contains RCRA hazardous waste, meets the waste acceptance criteria of, and is allowed by State NARM regulations to be disposed of at a low-level radioactive waste disposal facility (LLRWDF) licensed in accordance with federal 10 CFR 61, ~~DNS~~ EMA regulations, or the equivalent regulations of a licensing agency in another state.

BOARD NOTE: The Illinois ~~DNS~~ EMA regulations are codified at 32 Ill. Adm. Code: Chapter II, Subchapters b and d.

"EMA" means the Emergency Management Agency, the State of Illinois agency charged with regulating source, by-product, and special nuclear material in Illinois in accordance with an agreement between the State and the federal Nuclear Regulatory Commission (NRC) under section 274(b) of the federal Atomic Energy Act of 1954, as amended (42 USC 2021(b)).

BOARD NOTE: In addition to the materials regulated under this Part, EMA regulates radioactive materials under the Radiation Protection Act of 1990 [420 ILCS 40] that are not licensed by the federal NRC. For the purposes of notices to EMA required under this Subpart N, the address is as follows:

Illinois Emergency Management Agency
1035 Outer Park Drive
Springfield, Illinois 62704

"Exempted waste" means a waste that meets the eligibility criteria in Section 726.325 and all of the conditions in Section 726.330 or a waste that meets the eligibility criteria in Section 726.410 and which complies with all the conditions in Section 726.415. Such waste is conditionally exempted from the regulatory definition of hazardous waste in 35 Ill. Adm. Code 721.103.

"Hazardous waste" means hazardous waste as defined in 35 Ill. Adm. Code 721.103.

"Land disposal restriction treatment standards" or "LDR treatment standards" means treatment standards, under 35 Ill. Adm. Code 728, that a RCRA hazardous waste must meet before it can be disposed of in a RCRA hazardous waste land disposal unit.

"License" means a license issued by the federal NRC or the Illinois ~~DNS~~ EMA to a user that manages radionuclides regulated by the federal NRC or the Illinois ~~DNS~~ EMA under authority of the Atomic Energy Act of 1954, as amended (42 USC 2014 et seq.) or the Radiation Protection Act of 1990 [420 ILCS 40].

"Low-level mixed waste" or "LLMW" is a waste that contains both low-level radioactive waste and RCRA hazardous waste.

"Low-level radioactive waste" or "LLRW" is a radioactive waste that contains source, by-product, or special nuclear material and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material, as defined in section 11(e)(2) of the Atomic Energy Act of 1954 (42 USC 2014(e)(2)), incorporated by reference in 35 Ill. Adm. Code 720.111(b). (See also the NRC definition of waste at federal 10 CFR 61.2.)

BOARD NOTE: This definition differs from the similar definitions of low-level radioactive waste in the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(k)], the Central Midwest Interstate Low-Level Radioactive Waste Compact Act [45 ILCS 140/1, Article II(k)], and 32 Ill. Adm. Code 606.20(g) of the ~~DNS~~ EMA regulations. Those basically define low-level radioactive waste as radioactive waste that is not ~~(1)~~ high-level radioactive waste, ~~(2)~~ transuranic waste, ~~(3)~~ spent nuclear fuel, or ~~(4)~~ by-product material, as such are defined in section 11 of the federal Atomic Energy Act of 1954 (42 USC 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"Mixed waste" means a waste that contains both RCRA hazardous waste and source, by-product, or special nuclear material subject to the Atomic Energy Act of 1954, as amended (42 USC 2014 et seq.).

BOARD NOTE: This definition differs from the similar definitions of mixed waste in the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(l)] and 32 Ill. Adm. Code 606.20(h) of the ~~DNS~~ EMA regulations. Those basically define mixed waste as containing both RCRA hazardous waste and low-level radioactive waste, as such is defined under Section 3(k) of the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(k)].

"Naturally occurring or accelerator-produced radioactive material" or "NARM"

means a radioactive material that fulfills one of the following conditions:

It is naturally occurring and it is not a source, by-product, or special nuclear material, as defined ~~by~~ in section 11 of the federal Atomic Energy Act of 1954 (42 USC 2014 ~~et seq.~~), incorporated by reference in 35 Ill. Adm. Code 720.111(c); or

It is produced by an accelerator.

BOARD NOTE: NARM is regulated by the State, under the Radiation Protection Act of 1990 [420 ILCS 40] and 32 Ill. Adm. Code: Chapter II, Subchapters b and d, or by the federal Department of Energy (DOE), as authorized by the federal Atomic Energy Act (42 USC 2014 et seq.), under DOE regulations and orders.

"NRC" means the United States Nuclear Regulatory Commission.

BOARD NOTE: For the purposes of notices to the NRC required under this Subpart N, the address is as follows:

U.S. Nuclear Regulatory Commission, Region III
801 Warrenville Road
Lisle, Illinois 60532-4351

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.325 Wastes Eligible for a Storage and Treatment Conditional Exemption for Low-Level Mixed Waste

Low-level mixed waste (LLMW), as defined in Section 726.310, is eligible for a storage and treatment conditional exemption if it is generated and managed by a person under a single federal NRC or Illinois ~~DNS~~ EMA license. (Mixed waste generated at a facility with a different license number and shipped to a different person's facility for storage or treatment requires a permit, and such mixed waste is ineligible for this exemption. In addition, NARM waste is ineligible for this exemption.)

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.330 Conditions to Qualify for and Maintain a Storage and Treatment Conditional Exemption

a) For LLMW to qualify for the exemption, the generator must notify the Agency and the Illinois ~~DNS~~ EMA in writing by certified delivery that it is claiming a storage and treatment conditional exemption for the LLMW stored on the generator's facility. The dated notification must include the generator's name, address, RCRA identification number, federal NRC or Illinois ~~DNS~~ EMA license number, the waste codes and storage units for which the generator is seeking an

exemption, and a statement that the generator meets the conditions of this Subpart N. The generator's notification must be signed by the generator's authorized representative who certifies that the information in the notification is true, accurate, and complete. The generator must notify the Agency of its claim either before July 21, 2002, or within 90 days after a storage unit is first used to store conditionally exempt LLMW, whichever is later.

b) To qualify for and maintain an exemption for LLMW, the generator must do each of the following:

1) Store its LLMW waste in tanks or containers in compliance with the requirements of its license that apply to the proper storage of low-level radioactive waste (not including those license requirements that relate solely to recordkeeping);

2) Store its LLMW in tanks or containers in compliance with chemical compatibility requirements of a tank or container in 35 Ill. Adm. Code 724.277 or 724.299 or 35 Ill. Adm. Code 725.277 or 725.299;

3) Certify that facility personnel who manage stored conditionally exempt LLMW are trained in a manner that ensures that the conditionally exempt waste is safely managed and that the training includes training in chemical waste management and hazardous materials incidents response that meets the personnel training standards found in 35 Ill. Adm. Code 725.116(a)(3);

4) Conduct an inventory of its stored conditionally exempt LLMW at least annually and inspect the waste at least quarterly for compliance with this Subpart N; and

5) Maintain an accurate emergency plan and provide it to all local authorities who may have to respond to a fire, explosion, or release of hazardous waste or hazardous constituents. The generator's plan must describe emergency response arrangements with local authorities; describe evacuation plans; list the names, addresses, and telephone numbers of all facility personnel qualified to work with local authorities as emergency coordinators; and list emergency equipment.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.335 Treatment Allowed by a Storage and Treatment Conditional Exemption

The generator may treat its low-level mixed waste at its facility within a tank or container in accordance with the terms of its federal NRC or Illinois ~~DNS~~ EMA license. Treatment that cannot be done in a tank or container without a RCRA permit (such as incineration) is not allowed under this exemption.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.350 Recordkeeping for a Storage and Treatment Conditional Exemption

a) In addition to those records required by the generator's federal NRC or Illinois ~~DNS~~ EMA license, the generator must keep records as follows:

1) The generator's initial notification records, return receipts, reports to the Agency of failures to meet the exemption conditions, and all records supporting any reclaim of an exemption;

2) Records of the generator's LLMW annual inventories and quarterly inspections;

3) The generator's certification that facility personnel who manage stored mixed waste are trained in safe management of LLMW including training in chemical waste management and hazardous materials incidents response; and

4) The generator's emergency plan, as specified in Section 726.330(b).

b) The generator must maintain records concerning notification, personnel trained, and its emergency plan for as long as the generator claims this exemption and for three years thereafter, or in accordance with federal NRC regulations ~~under~~ (10 CFR 20) or under Illinois ~~DNS~~ EMA regulations ~~under~~ (32 Ill. Adm. Code: Chapter II, Subchapter b), whichever is longer. A generator must maintain records concerning its annual inventory and quarterly inspections for three years after the waste is sent for disposal, or in accordance with federal NRC regulations ~~under~~ (10 CFR 20) or under Illinois ~~DNS~~ EMA regulations ~~under~~ (32 Ill. Adm. Code: Chapter II, Subchapter b), whichever is longer.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.355 Waste No Longer Eligible for a Storage and Treatment Conditional Exemption

a) When a generator's LLMW has met the requirements of its federal NRC or Illinois ~~DNS~~ EMA license for decay-in-storage and can be disposed of as non-radioactive waste, then the conditional exemption for storage no longer applies. On that date the generator's waste is subject to hazardous waste regulation under the relevant Sections of 35 Ill. Adm. Code 702, 703, 720 through 726, and 728, and the time period for accumulation of a hazardous waste, as specified in 35 Ill. Adm. Code 722.134 begins.

b) When a generator's conditionally exempt LLMW, which has been generated and stored under a single federal NRC or Illinois ~~DNS~~ EMA license number, is

removed from storage, it is no longer eligible for the storage and treatment exemption. However, a generator's waste may be eligible for the transportation and disposal conditional exemption at Section 726.405.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.415 Conditions to Qualify for and Maintain a Transportation and Disposal Conditional Exemption

A generator must meet the following conditions for its eligible waste to qualify for and maintain the exemption:

a) The eligible waste must meet or be treated to meet LDR treatment standards, as described in Section 726.420;

b) If the generator is not already subject to federal NRC or Illinois ~~DNS~~ EMA manifest and transportation regulations for the shipment of its waste, the generator must manifest and transport its waste according to federal NRC or Illinois ~~DNS~~ EMA regulations, as described in Section 726.425;

c) The exempted waste must be in containers when it is disposed of in the LLRWDF, as described in Section 726.440; and

d) The exempted waste must be disposed of at a designated LLRWDF, as described in Section 726.435.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.425 Applicability of the Manifest and Transportation Condition

If a generator is not already subject to federal NRC or Illinois ~~DNS~~ EMA manifest and transportation regulations for the shipment of its waste, the generator must meet the federal NRC manifest requirements under 10 CFR 20.2006 (Transfer for Disposal and Manifests), incorporated by reference in 35 Ill. Adm. Code ~~720.111,~~ 720.111(b); ~~and~~ Illinois ~~DNS~~ EMA manifest requirements under 32 Ill. Adm. Code 340~~,~~; ~~and~~ the federal NRC transportation requirements under 10 CFR 71.5 (Transportation of Licensed Material), incorporated by reference in 35 Ill. Adm. Code 720.111(b); and the Illinois ~~DNS~~ EMA transportation requirements under 32 Ill. Adm. Code 341 to ship the exempted waste.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.430 Effectiveness of a Transportation and Disposal Exemption

The exemption becomes effective once all of the following have occurred:

a) The generator's eligible waste meets the applicable LDR treatment standards;

b) The generator has received return receipts that it has notified the Agency and the LLRWDF, as described in Section 726.445;

c) The generator has completed the packaging and preparation for shipment requirements for its waste according to federal NRC packaging and transportation regulations found under 10 CFR 71 (Packaging and Transportation of Radioactive Material), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), and under Illinois ~~DNS~~ EMA regulations ~~under~~ at 32 Ill. Adm. Code 341; and a generator has prepared a manifest for a generator's waste according to NRC manifest regulations found under 10 CFR 20 (Standards for Protection against Radiation), incorporated by reference in 35 Ill. Adm. Code 720.111(b), or under Illinois ~~DNS~~ EMA regulations under 32 Ill. Adm. Code 340; and

d) The generator has placed its waste on a transportation vehicle destined for a LLRWDF licensed by the federal NRC, the Illinois ~~DNS~~ EMA, or by a nuclear licensing agency in another state.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.435 Disposal of Exempted Waste

A generator's exempted waste must be disposed of in a LLRWDF that is regulated and licensed by the federal NRC under 10 CFR 61, by the Illinois ~~DNS~~ EMA under 32 Ill. Adm. Code: Chapter II, Subchapters b and d, or by a licensing agency in another state, including State NARM licensing regulations for eligible NARM.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.440 Containers Used for Disposal of Exempted Waste

A generator's exempted waste must be placed in containers before it is disposed of. The container must be one of the following:

a) A carbon steel drum;

b) An alternative container with equivalent containment performance in the disposal environment as a carbon steel drum; or

c) A high-integrity container, as defined by NRC in ~~Appendix~~ appendix G to ~~40~~ 10 CFR 20 (Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.445 Notification

a) A generator must provide a one time notice to the Agency and the Illinois ~~DNS~~ EMA stating that it is claiming the transportation and disposal conditional exemption prior to the initial shipment of an exempted waste from the generator's facility to a LLRWDF. The generator's dated written notice must include its facility name, address, phone number, and RCRA ID number and be sent by certified delivery.

b) A generator must notify the LLRWDF receiving its exempted waste by certified delivery before shipment of each exempted waste. The generator can only ship the exempted waste after it has received the return receipt of its notice to the LLRWDF. This notification must include the following information:

1) A statement that the generator has claimed the exemption for the waste;

2) A statement that the eligible waste meets applicable LDR treatment standards;

3) The generator's facility's name, address, and RCRA ID number;

4) The RCRA hazardous waste codes prior to the exemption of the waste streams;

5) A statement that the exempted waste must be placed in a container according to Section 726.440 prior to disposal in order for the waste to remain exempt under the transportation and disposal conditional exemption of this Subpart N;

6) The manifest number of the shipment that will contain the exempted waste; and

7) A certification that all the information provided is true, complete, and accurate. The statement must be signed by the generator's authorized representative.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.450 Recordkeeping for a Transportation and Disposal Conditional Exemption

In addition to those records required by a generator's NRC or Illinois ~~DNS~~ EMA license, the generator must keep records as follows:

a) The generator must follow the applicable existing recordkeeping requirements under 35 Ill. Adm. Code 724.173, 725.173, and 728.107 to demonstrate that its waste has met LDR treatment standards prior to the generator claiming the

exemption.

b) The generator must keep a copy of all notifications and return receipts required under Sections 726.455, and 726.460 for three years after the exempted waste is sent for disposal.

c) The generator must keep a copy of all notifications and return receipts required under Section 726.445(a) for three years after the last exempted waste is sent for disposal.

d) The generator must keep a copy of the notification and return receipt required under Section 726.445(b) for three years after the exempted waste is sent for disposal.

e) If the generator is not already subject to federal NRC and Illinois ~~DNS~~ EMA manifest and transportation regulations for the shipment of its waste, the generator must also keep all other documents related to tracking the exempted waste as required under federal 10 CFR 20.2006 (Transfer for Disposal and Manifests), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), and Illinois ~~DNS~~ EMA requirements under 32 Ill. Adm. Code 340, including applicable NARM requirements, in addition to the records specified in subsections (a) through (d) of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.460 Reclaiming a Lost Transportation and Disposal Conditional Exemption

a) A generator may reclaim a lost transportation and disposal conditional exemption for a waste after the generator has received a return receipt confirming that the Agency and the Illinois ~~DNS~~ EMA have received the generator's notification of the loss of the exemption specified in Section 726.455(a) and if the following conditions are fulfilled:

1) The generator again meets the conditions specified in Section 726.415 for the waste; and

2) The generator sends a notice, by certified delivery, to the Agency that the generator is reclaiming the exemption for the waste. A generator's notice must be signed by the generator's authorized representative certifying that the information provided is true, accurate, and complete. The notice must include all of the following:

A) An explanation of the circumstances of each failure;

B) A certification that each failure that caused the generator to lose the exemption for the waste has been corrected and that the

generator again meets all conditions for the waste as of the date the generator specifies;

C) A description of plans that the generator has implemented, listing the specific steps that the generator has taken, to ensure that conditions will be met in the future; and

D) Any other information that the generator wants the Agency to consider when the Agency reviews the generator's notice reclaiming the exemption.

b) The Agency may terminate a reclaimed conditional exemption if it determines, in writing, pursuant to Section 39 of the Act [415 ILCS 5/39], that the generator's claim is inappropriate based on factors including, but not limited to, the following: the generator has failed to correct the problem; the generator explained the circumstances of the failure unsatisfactorily; or the generator has failed to implement a plan with steps to prevent another failure to meet the conditions of Section 726.415. In reviewing a reclaimed conditional exemption under this Section, the Agency may add conditions to the exemption to ensure that transportation and disposal activities will protect human health and the environment. Any Agency determination made pursuant to this subsection (b) is subject to review by the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.Appendix I Methods Manual for Compliance with BIF Regulations

~~See~~ The document entitled, "Methods Manual for Compliance with BIF Regulations~~." This document~~: Burning Hazardous Waste in Boilers and Industrial Furnaces," December 1990, is available ~~from two sources~~as appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), incorporated by reference in 35 Ill. Adm. Code 720.111(b). It is also available through NTIS~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~ as described in the incorporation by reference~~. It is also available as 40 CFR 266, Appendix IX, incorporated by reference in 35 Ill. Adm. Code 720.111.~~

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 726.Appendix J Guideline on Air Quality Models (Repealed)

~~See "Guideline on Air Quality Models (Revised)." This document is available from two sources. It is available through NTIS, incorporated by reference in 35 Ill. Adm. Code 720.111. It is also available as 40 CFR 266, Appendix X, incorporated by reference in 35 Ill. Adm. Code 720.111. This incorporation includes no future editions or amendments.~~

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 728
LAND DISPOSAL RESTRICTIONS

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728.Table U Universal Treatment Standards (UTS)

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R87-5 at 11 Ill. Reg. 19354, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13046, effective July 29, 1988; amended in R89-1 at 13 Ill. Reg. 18403, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6232, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14470, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16508, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9462, effective June 17, 1991; amended in R90-11 at 15 Ill. Reg. 11937, effective August 12, 1991; amendment withdrawn at 15 Ill. Reg. 14716, October 11, 1991; amended in R91-13 at 16 Ill. Reg. 9619, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5727, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20692, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12203, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17563, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9660, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11100, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 783, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7685, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17706, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1964, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9204, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9623, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1296, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9181, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6687, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. 13045, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 6049, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL

Section 728.102 Definitions

When used in this Part, the following terms have the meanings given below. All other terms have the meanings given under 35 Ill. Adm. Code 702.110, 720.110, or 721.102 through 721.104.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object; plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D of this Part, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals, such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous

waste that are not ruptured and that retain at least 75 percent of their original volume. A mixture of debris that has not been treated to the standards provided by Section 728.145 of this Part and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"End-of-pipe" refers to the point where effluent is discharged to the environment.

"Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond that are listed under Appendix C of this Part.

"Hazardous constituent or constituents" means those constituents listed in Appendix H to 35 Ill. Adm. Code 721.

"Hazardous debris" means debris that contains a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 or that exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Inorganic metal-bearing waste" is one for which USEPA has established treatment standards for metal hazardous constituents that does not otherwise contain significant organic or cyanide content, as described in Section 728.103(b)(1), and which is specifically listed in Appendix K of this Part.

"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and "land disposal" includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

"Nonwastewaters" are wastes that do not meet the criteria for "wastewaters" in this Section.

"Polychlorinated biphenyls" or "PCBs" are halogenated organic compounds defined in accordance with federal 40 CFR 761.3 (Definitions), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b).

"ppm" means parts per million.

"RCRA corrective action" means corrective action taken under 35 Ill. Adm. Code 724.200 or 725.193, federal 40 CFR 264.100 or 265.93, or similar regulations in other states with RCRA programs authorized by USEPA pursuant to 40 CFR 271.

"Soil" means unconsolidated earth material composing the superficial geologic

strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles, as classified by the United States Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges, or solids that is inseparable by simple mechanical removal processes and which is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Stormwater impoundments" are surface impoundments that receive wet weather flow and which receive process waste only during wet weather events.

"Underlying hazardous constituent" means any constituent listed in Table U of this Part, "Universal Treatment Standards (UTS)," except fluoride, selenium, sulfides, vanadium, and zinc, that can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standard.

"USEPA" or "U.S. EPA" means the United States Environmental Protection Agency.

"Wastewaters" are wastes that contain less than one percent by weight total organic carbon (TOC) and less than one percent by weight total suspended solids (TSS).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.103 Dilution Prohibited as a Substitute for Treatment

a) Except as provided in subsection (b) of this Section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D of this Part, to circumvent the effective date of a prohibition in Subpart C of this Part, to otherwise avoid a prohibition in Subpart C of this Part, or to circumvent a land disposal restriction imposed by RCRA section 3004 (42 USC 6924).

b) Dilution of waste that is hazardous only because it exhibits a characteristic of hazardous waste in a treatment system that treats wastes subsequently discharged to a water of the State pursuant to an NPDES permit issued under 35 Ill. Adm. Code 309, that treats wastes in a CWA-equivalent treatment system, or that treats wastes for purposes of pretreatment requirements under 35 Ill. Adm. Code 310 is not impermissible dilution for purposes of this Section, unless a method other than DEACT has been specified in Section 728.140 as the treatment standard or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.

c) Combustion of waste designated by any of the USEPA hazardous waste codes listed in Appendix J to this Part is prohibited, unless the waste can be demonstrated to comply with one or more of the following criteria at the point of generation or after any bona fide treatment, such as cyanide destruction prior to combustion (unless otherwise specifically prohibited from combustion):

1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in Section 728.148;

2) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;

3) The waste has reasonable heating value, such as greater than or equal to ~~5000~~ 5,000 Btu per pound, at the point of generation;

4) The waste is co-generated with wastes for which combustion is a required method of treatment;

5) The waste is subject to any federal or state requirements necessitating reduction of organics (including biological agents); or

6) The waste contains greater than one percent Total Organic Carbon (TOC).

d) It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.105 Procedures for Case-by-Case Extensions to an Effective Date

~~a) The Board incorporates by reference 40 CFR 268.5 (2002). This Part incorporates no future editions or amendments.~~

~~b) Persons may apply to USEPA for extensions of effective dates pursuant to 40 CFR 268.5. Extensions that are granted by USEPA will be deemed extensions of dates specified in the derivative Board rule.~~

Any person may apply to USEPA for an extension of an effective date pursuant to 40 CFR 268.5.

Any extension that is granted by USEPA will be deemed an extension of the effective date of the derivative Board rule.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.106 Petitions to Allow Land Disposal of a Waste Prohibited under Subpart C

a) Any person seeking an exemption from a prohibition under Subpart C for the disposal of a restricted hazardous waste in a particular unit or units must submit a petition to the Board demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:

1) An identification of the specific waste and the specific unit for which the demonstration will be made;

2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;

3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality;

4) A monitoring plan that detects migration at the earliest practical time;

5) Sufficient information to assure the Agency that the owner or operator of a land disposal unit receiving restricted wastes will comply with other applicable federal, state, and local laws;

6) Whether the facility is in interim status, or, if a RCRA permit has been issued, the term of the permit.

b) The demonstration referred to in subsection (a) of this Section must meet the following criteria:

1) All waste and environmental sampling, test and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;

2) All sampling, testing and estimation techniques for chemical and physical properties of the waste and all environmental parameters must conform with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," USEPA publication number EPA-530/SW-87-011, each incorporated by reference in 35 Ill. Adm. Code 720.111.

3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

4) A quality assurance and quality control plan that addresses all aspects of the demonstration and conforms with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," USEPA publication number EPA-530/SW-87-011 ~~incorporated by reference in 35 Ill. Adm. Code 720.111~~; and

5) An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.

c) Each petition referred to in subsection (a) of this Section must include the following:

1) A monitoring plan that describes the monitoring program installed at or around the unit to verify continued compliance with the conditions of the adjusted standard. This monitoring plan must provide information on the monitoring of the unit or the environment around the unit. The following specific information must be included in the plan:

A) The media monitored in the cases where monitoring of the environment around the unit is required;

B) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;

C) The location of the monitoring stations;

D) The monitoring interval (frequency of monitoring at each station);

E) The specific hazardous constituents to be monitored;

F) The implementation schedule for the monitoring program;

G) The equipment used at the monitoring stations;

H) The sampling and analytical techniques employed; and

I) The data recording and reporting procedures.

2) Where applicable, the monitoring program described in subsection (c)(1) of

this Section must be in place for a period of time specified by the Board, as part of its approval of the petition, prior to receipt of prohibited waste at the unit.

3) The monitoring data collected according to the monitoring plan specified under subsection (c)(1) of this Section must be sent to the Agency according to a format and schedule specified and approved in the monitoring plan.

4) A copy of the monitoring data collected under the monitoring plan specified under subsection (c)(1) of this Section must be kept on-site at the facility in the operating record.

5) The monitoring program specified under subsection (c)(1) of this Section must meet the following criteria:

A) All sampling, testing, and analytical data must be approved by the Board and must provide data that is accurate and reproducible;

B) All estimation and monitoring techniques must be approved by the Board; and

C) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Board.

d) Each petition must be submitted to the Board as provided in Subpart D of 35 Ill. Adm. Code 104.

e) After a petition has been approved, the owner or operator must report any changes in conditions at the unit or the environment around the unit that significantly depart from the conditions described in the petition and affect the potential for migration of hazardous constituents from the units as follows:

1) If the owner or operator plans to make changes to the unit design, construction, or operation, the owner or operator must do the following at least 90 days prior to making the change:

A) File a petition for modification of or a new petition to amend an adjusted standard with the Board reflecting the changes; or

B) Demonstrate to the Agency that the change can be made consistent with the conditions of the existing adjusted standard.

2) If the owner or operator discovers that a condition at the site that was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Agency within 10 days after discovering

the change. The Agency must determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance, a petition for modification of or a new petition for an adjusted standard.

f) If there is migration of hazardous constituents from the unit, as determined by the owner or operator, the owner or operator must do the following:

1) ~~Immediately~~ It must immediately suspend receipt of prohibited waste at the unit, and

2) ~~Notify~~ It must notify the Agency, in writing, within 10 days after the determination that a release has occurred.

3) Following receipt of the notification, the Agency ~~shall~~ must, within 60 days after receiving notification do the following:

A) ~~Determine~~ It must determine whether the owner or operator can continue to receive prohibited waste in the unit under the conditions of the adjusted standard.

B) If modification or vacation of the adjusted standard is necessary, it must file a motion to modify or vacate the adjusted standard with the Board.

C) ~~Determine~~ It must determine whether further examination of any migration is required under the applicable provisions of 35 Ill. Adm. Code 724 or 725.

g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

h) After receiving a petition, the Board may request any additional information that may be required to evaluate the demonstration.

i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any

other disposal unit.

j) The Board will give public notice and provide an opportunity for public comment, as provided in Subpart D of 35 Ill. Adm. Code 104. Notice of a final decision on a petition will be published in the Environmental Register.

k) The term of a petition granted under this Section will be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under subsection (g) of this Section if the unit is operating under interim status. In either case, the term of the granted petition expires upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.

l) Prior to the Board's decision, the applicant must comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.

m) The petition granted by the Board does not relieve the petitioner of responsibilities in the management of hazardous waste under 35 Ill. Adm. Code 702, 703, and 720 through 726.

n) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm are not eligible for an adjusted standard under this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.107 Testing, Tracking, and Recordkeeping Requirements for Generators, Treaters, and Disposal Facilities

a) Requirements for generators.

1) A generator of a hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in Section 728.140, 728.145, or 728.149. This determination can be made in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing determines the total concentration of hazardous constituents or the concentration of hazardous constituents in an extract of the waste obtained using ~~SW-846~~ Method 1311 (~~the~~ Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste extract. In addition, some hazardous wastes must be treated by particular treatment methods before they can be land

disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in Section 728.140 and Table T of this Part, and are described in detail in Table C of this Part. These wastes and soils contaminated with such wastes do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards must be tested). If a generator determines that it is managing a waste or soil contaminated with a waste that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator must comply with the special requirements of Section 728.109 in addition to any applicable requirements in this Section.

2) If the waste or contaminated soil does not meet the treatment standard, the generator must send a one-time written notice to each treatment or storage facility receiving the waste with the initial shipment of waste to each treatment or storage facility, and the generator must place a copy of the one-time notice in the file. The notice must include the information in column "728.107(a)(2)" of the Generator Paperwork Requirements Table in Table I of this Part. No further notification is necessary until such time that the waste or facility changes, in which case a new notification must be sent and a copy placed in the generator's file.

A) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

> I certify under penalty of law that I personally have examined this contaminated soil and it (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 35 Ill. Adm. Code 728.149(c).

B) This subsection (a)(2)(B) corresponds with 40 CFR 268.7(a)(2)(ii), which is marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules.

3) If the waste or contaminated soil meets the treatment standard at the original point of generation, the waste generator must do the following:

A) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in its own file. The notice must include the information indicated in column "728.107(a)(3)" of the Generator Paperwork Requirements Table in Table I of this Part and the following certification statement, signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in Subpart D of 35 Ill. Adm. Code 728. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

B) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in the column headed "(a)(3)" in Table I of this Part.

C) If the waste changes, the generator must send a new notice and certification to the receiving facility and place a copy in its files. A generator of hazardous debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(f) is not subject to these requirements.

4) For reporting, tracking and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed, there are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to, case-by-case extensions under Section 728.105, disposal in a no-migration unit under Section 728.106, or a national capacity variance or case-by-case capacity variance under Subpart C of this Part. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "728.107(a)(4)" of the Generator Paperwork Requirements Table in Table I of this Part. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in its file.

5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 35 Ill. Adm. Code 722.134 to meet applicable LDR treatment standards found at Section 728.140, the generator must develop and follow a written waste analysis plan that describes the procedures it will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table F of this Part, however, are not subject to these waste analysis requirements.) The plan must be kept on

site in the generator's records, and the following requirements must be met:

A) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated, and contain all information necessary to treat the wastes in accordance with the requirements of this Part, including the selected testing frequency;

B) Such plan must be kept in the facility's on-site files and made available to inspectors; and

C) Wastes shipped off-site pursuant to this subsection (a)(5) of this Section must comply with the notification requirements of subsection (a)(3) of this Section.

6) If a generator determines that the waste or contaminated soil is restricted based solely on its knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using ~~SW-846~~ Method 1311 (~~the~~ Toxicity Characteristic Leaching Procedure)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, all waste analysis data must be retained on-site in the generator's files.

7) If a generator determines that it is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or which is exempt from Subtitle C regulation under 35 Ill. Adm. Code 721.102 through 721.106 subsequent to the point of generation (including deactivated characteristic hazardous wastes that are managed in wastewater treatment systems subject to the CWA, as specified at 35 Ill. Adm. Code 721.104(a)(2); that are CWA-equivalent; or that are managed in an underground injection well regulated under 35 Ill. Adm. Code 730), the generator must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste in the generating facility's on-site file.

8) A generator must retain a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this Section on-site for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three-year record retention period is automatically extended during the course of any unresolved enforcement action

regarding the regulated activity or as requested by the Agency. The requirements of this subsection (a)(8) apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under 35 Ill. Adm. Code 721.102 through 721.106, or exempted from RCRA Subtitle C regulation, subsequent to the point of generation.

9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at Section 728.142(c), the generator must fulfill the following conditions:

A) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column "Section 728.107(a)(9)" in the Generator Paperwork Requirements Table of Table I of this Part and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

> I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix D to 35 Ill. Adm. Code 728 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 35 Ill. Adm. Code 728.142(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

B) No further notification is necessary until such time as the wastes in the lab pack change, or the receiving facility changes, in which case a new notice and certification must be sent and a copy placed in the generator's file.

C) If the lab pack contains characteristic hazardous wastes (D001-D043), underlying hazardous constituents (as defined in Section 728.102(i)) need not be determined.

D) The generator must also comply with the requirements in subsections (a)(6) and (a)(7) of this Section.

10) Small quantity generators with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) must comply with the applicable notification and certification requirements of subsection (a) of this Section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the

tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Agency.

b) The owner or operator of a treatment facility must test its wastes according to the frequency specified in its waste analysis plan, as required by 35 Ill. Adm. Code 724.113 (for permitted TSDs) or 725.113 (for interim status facilities). Such testing must be performed as provided in subsections (b)(1), (b)(2), and (b)(3) of this Section.

1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues using ~~SW-846~~ Method 1311 (~~the~~ Toxicity Characteristic Leaching Procedure)~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, to assure that the treatment residues extract meets the applicable treatment standards.

2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.

3) A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.

A) No further notification is necessary until such time that the waste or receiving facility changes, in which case a new notice must be sent and a copy placed in the treatment facility's file.

B) The one-time notice must include the following requirements:

i) USEPA hazardous waste number and manifest number of first shipment;

ii) The waste is subject to the LDRs. The constituents of concern for F001 through F005 and F039 waste and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice;

iii) The notice must include the applicable wastewater/ nonwastewater category (see Section 728.102(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide);

iv) Waste analysis data (when available);

v) For contaminated soil subject to LDRs as provided in Section 728.149(a), the constituents subject to treatment as described in Section 728.149(d) and the following statement, "this contaminated soil (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and (is subject to/complies with) the soil treatment standards as provided by Section 728.149(c)"; and

vi) A certification is needed (see applicable Section for exact wording).

4) The owner or operator of a treatment facility must submit a certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification must state as follows:

> I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 35 Ill. Adm. Code 728.140 without impermissible dilution of the prohibited waste. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it must state as follows:

> I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 35 Ill. Adm. Code 728.149 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the treatment facility's file.

B) Debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e) (i.e., debris treated by an extraction or destruction technology listed in Table F of this Part and debris that the Agency has determined does not contain hazardous waste) is subject to the notification and certification requirements of subsection (d) of this Section rather than the certification requirements of this subsection (b)(4).

C) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in part or in whole on the analytical detection limit alternative specified in Section 728.140(d), the certification must be signed by an authorized representative and must state as follows:

> I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in Table C to 35 Ill. Adm. Code 728. I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D) For characteristic wastes that are subject to the treatment standards in Section 728.140 and Table T of this Part (other than those expressed as a required method of treatment) or Section 728.149 and which contain underlying hazardous constituents, as defined in Section 728.102(i); if these wastes are treated on-site to remove the hazardous characteristic; and that are then sent off-site for treatment of underlying hazardous constituents, the certification must state as follows:

> I certify under penalty of law that the waste has been

treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of Section 728.149 of that Part to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

E) For characteristic wastes that contain underlying hazardous constituents, as defined in Section 728.102(i), that are treated on-site to remove the hazardous characteristic and to treat underlying hazardous constituents to levels in Section 728.148 and Table U of this Part universal treatment standards, the certification must state as follows:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of that Part to remove the hazardous characteristic and that underlying hazardous constituents, as defined in 35 Ill. Adm. Code 728.102(i), have been treated on-site to meet the universal treatment standards of 35 Ill. Adm. Code 728.148 and Table U of that Part. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility that sends the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this Section.

6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler) is not required to notify the receiving facility pursuant to subsection (b)(3) of this Section. With each shipment of such wastes the owner or operator of the recycling facility must submit a certification described in subsection (b)(4) of this Section and a notice that includes the information listed in subsection (b)(3) of this Section (except the manifest number) to the Agency. The recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product.

c) Except where the owner or operator is disposing of any waste that is a recyclable

material used in a manner constituting disposal pursuant to 35 Ill. Adm. Code 726.120(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this Part ~~shall~~ must do the following:

1) Maintain in its files copies of the notice and certifications specified in subsection (a) or (b) of this Section.

2) Test the waste or an extract of the waste or treatment residue developed using ~~SW-846~~ Method 1311 (~~the~~ Toxicity Characteristic Leaching Procedure)~~, incorporated by reference in 35 Ill. Adm. Code 720.111,~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, to assure that the waste or treatment residue is in compliance with the applicable treatment standards set forth in Subpart D of this Part. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by 35 Ill. Adm. Code 724.113 or 35 Ill. Adm. Code 725.113.

3) Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 728.133(f) but not subject to the prohibitions set forth in Section 728.132, the owner or operator must ensure that such waste is the subject of a certification according to the requirements of Section 728.108 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 728.105(h)(2). The same requirement applies to any waste that is subject to the prohibitions under Section 728.133(f) and also is subject to the statutory prohibitions in the codified prohibitions in Section 728.139 or Section 728.132.

4) Where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), the owner or operator is not subject to subsections (c)(1) through (c)(3) of this Section with respect to such waste.

d) A generator or treater that first claims that hazardous debris is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e) (i.e., debris treated by an extraction or destruction technology provided by Table F of this Part, and debris that has been delisted) is subject to the following notification and certification requirements:

1) A one-time notification must be submitted to the Agency including the following information:

A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the treated debris;

B) A description of the hazardous debris as initially generated, including the applicable USEPA hazardous waste numbers; and

C) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the technology from Table F of this Part used to treat the debris.

2) The notification must be updated if the debris is shipped to a different facility and, for debris excluded under 35 Ill. Adm. Code 721.102(e)(1), if a different type of debris is treated or if a different technology is used to treat the debris.

3) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table F of this Part, as follows:

A) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;

B) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and

C) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state as follows:

> I certify under penalty of law that the debris has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.145. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment.

e) A generator or treater that first receives a determination from USEPA or the Agency that a given contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer contains a listed hazardous waste and a generator or treater that first determines that a contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer exhibits a characteristic of hazardous waste must do the following:

1) Prepare a one-time only documentation of these determinations including all supporting information; and

2) Maintain that information in the facility files and other records for a minimum of three years.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART B: SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

Section 728.114 Surface Impoundment Exemptions

a) This Section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

b) Wastes that are newly identified or listed by USEPA persuant to Section 3001 of RCRA (42 USC ~~§~~ 6921) after November 8, 1984 and which are stored in a surface impoundment that is newly subject to subtitle C of RCRA (42 USC ~~§~~ 6921 et seq.) as a result of the additional identification or listing may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725 within 12 months after promulgation of the new listing or characteristic.

c) Wastes that are newly identified or listed by USEPA under Section 3001 of RCRA (42 ~~U.S.C. §~~ USC 6921) after November 8, 1984 and which are treated in a surface impoundment that is newly subject to Subtitle C of RCRA (42 ~~U.S.C. §~~ USC 6921 et seq.) as a result of the additional identification or listing may continue to be treated in that surface impoundment, notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725 within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with Section 728.104.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: PROHIBITION ON LAND DISPOSAL

Section 728.120 Waste-Specific Prohibitions: Dyes and Pigments Production Wastes

a) The waste specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K181, soil and debris contaminated with this waste, radioactive wastes mixed with this waste, and soil and debris contaminated with radioactive wastes mixed with this waste are prohibited from land disposal.

b) The requirements of subsection (a) of this Section do not apply if any of the

following conditions are fulfilled:

1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;

2) A no-migration exemption has been granted from a prohibition pursuant to a petition under Section 728.106, in which case the requirements of subsection (a) of this Section do not apply with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;

4) Hazardous debris has met the treatment standards in Section 728.140 or the alternative treatment standards in Section 728.145; or

5) USEPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, in which case the requirements of subsection (a) of this Section do not apply with respect to these wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract of the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels set forth in Subpart D of this Part, the waste is prohibited from land disposal, and all requirements of this Part apply, except as otherwise specified.

(Source: Added at 30 Ill. Reg. _____, effective _____)

Section 728.130 Waste-Specific Prohibitions: Wood Preserving Wastes

a) The following wastes are prohibited from land disposal: the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, and F035.

b) The following wastes are prohibited from land disposal: soil and debris contaminated with the wastes specified in 35 Ill. Adm. Code 721 as F032, F034, F035; and radioactive wastes mixed with USEPA hazardous waste numbers F032, F034, and F035.

c) This subsection (c) corresponds with 40 CFR 268.30(c), which expired by its own terms on May 12, 1999. This statement maintains structural consistency with the corresponding federal regulations.

d) The requirements of subsections (a) and (b) of this Section do not apply if any of the following conditions is fulfilled:

1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;

2) A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or

4) A person has been granted an extension to the effective date of a prohibition by USEPA pursuant to federal 40 CFR 268.5 (see Section 728.105), with respect to those wastes covered by the extension.

e) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T to this Part, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable universal treatment standard levels of Section 728.148 and Table U to this Part, the waste is prohibited from land disposal and all requirements of Part 728 are applicable, except as otherwise specified.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.134 Waste-Specific Prohibitions: Toxicity Characteristic Metal Wastes

a) The following wastes are prohibited from land disposal: the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers D004 through D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at 35 Ill. Adm. Code 721.

b) The following waste is prohibited from land disposal: slag from secondary lead smelting that exhibits the characteristic of toxicity due to the presence of one or more metals.

c) The following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with USEPA hazardous waste numbers D004 through D011 wastes that are

newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.

d) This subsection (d) corresponds with 40 CFR 269.34(d), which expired by its own terms on May 26, 2000. This statement maintains structural consistency with the corresponding federal regulations.

e) The requirements of subsections (a) and (b) of this Section do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;

2) The Board has granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or

4) USEPA has granted an extension to the effective date of a prohibition pursuant to federal 40 CFR 268.5, with respect to those wastes covered by the extension.

f) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T of this Part, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable universal treatment standard levels of Section 728.148 and Table U of this Part, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.135 Waste-Specific Prohibitions: Petroleum Refining Wastes

a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous wastes numbers K169, K170, K171, and K172; soils and debris contaminated with these wastes; radioactive wastes mixed with these hazardous wastes; and soils and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

b) The requirements of subsection (a) of this Section do not apply if any of the following applies to the waste:

1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;

2) The Board has granted an adjusted standard that exempts waste from a prohibition pursuant to Section 728.106, with respect to those wastes and units covered by the adjusted standard;

3) The wastes meet an adjusted standard from an applicable treatment standard granted under Section 728.144;

4) The waste is hazardous debris that has met the treatment standards set forth in Section 728.140 and Table T of this Part or the alternative treatment standards in Section 728.145; or

5) USEPA has granted an extension to the effective date of a prohibition pursuant to federal 40 CFR 268.5, with respect to these wastes covered by the extension.

c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable universal treatment standard levels of Section 728.148 and Table U of this Part, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART D: TREATMENT STANDARDS

Section 728.140 Applicability of Treatment Standards

a) A prohibited waste identified in Table T of this Part, "Treatment Standards for Hazardous Wastes," may be land disposed only if it meets the requirements found in that Table. For each waste, Table T of this Part identifies one of three types of treatment standard requirements:

1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in Table T of this Part for that waste (total waste standards);

2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in Table T of this Part (waste extract standards); or

3) The waste must be treated using the technology specified in Table T of this Part (technology standard), which is described in detail in Table C of this Part, "Technology Codes and Description of Technology-Based Standards."

b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311~~, the~~ (Toxicity Characteristic Leaching Procedure)~~, found~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311 or Method 1310B~~,~~ ~~the~~ (Extraction Procedure Toxicity Test)~~,~~ ~~found~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846~~, incorporated by reference in 35 Ill. Adm. Code 720.111~~. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Agency pursuant to Section 728.142(b).

c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.

d) Notwithstanding the prohibitions specified in subsection (a) of this Section, treatment and disposal facilities may demonstrate (and certify pursuant to Section 728.107(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in Table T of this Part, provided the following conditions are satisfied:

1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724, or based on combustion in fuel substitution units operating in accordance with applicable technical requirements;

2) The treatment or disposal facility has used the methods referenced in subsection (d)(1) of this Section to treat the organic constituents; and

3) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this Section and Table T of this Part by an order of magnitude.

e) For a characteristic waste (USEPA hazardous waste number D001 through D043) that is subject to treatment standards set forth in Table T of this Part, "Treatment Standards for Hazardous Wastes," and the waste is not managed in a wastewater treatment system that is either regulated under the Clean Water Act (CWA) or one that is CWA-equivalent or the waste is injected into a Class I non-hazardous deep injection well, all underlying hazardous constituents (as defined in Section 728.102) must meet the universal treatment standards, set forth in Table U of this Part prior to land disposal, as defined in Section 728.102.

f) The treatment standards for USEPA hazardous waste numbers F001 through F005 nonwastewater constituents carbon disulfide, cyclohexanone, or methanol apply to wastes that contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311~~, the~~ (Toxicity Characteristic Leaching Procedure) ~~found~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a). If the waste contains any of these three constituents along with any of the other 25 constituents found in USEPA hazardous waste numbers F001 through F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, or methanol are not required.

g) This subsection (g) corresponds with 40 CFR 268.40(g), which expired by its own terms on March 4, 1999. This statement maintains structural consistency with the corresponding federal rules.

h) Prohibited USEPA hazardous waste numbers D004 through D011, mixed radioactive wastes, and mixed radioactive listed wastes containing metal constituents that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage do not have to be re-treated to meet treatment standards in this Section prior to land disposal.

i) This subsection (i) corresponds with 40 CFR 268.40(i), which USEPA has removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

j) The treatment standards for the wastes specified in 35 Ill. Adm. Code 721.133 as USEPA hazardous waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in Table T of this Part, "Treatment Standards for Hazardous Wastes," or by treating the waste by the following technologies: combustion, as defined by the technology

code CMBST at Table C, for nonwastewaters; biodegradation, as defined by the technology code BIODG; carbon adsorption, as defined by the technology code CARBN; chemical oxidation, as defined by the technology code CHOXD; or combustion, as defined as technology code CMBST at Table C, for wastewaters.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.142 Treatment Standards Expressed as Specified Technologies

a) The following wastes listed in Table T of this Part, "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than as a concentration level, must be treated using the technology or technologies specified in Table C of this Part.

1) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70 (Incineration), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60 (Disposal Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b). Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70. Thermal treatment in accordance with this Section must be in compliance with applicable regulations in 35 Ill. Adm. Code 724, 725, and 726.

2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentrations greater than or equal to ~~1000~~ 1,000 mg/kg and liquid HOC-containing wastes that are prohibited under Section 728.132(e)(1) must be incinerated in accordance with the requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725. These treatment standards do not apply where the waste is subject to a treatment standard codified in Subpart C of this Part for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under Section 728.141(a)).

3) A mixture consisting of wastewater, the discharge of which is subject to regulation under 35 Ill. Adm. Code 309 or 310, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process that meet the criteria of the D001 ignitable liquids containing greater than 10 percent total organic constituents (TOC) subcategory are subject to the DEACT treatment standard described in Table C of this Part. For purposes of this subsection (a)(3), "de minimis losses" include the following:

A) Those from normal material handling operations (e.g., spills from the

unloading or transfer of materials from bins or other containers, or leaks from pipes, valves, or other devices used to transfer materials);

B) Minor leaks from process equipment, storage tanks, or containers;

C) Leaks from well-maintained pump packings and seals;

D) Sample purgings; and

E) Relief device discharges.

b) Any person may submit an application to the Agency demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achievable by methods specified in subsections (a), (c), and (d) of this Section for wastes or specified in Table F of this Part for hazardous debris. The applicant must submit information demonstrating that the applicant's treatment method is in compliance with federal and state requirements, including this Part; 35 Ill. Adm. Code 709, 724, 725, 726, and 729; and Sections 22.6 and 39(h) of the Environmental Protection Act [415 ILCS 5/22.6 and 39(h)] and that the treatment method is protective of human health and the environment. On the basis of such information and any other available information, the Agency must approve the use of the alternative treatment method if the Agency finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subsections (a), (c), and (d) of this Section and in Table F of this Part, for hazardous debris. Any approval must be stated in writing and may contain such provisions and conditions as the Agency determines to be appropriate. The person to whom such approval is issued must comply with all limitations contained in such determination.

c) As an alternative to the otherwise applicable treatment standards of Subpart D of this Part, lab packs are eligible for land disposal provided the following requirements are met:

1) The lab packs comply with the applicable provisions of 35 Ill. Adm. Code 724.416 and 725.416;

BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional restrictions on the use of lab packs.

2) The lab pack does not contain any of the wastes listed in Appendix D of this Part;

3) The lab packs are incinerated in accordance with the requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725; and

4) Any incinerator residues from lab packs containing D004, D005, D006,

D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Subpart D of this Part.

d) Radioactive hazardous mixed wastes are subject to the treatment standards in Section 728.140 and Table T of this Part. Where treatment standards are specified for radioactive mixed wastes in Table T of this Part, "Table of Treatment Standards," those treatment standards will govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by USEPA hazardous waste code) applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in Section 728.145.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.144 Adjustment of Treatment Standard

a) Based on a petition filed by a generator or treater of hazardous waste, the Board will grant an adjusted standard from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the waste:

1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:

A) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media); or

B) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

BOARD NOTE: Corresponding federal 40 CFR 268.44 refers to these as "treatability variances." The Board has not used this term in its rules to avoid confusion with the Board variances under Title IX of the Environmental Protection Act. The equivalent Board procedures are an "adjusted standard from a treatment standard" pursuant to subsections (a)

through (m) of this Section, or a "treatability exception" adopted pursuant to subsection (p) of this Section. While the latter is adopted by "identical in substance" rulemaking following a USEPA action, the former is an original Board action that will be the only mechanism following authorization to the State of this component of the RCRA program.

b) Each petition must be submitted in accordance with the procedures in Subpart D of 35 Ill. Adm. Code 104.

c) Each petition must include the following statement signed by the petitioner or an authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

d) After receiving a petition for an adjusted treatment standard, the Board may request any additional information or samples that are necessary to evaluate the petition.

e) The Board will give public notice and provide an opportunity for public comment, as provided in Subpart D of 35 Ill. Adm. Code 104. In conjunction with any updating of the RCRA regulations, the Board will maintain, in this Part, a listing of all adjusted treatment standards granted by the Board pursuant to this Section. ~~A LISTING OF ALL ADJUSTED STANDARDS GRANTED PURSUANT TO THIS SECTION WILL BE PUBLISHED IN THE ILLINOIS REGISTER AND ENVIRONMENTAL REGISTER AT THE END OF EACH FISCAL YEAR.~~ *A listing of all adjusted standards granted pursuant to this section will be published in the Illinois Register and Environmental Register at the end of each fiscal year.* (Section 28.1(d)(3) of the Environmental Protection Act [415 ILCS 5/28.1(d)(3)])

f) A generator, treatment facility or disposal facility that is managing a waste covered by an adjusted treatment standard must comply with the waste analysis requirements for restricted wastes found under Section 728.107.

g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.

h) Based on a petition filed by a generator or treater of hazardous waste, the Board will grant an adjusted standard from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the

waste:

1) It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or

2) It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:

   A) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or

   B) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term threats to human health and the environment. An adjusted standard from a treatment standard granted under this subsection (h)(3) will include the following features:

   A) At a minimum, the adjusted standard from the treatment standard will impose an alternative land disposal restriction treatment standard that will achieve the following, using a reasonable maximum exposure scenario:

      i) For carcinogens, it will achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime, generally falling within a range from 10^{-4} to 10^{-6}; and

      ii) For constituents with non-carcinogenic effects, it will achieve constituent concentrations that an individual could be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

B) The treatment adjusted standard will not consider post-land-disposal controls.

4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) natural background concentrations at the site where the contaminated soil will be land disposed.

5) The Board will follow the procedures of Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 104 pertaining to public notice and a reasonable opportunity for public comment before granting or denying a petition.

i) Each petition for a site-specific adjusted treatment standard must include the information in 35 Ill. Adm. Code 720.120(b)(1) through (b)(4).

j) After receiving a petition for a site-specific adjusted treatment standard, the Board may request any additional information or samples that the Board determines are necessary to evaluate the petition.

k) A generator, treatment facility, or disposal facility that is managing a waste covered by a site-specific adjusted treatment standard must comply with the waste analysis requirements for restricted wastes in Section 728.107.

l) During the petition review process, the petitioner for a site-specific adjusted treatment standard must comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.

m) For any adjusted standard from a treatment standard, the petitioner must also demonstrate that compliance with the requested adjusted standard is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, the Board will take into account whether the adjusted standard should be granted if the subject waste is to be used in a manner constituting disposal pursuant to Sections 728.120 through 728.123.

n) This subsection (n) corresponds with 40 CFR ~~264.1030(n)~~ 268.44(n), marked "reserved" by USEPA. This statement maintains structural consistency with corresponding federal regulations.

o) The facilities listed in Table H of this Part are excluded from the treatment standards under Section 728.143(a) and Table B of this Part, and are subject to the constituent concentrations listed in Table H of this Part.

p) If USEPA grants a treatability exception by regulatory action pursuant to 40 CFR

268.44 and a person demonstrates that the treatability exception needs to be adopted as part of the Illinois RCRA program because the waste is generated or managed in Illinois, the Board will adopt the treatability exception by identical in substance rulemaking pursuant to Section 22.4(a) of the Environmental Protection Act [415 ILCS 5/22.4(a)].

BOARD NOTE: The Board will adopt the treatability exception during a RCRA update Docket if a timely demonstration is made. Otherwise, the Board will assign the matter to a separate Docket.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.145 Treatment Standards for Hazardous Debris

a) Treatment standards. Hazardous debris must be treated prior to land disposal as follows, unless the Agency has determined, under 35 Ill. Adm. Code 721.103(f)(2), that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this Subpart D for the waste contaminating the debris:

1) General. Hazardous debris must be treated for each "contaminant subject to treatment," defined by subsection (b) of this Section, using the technology or technologies identified in Table F of this Part.

2) Characteristic debris. Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under 35 Ill. Adm. Code 721.121, 721.122, or 721.123, respectively, must be deactivated by treatment using one of the technologies identified in Table F of this Part.

3) Mixtures of debris types. The treatment standards of Table F of this Part must be achieved for each type of debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

4) Mixtures of contaminant types. Debris that is contaminated with two or more contaminants subject to treatment identified under subsection (b) of this Section must be treated for each contaminant using one or more treatment technologies identified in Table F of this Part. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.

5) Waste PCBs. Hazardous debris that is also a waste PCB under 40 CFR 761 (Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b), is subject to the requirements of either 40 CFR 761 or the requirements of this Section, whichever are more

stringent.

b) Contaminants subject to treatment. Hazardous debris must be treated for each "contaminant subject to treatment." The contaminants subject to treatment must be determined as follows:

1) Toxicity characteristic debris. The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by 35 Ill. Adm. Code 721.124 are those EP constituents for which the debris exhibits the TC toxicity characteristic.

2) Debris contaminated with listed waste. The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under Section 728.140 and Table T of this Part.

3) Cyanide reactive debris. Hazardous debris that is reactive because of cyanide must be treated for cyanide.

c) Conditioned exclusion of treated debris. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table F of this Part and that does not exhibit a characteristic of hazardous waste identified under Subpart C of 35 Ill. Adm. Code 721 after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table F of this Part is a hazardous waste and must be managed in a RCRA Subtitle C treatment, storage, or disposal facility.

d) Treatment residuals.

1) General requirements. Except as provided by subsections (d)(2) and (d)(4) of this Section:

A) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

B) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by Subpart D of this Part for the waste contaminating the debris.

2) Nontoxic debris. Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by subsection (b) of this Section, must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of Subpart D of this

Part.

3) Cyanide-reactive debris. Residue from the treatment of debris that is reactive because of cyanide must meet the standards for USEPA hazardous waste number D003 under Section 728.140 and Table T of this Part.

4) Ignitable nonwastewater residue. Ignitable nonwastewater residue containing equal to or greater than 10 percent total organic carbon is subject to the technology specified in the treatment standard for USEPA hazardous waste number D001: Ignitable Liquids.

5) Residue from spalling. Layers of debris removed by spalling are hazardous debris that remains subject to the treatment standards of this Section.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: PROHIBITIONS ON STORAGE

Section 728.150 Prohibitions on Storage of Restricted Wastes

a) Except as provided in this Section, the storage of hazardous wastes restricted from land disposal under Subpart C of this Part is prohibited, unless the following conditions are met:

1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in 35 Ill. Adm. Code 722.134 and 35 Ill. Adm. Code 724 and 725. (A generator that is in existence on the effective date of a regulation under this Part and which must store hazardous wastes for longer than 90 days due to the regulations under this Part becomes an owner or operator of a storage facility and must obtain a RCRA permit, as required by 35 Ill. Adm. Code 703. Such a facility may qualify for interim status upon compliance with the regulations governing interim status under 35 Ill. Adm. Code 703.153.)

2) An owner or operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and each of the following conditions are fulfilled:

A) Each container is clearly marked to identify its contents and the date each period of accumulation begins; and

B) Each tank is clearly marked with a description of its contents, the

quantity of each hazardous waste received and the date each period of accumulation begins, or such information is recorded and maintained in the operating record at the facility. Regardless of whether the tank itself is marked, the owner and operator must comply with the operating record requirements of 35 Ill. Adm. Code 724.173 or 725.173.

3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.

b) An owner or operator of a treatment, storage, or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

c) An owner or operator of a treatment, storage, or disposal facility may store wastes beyond one year; however, the owner or operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension ~~under~~ granted by USEPA pursuant to 40 CFR 268.5~~, incorporated by reference in Section 728.105~~, an approved Section 728.106 petition or a national capacity variance ~~under~~ granted by USEPA pursuant to subpart C of 40 CFR 268~~, Subpart C~~), the prohibition in subsection (a) does not apply during the period of such exemption.

e) The prohibition in subsection (a) of this Section does not apply to hazardous wastes that meet the treatment standards specified under Sections 728.141, 728.142, and 728.143 or the adjusted treatment standards specified under Section 728.144, or, where treatment standards have not been specified, the waste is in compliance with the applicable prohibitions specified in Section 728.132 or 728.139.

f) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of federal 40 CFR 761.65(b) (Storage for Disposal), incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(b), and must be removed from storage and treated or disposed as required by the Part within one year of the date when such wastes are first placed into storage. The provisions of subsection (c) of this Section do not apply to such PCB wastes prohibited under Section 728.132.

g) The prohibition and requirements in this Section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to 35 Ill. Adm. Code 724.654.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Appendix C List of Halogenated Organic Compounds Regulated under Section 728.132

In determining the concentration of halogenated organic compounds (HOCs) in a hazardous waste for purposes of the Section 728.132 land disposal prohibition, USEPA has defined the HOCs that must be included in a calculation as any compounds having a carbon-halogen bond that are listed in this Appendix (see Section 728.102). This Appendix C to Part 728 consists of the following compounds:

I. Volatiles

1. Bromodichloromethane
2. Bromomethane
3. Carbon Tetrachloride
4. Chlorobenzene
5. 2-Chloro-1,3-butadiene
6. Chlorodibromomethane
7. Chloroethane
8. 2-Chloroethyl vinyl ether
9. Chloroform
10. Chloromethane
11. 3-Chloropropene
12. 1,2-Dibromo-3-chloropropane
13. 1,2-Dibromomethane
14. Dibromomethane
15. Trans-1,4-Dichloro-2--butene
16. Dichlorodifluoromethane
17. 1,1-Dichloroethane
18. 1,2-Dichloroethane
19. 1,1-Dichloroethylene
20. Trans-1,2-Dichloroethene
21. 1,2-Dichloropropane
22. Trans-1,3-Dichloropropene
23. cis-1,3-Dichloropropene
24. Iodomethane
25. Methylene chloride
26. 1,1,1,2-Tetrachloroethane
27. 1,1,2,2-Tetrachloroethane
28. Tetrachloroethene
29. Tribromomethane
30. 1,1,1-Trichloroethane
31. 1,1,2-Trichloroethane
32. Trichloroethene
33. Trichloromonofluoromethane

34. 1,2,3-Thrichloropropane
35. Vinyl Chloride

II. Semivolatiles

1. Bis(2-chloroethoxy)ethane
2. Bis(2-chloroethyl)ether
3. Bis(2-chloroisopropyl)ether
4. p-Chloroaniline
5. Chlorobenzilate
6. p-Chloro-m-cresol
7. 2-Chloronaphthalene
8. 2-Chlorophenol
9. 3-Chloropropionitrile
10. m-Dichlorobenzene
11. o-Dichlorobenzene
12. p-Dichlorobenzene
13. 3.3'-Dichlorobenzidine
14. 2,4-Dichlorophenol
15. 2,6-Dichlorophenol
16. Hexachlorobenzene
17. Hexachlorobutadiene
18. Hexachlorocyclopentadiene
19. Hexachloroethane
20. Hexachlorophene
21. Hexachloropropene
22. 4,4'-Methylenebis(2-chloroanaline)
23. Pentachlorobenzene
24. Pentachloroethane
25. Pentachloronitrobenzene
26. Pentachlorophenol
27. Pronamide
28. 1,2,4,5-Tetrachlorobenzene
29. 2,3,4,6-Tetrachlorophenol
30. 1,2,4-Trichlorobenzene
31. 2,4,5-Trichlorophenol
32. 2,4,6-Trichlorophenol
33. Tris(2,3-dibromopropyl)phosphate

III. Organochlorine Pesticides

1. Aldrin
2. alpha-BHC
3. beta-BHC
4. delta-BHC
5. gamma-BHC

6. Chlorodane
7. DDD
8. DDE
9. DDT
10. Dieldrin
11. Endosulfan I
12. Endosulfan II
13. Endrin
14. Endrin aldehyde
15. Heptachlor
16. Heptachlor epoxide
17. Isodrin
18. Kepone
19. Methoxyclor
20. Toxaphene

IV. Phenoxyacetic Acid Herbicides

1. 2,4-Dichlorophenoxyacetic acid
2. Silvex
3. 2,4,5-T

V. PCBs

1. Aroclor 1016
2. Aroclor 1221
3. Aroclor 1232
4. Aroclor 1242
5. Aroclor 1248
6. Aroclor 1254
7. Aroclor 1260
8. PCBs not otherwise specified

VI. Dioxins and Furans

1. Hexachlorodibenzo-p-dioxins
2. Hexachlorodibenzofuran
3. Pentachlorodibenzo-p-dioxins
4. Pentachlorodibenzofuran
5. Tetrachlorodibenzo-p-dioxins
6. Tetrachlorodibenzofuran
7. 2,3,7,8-Tetrachlorodibenzo-p-dioxin

BOARD NOTE: Derived from appendix III to 40 CFR 268~~, Appendix III (2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Appendix G Federal Effective Dates

The following are the effective dates for the USEPA rules in 40 CFR 268. These generally became effective as Illinois rules at a later date.

TABLE 1
EFFECTIVE DATES OF SURFACE DISPOSED WASTES (NON-SOIL AND DEBRIS) REGULATED IN THE LDRS[a]—COMPREHENSIVE LIST

Waste code	Waste category	Effective date
D001[c]	All (except High TOC Ignitable Liquids)	August 9, 1993
D001	High TOC Ignitable Liquids	August 8, 1990
D002[c]	All	August 9, 1993
D003[e]	Newly identified surface-disposed elemental phosphorus processing wastes	May 26, 2000
D004	Newly identified D004 and mineral processing wastes	August 24, 1998
D004	Mixed radioactive/newly identified D004 or mineral processing wastes	May 26, 2000
D005	Newly identified D005 and mineral processing wastes	August 24, 1998
D005	Mixed radioactive/newly identified D005 or mineral processing wastes	May 26, 2000
D006	Newly identified D006 and mineral processing wastes	August 24, 1998
D006	Mixed radioactive/newly identified D006 or mineral processing wastes	May 26, 2000
D007	Newly identified D007 and mineral processing wastes	August 24, 1998
D007	Mixed radioactive/newly identified D007or mineral processing wastes	May 26, 2000
D008	Newly identified D008 and mineral processing waste	August 24, 1998
D008	Mixed radioactive/newly identified D008 or mineral processing wastes	May 26, 2000
D009	Newly identified D009 and mineral processing waste	August 24, 1998
D009	Mixed radioactive/newly identified D009or mineral processing wastes	May 26, 2000
D010	Newly identified D010 and mineral processing wastes	August 24, 1998
D010	Mixed radioactive/newly identified D010 or mineral processing wastes	May 26, 2000
D011	Newly identified D011 and mineral processing wastes	August 24, 1998

D011	Mixed radioactive/newly identified D011or mineral processing wastes	May 26, 2000
D012 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D013 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D014 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D015 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D016 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D017 (that exhibit the toxicity characteristic based on the TCLP)[d]	All	December 14, 1994
D018	Mixed with radioactive wastes	September 19, 1996
D018	All others	December 19, 1994
D019	Mixed with radioactive wastes	September 19, 1996
D019	All others	December 19, 1994
D020	Mixed with radioactive wastes	September 19, 1996
D020	All others	December 19, 1994
D021	Mixed with radioactive wastes	September 19, 1996
D021	All others	December 19, 1994
D022	Mixed with radioactive wastes	September 19, 1996
D022	All others	December 19, 1994
D023	Mixed with radioactive wastes	September 19, 1996
D023	All others	December 19, 1994
D024	Mixed with radioactive wastes	September 19, 1996
D024	All others	December 19, 1994
D025	Mixed with radioactive wastes	September 19, 1996
D025	All others	December 19, 1994
D026	Mixed with radioactive wastes	September 19, 1996
D026	All others	December 19, 1994
D027	Mixed with radioactive wastes	September 19, 1996
D027	All others	December 19, 1994
D028	Mixed with radioactive wastes	September 19, 1996
D028	All others	December 19, 1994
D029	Mixed with radioactive wastes	September 19, 1996
D029	All others	December 19, 1994
D030	Mixed with radioactive wastes	September 19, 1996
D030	All others	December 19, 1994

D031	Mixed with radioactive wastes	September 19, 1996
D031	All others	December 19, 1994
D032	Mixed with radioactive wastes	September 19, 1996
D032	All others	December 19, 1994
D033	Mixed with radioactive wastes	September 19, 1996
D033	All others	December 19, 1994
D034	Mixed with radioactive wastes	September 19, 1996
D034	All others	December 19, 1994
D035	Mixed with radioactive wastes	September 19, 1996
D035	All others	December 19, 1994
D036	Mixed with radioactive wastes	September 19, 1996
D036	All others	December 19, 1994
D037	Mixed with radioactive wastes	September 19, 1996
D037	All others	December 19, 1994
D038	Mixed with radioactive wastes	September 19, 1996
D038	All others	December 19, 1994
D039	Mixed with radioactive wastes	September 19, 1996
D039	All others	December 19, 1994
D040	Mixed with radioactive wastes	September 19, 1996
D040	All others	December 19, 1994
D041	Mixed with radioactive wastes	September 19, 1996
D041	All others	December 19, 1994
D042	Mixed with radioactive wastes	September 19, 1996
D042	All others	December 19, 1994
D043	Mixed with radioactive wastes	September 19, 1996
D043	All others	December 19, 1994
F001	Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988
F001	All others	November 8, 1986
F002 (1,1,2-trichloroethane)	Wastewater and Nonwastewater	August 8, 1990
F002	Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988
F002	All others	November 8, 1986
F003	Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988
F003	All others	November 8, 1986
F004	Small quantity generators, CERCLA response/RCRA corrective action, initial generator’s solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988

F004	All others	November 8, 1986
F005 (benzene, 2-ethoxy ethanol, 2-nitropropane)	Wastewater and Nonwastewater	August 8, 1990
F005	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988
F005	All others	November 8, 1986
F006	Wastewater	August 8, 1990
F006	Nonwastewater	August 8, 1988
F006 (cyanides)	Nonwastewater	July 8, 1989
F007	All	July 8, 1989
F008	All	July 8, 1989
F009	All	July 8, 1989
F010	All	June 8, 1989
F011 (cyanides)	Nonwastewater	December 8, 1989
F011	All others	July 8, 1989
F012 (cyanides)	Nonwastewater	December 8, 1989
F012	All others	July 8, 1989
F019	All	August 8, 1990
F020	All	November 8, 1988
F021	All	November 8, 1988
F025	All	August 8, 1990
F026	All	November 8, 1988
F027	All	November 8, 1988
F028	All	November 8, 1988
F032	Mixed with radioactive wastes	May 12, 1999
F032	All others	August 12, 1997
F034	Mixed with radioactive wastes	May 12, 1999
F034	All others	August 12, 1997
F035	Mixed with radioactive wastes	May 12, 1999
F035	All others	August 12, 1997
F037	Not generated from surface impoundment cleanouts or closures	June 30, 1993
F037	Generated from surface impoundment cleanouts or closures	June 30, 1994
F037	Mixed with radioactive wastes	June 30, 1994
F038	Not generated from surface impoundment cleanouts or closures	June 30, 1993
F038	Generated from surface impoundment cleanouts or closures	June 30, 1994
F038	Mixed with radioactive wastes	June 30, 1994
F039	Wastewater	August 8, 1990
F039	Nonwastewater	May 8, 1992
K001 (organics)[b]	All	August 8, 1988
K001	All others	August 8, 1988

K002	All	August 8, 1990
K003	All	August 8, 1990
K004	Wastewater	August 8, 1990
K004	Nonwastewater	August 8, 1988
K005	Wastewater	August 8, 1990
K005	Nonwastewater	June 8, 1989
K006	All	August 8, 1990
K007	Wastewater	August 8, 1990
K007	Nonwastewater	June 8, 1989
K008	Wastewater	August 8, 1990
K008	Nonwastewater	August 8, 1988
K009	All	June 8, 1989
K010	All	June 8, 1989
K011	Wastewater	August 8, 1990
K011	Nonwastewater	June 8, 1989
K013	Wastewater	August 8, 1990
K013	Nonwastewater	June 8, 1989
K014	Wastewater	August 8, 1990
K014	Nonwastewater	June 8, 1989
K015	Wastewater	August 8, 1988
K015	Nonwastewater	August 8, 1990
K016	All	August 8, 1988
K017	All	August 8, 1990
K018	All	August 8, 1988
K019	All	August 8, 1988
K020	All	August 8, 1988
K021	Wastewater	August 8, 1990
K021	Nonwastewater	August 8, 1988
K022	Wastewater	August 8, 1990
K022	Nonwastewater	August 8, 1988
K023	All	June 8, 1989
K024	All	August 8, 1988
K025	Wastewater	August 8, 1990
K025	Nonwastewater	August 8, 1988
K026	All	August 8, 1990
K027	All	June 8, 1989
K028 (metals)	Nonwastewater	August 8, 1990
K028	All others	June 8, 1989
K029	Wastewater	August 8, 1990
K029	Nonwastewater	June 8, 1989
K030	All	August 8, 1988
K031	Wastewater	August 8, 1990
K031	Nonwastewater	May 8, 1992
K032	All	August 8, 1990
K033	All	August 8, 1990
K034	All	August 8, 1990

K035	All	August 8, 1990
K036	Wastewater	June 8, 1989
K036	Nonwastewater	August 8, 1988
K037[b]	Wastewater	August 8, 1988
K037	Nonwastewater	August 8, 1988
K038	All	June 8, 1989
K039	All	June 8, 1989
K040	All	June 8, 1989
K041	All	August 8, 1990
K042	All	August 8, 1990
K043	All	June 8, 1989
K044	All	August 8, 1988
K045	All	August 8, 1988
K046 (Nonreactive)	Nonwastewater	August 8, 1988
K046	All others	August 8, 1990
K047	All	August 8, 1988
K048	Wastewater	August 8, 1990
K048	Nonwastewater	November 8, 1990
K049	Wastewater	August 8, 1990
K049	Nonwastewater	November 8, 1990
K050	Wastewater	August 8, 1990
K050	Nonwastewater	November 8, 1990
K051	Wastewater	August 8, 1990
K051	Nonwastewater	November 8, 1990
K052	Wastewater	August 8, 1990
K052	Nonwastewater	November 8, 1990
K060	Wastewater	August 8, 1990
K060	Nonwastewater	August 8, 1988
K061	Wastewater	August 8, 1990
K061	Nonwastewater	June 30, 1992
K062	All	August 8, 1988
K069 (non-calcium sulfate)	Nonwastewater	August 8, 1988
K069	All others	August 8, 1990
K071	All	August 8, 1990
K073	All	August 8, 1990
K083	All	August 8, 1990
K084	Wastewater	August 8, 1990
K084	Nonwastewater	May 8, 1992
K085	All	August 8, 1990
K086 (organics)[b]	All	August 8, 1988
K086	All others	August 8, 1988
K087	All	August 8, 1988
K088	Mixed with radioactive wastes	April 8, 1998
K088	All others	October 8, 1997
K093	All	June 8, 1989
K094	All	June 8, 1989

K095	Wastewater	August 8, 1990
K095	Nonwastewater	June 8, 1989
K096	Wastewater	August 8, 1990
K096	Nonwastewater	June 8, 1989
K097	All	August 8, 1990
K098	All	August 8, 1990
K099	All	August 8, 1988
K100	Wastewater	August 8, 1990
K100	Nonwastewater	August 8, 1988
K101 (organics)	Wastewater	August 8, 1988
K101 (metals)	Wastewater	August 8, 1990
K101 (organics)	Nonwastewater	August 8, 1988
K101 (metals)	Nonwastewater	May 8, 1992
K102 (organics)	Wastewater	August 8, 1988
K102 (metals)	Wastewater	August 8, 1990
K102 (organics)	Nonwastewater	August 8, 1988
K102 (metals)	Nonwastewater	May 8, 1992
K103	All	August 8, 1988
K104	All	August 8, 1988
K105	All	August 8, 1990
K106	Wastewater	August 8, 1990
K106	Nonwastewater	May 8, 1992
K107	Mixed with radioactive wastes	June 30, 1994
K107	All others	November 9, 1992
K108	Mixed with radioactive wastes	June 30, 1994
K108	All others	November 9, 1992
K109	Mixed with radioactive wastes	June 30, 1994
K109	All others	November 9, 1992
K110	Mixed with radioactive wastes	June 30, 1994
K110	All others	November 9, 1992
K111	Mixed with radioactive wastes	June 30, 1994
K111	All others	November 9, 1992
K112	Mixed with radioactive wastes	June 30, 1994
K112	All others	November 9, 1992
K113	All	June 8, 1989
K114	All	June 8, 1989
K115	All	June 8, 1989
K116	All	June 8, 1989
K117	Mixed with radioactive wastes	June 30, 1994
K117	All others	November 9, 1992
K118	Mixed with radioactive wastes	June 30, 1994
K118	All others	November 9, 1992
K123	Mixed with radioactive wastes	June 30, 1994
K123	All others	November 9, 1992
K124	Mixed with radioactive wastes	June 30, 1994
K124	All others	November 9, 1992

K125	Mixed with radioactive wastes	June 30, 1994
K125	All others	November 9, 1992
K126	Mixed with radioactive wastes	June 30, 1994
K126	All others	November 9, 1992
K131	Mixed with radioactive wastes	June 30, 1994
K131	All others	November 9, 1992
K132	Mixed with radioactive wastes	June 30, 1994
K132	All others	November 9, 1992
K136	Mixed with radioactive wastes	June 30, 1994
K136	All others	November 9, 1992
K141	Mixed with radioactive wastes	September 19, 1996
K141	All others	December 19, 1994
K142	Mixed with radioactive wastes	September 19, 1996
K142	All others	December 19, 1994
K143	Mixed with radioactive wastes	September 19, 1996
K143	All others	December 19, 1994
K144	Mixed with radioactive wastes	September 19, 1996
K144	All others	December 19, 1994
K145	Mixed with radioactive wastes	September 19, 1996
K145	All others	December 19, 1994
K147	Mixed with radioactive wastes	September 19, 1996
K147	All others	December 19, 1994
K148	Mixed with radioactive wastes	September 19, 1996
K148	All others	December 19, 1994
K149	Mixed with radioactive wastes	September 19, 1996
K149	All others	December 19, 1994
K150	Mixed with radioactive wastes	September 19, 1996
K150	All others	December 19, 1994
K151	Mixed with radioactive wastes	September 19, 1996
K151	All others	December 19, 1994
K156	Mixed with radioactive wastes	April 8, 1998
K156	All others	July 8, 1996
K157	Mixed with radioactive wastes	April 8, 1998
K157	All others	July 8, 1996
K158	Mixed with radioactive wastes	April 8, 1998
K158	All others	July 8, 1996
K159	Mixed with radioactive wastes	April 8, 1998
K159	All others	July 8, 1996
K160	Mixed with radioactive wastes	April 8, 1998
K160	All others	July 8, 1996
K161	Mixed with radioactive wastes	April 8, 1998
K161	All others	July 8, 1996
K169	All	February 8, 1999
K170	All	February 8, 1999
K171	All	February 8, 1999
K172	All	February 8, 1999

K174	All	May 7, 2001
K175	All	May 7, 2001
K176	All	May 20, 2002
K177	All	May 20, 2002
K178	All	May 20, 2002
K181	All	August 23, 2005
P001	All	August 8, 1990
P002	All	August 8, 1990
P003	All	August 8, 1990
P004	All	August 8, 1990
P005	All	August 8, 1990
P006	All	August 8, 1990
P007	All	August 8, 1990
P008	All	August 8, 1990
P009	All	August 8, 1990
P010	Wastewater	August 8, 1990
P010	Nonwastewater	May 8, 1992
P011	Wastewater	August 8, 1990
P011	Nonwastewater	May 8, 1992
P012	Wastewater	August 8, 1990
P012	Nonwastewater	May 8, 1992
P013 (barium)	Nonwastewater	August 8, 1990
P013	All others	June 8, 1989
P014	All	August 8, 1990
P015	All	August 8, 1990
P016	All	August 8, 1990
P017	All	August 8, 1990
P018	All	August 8, 1990
P020	All	August 8, 1990
P021	All	June 8, 1989
P022	All	August 8, 1990
P023	All	August 8, 1990
P024	All	August 8, 1990
P026	All	August 8, 1990
P027	All	August 8, 1990
P028	All	August 8, 1990
P029	All	June 8, 1989
P030	All	June 8, 1989
P031	All	August 8, 1990
P033	All	August 8, 1990
P034	All	August 8, 1990
P036	Wastewater	August 8, 1990
P036	Nonwastewater	May 8, 1992
P037	All	August 8, 1990
P038	Wastewater	August 8, 1990
P038	Nonwastewater	May 8, 1992

P039	All	June 8, 1989
P040	All	June 8, 1989
P041	All	June 8, 1989
P042	All	August 8, 1990
P043	All	June 8, 1989
P044	All	June 8, 1989
P045	All	August 8, 1990
P046	All	August 8, 1990
P047	All	August 8, 1990
P048	All	August 8, 1990
P049	All	August 8, 1990
P050	All	August 8, 1990
P051	All	August 8, 1990
P054	All	August 8, 1990
P056	All	August 8, 1990
P057	All	August 8, 1990
P058	All	August 8, 1990
P059	All	August 8, 1990
P060	All	August 8, 1990
P062	All	June 8, 1989
P063	All	June 8, 1989
P064	All	August 8, 1990
P065	Wastewater	August 8, 1990
P065	Nonwastewater	May 8, 1992
P066	All	August 8, 1990
P067	All	August 8, 1990
P068	All	August 8, 1990
P069	All	August 8, 1990
P070	All	August 8, 1990
P071	All	June 8, 1989
P072	All	August 8, 1990
P073	All	August 8, 1990
P074	All	June 8, 1989
P075	All	August 8, 1990
P076	All	August 8, 1990
P077	All	August 8, 1990
P078	All	August 8, 1990
P081	All	August 8, 1990
P082	All	August 8, 1990
P084	All	August 8, 1990
P085	All	June 8, 1989
P087	All	May 8, 1992
P088	All	August 8, 1990
P089	All	June 8, 1989
P092	Wastewater	August 8, 1990
P092	Nonwastewater	May 8, 1992

P093	All	August 8, 1990
P094	All	June 8, 1989
P095	All	August 8, 1990
P096	All	August 8, 1990
P097	All	June 8, 1989
P098	All	June 8, 1989
P099 (silver)	Wastewater	August 8, 1990
P099	All others	June 8, 1989
P101	All	August 8, 1990
P102	All	August 8, 1990
P103	All	August 8, 1990
P104 (silver)	Wastewater	August 8, 1990
P104	All others	June 8, 1989
P105	All	August 8, 1990
P106	All	June 8, 1989
P108	All	August 8, 1990
P109	All	June 8, 1989
P110	All	August 8, 1990
P111	All	June 8, 1989
P112	All	August 8, 1990
P113	All	August 8, 1990
P114	All	August 8, 1990
P115	All	August 8, 1990
P116	All	August 8, 1990
P118	All	August 8, 1990
P119	All	August 8, 1990
P120	All	August 8, 1990
P121	All	June 8, 1989
P122	All	August 8, 1990
P123	All	August 8, 1990
P127	Mixed with radioactive wastes	April 8, 1998
P127	All others	July 8, 1996
P128	Mixed with radioactive wastes	April 8, 1998
P128	All others	July 8, 1996
P185	Mixed with radioactive wastes	April 8, 1998
P185	All others	July 8, 1996
P188	Mixed with radioactive wastes	April 8, 1998
P188	All others	July 8, 1996
P189	Mixed with radioactive wastes	April 8, 1998
P189	All others	July 8, 1996
P190	Mixed with radioactive wastes	April 8, 1998
P190	All others	July 8, 1996
P191	Mixed with radioactive wastes	April 8, 1998
P191	All others	July 8, 1996
P192	Mixed with radioactive wastes	April 8, 1998
P192	All others	July 8, 1996

P194	Mixed with radioactive wastes	April 8, 1998
P194	All others	July 8, 1996
P196	Mixed with radioactive wastes	April 8, 1998
P196	All others	July 8, 1996
P197	Mixed with radioactive wastes	April 8, 1998
P197	All others	July 8, 1996
P198	Mixed with radioactive wastes	April 8, 1998
P198	All others	July 8, 1996
P199	Mixed with radioactive wastes	April 8, 1998
P199	All others	July 8, 1996
P201	Mixed with radioactive wastes	April 8, 1998
P201	All others	July 8, 1996
P202	Mixed with radioactive wastes	April 8, 1998
P202	All others	July 8, 1996
P203	Mixed with radioactive wastes	April 8, 1998
P203	All others	July 8, 1996
P204	Mixed with radioactive wastes	April 8, 1998
P204	All others	July 8, 1996
P205	Mixed with radioactive wastes	April 8, 1998
P205	All others	July 8, 1996
U001	All	August 8, 1990
U002	All	August 8, 1990
U003	All	August 8, 1990
U004	All	August 8, 1990
U005	All	August 8, 1990
U006	All	August 8, 1990
U007	All	August 8, 1990
U008	All	August 8, 1990
U009	All	August 8, 1990
U010	All	August 8, 1990
U011	All	August 8, 1990
U012	All	August 8, 1990
U014	All	August 8, 1990
U015	All	August 8, 1990
U016	All	August 8, 1990
U017	All	August 8, 1990
U018	All	August 8, 1990
U019	All	August 8, 1990
U020	All	August 8, 1990
U021	All	August 8, 1990
U022	All	August 8, 1990
U023	All	August 8, 1990
U024	All	August 8, 1990
U025	All	August 8, 1990
U026	All	August 8, 1990
U027	All	August 8, 1990

U028	All	June 8, 1989
U029	All	August 8, 1990
U030	All	August 8, 1990
U031	All	August 8, 1990
U032	All	August 8, 1990
U033	All	August 8, 1990
U034	All	August 8, 1990
U035	All	August 8, 1990
U036	All	August 8, 1990
U037	All	August 8, 1990
U038	All	August 8, 1990
U039	All	August 8, 1990
U041	All	August 8, 1990
U042	All	August 8, 1990
U043	All	August 8, 1990
U044	All	August 8, 1990
U045	All	August 8, 1990
U046	All	August 8, 1990
U047	All	August 8, 1990
U048	All	August 8, 1990
U049	All	August 8, 1990
U050	All	August 8, 1990
U051	All	August 8, 1990
U052	All	August 8, 1990
U053	All	August 8, 1990
U055	All	August 8, 1990
U056	All	August 8, 1990
U057	All	August 8, 1990
U058	All	June 8, 1989
U059	All	August 8, 1990
U060	All	August 8, 1990
U061	All	August 8, 1990
U062	All	August 8, 1990
U063	All	August 8, 1990
U064	All	August 8, 1990
U066	All	August 8, 1990
U067	All	August 8, 1990
U068	All	August 8, 1990
U069	All	June 30, 1992
U070	All	August 8, 1990
U071	All	August 8, 1990
U072	All	August 8, 1990
U073	All	August 8, 1990
U074	All	August 8, 1990
U075	All	August 8, 1990
U076	All	August 8, 1990

U077	All	August 8, 1990
U078	All	August 8, 1990
U079	All	August 8, 1990
U080	All	August 8, 1990
U081	All	August 8, 1990
U082	All	August 8, 1990
U083	All	August 8, 1990
U084	All	August 8, 1990
U085	All	August 8, 1990
U086	All	August 8, 1990
U087	All	June 8, 1989
U088	All	June 8, 1989
U089	All	August 8, 1990
U090	All	August 8, 1990
U091	All	August 8, 1990
U092	All	August 8, 1990
U093	All	August 8, 1990
U094	All	August 8, 1990
U095	All	August 8, 1990
U096	All	August 8, 1990
U097	All	August 8, 1990
U098	All	August 8, 1990
U099	All	August 8, 1990
U101	All	August 8, 1990
U102	All	June 8, 1989
U103	All	August 8, 1990
U105	All	August 8, 1990
U106	All	August 8, 1990
U107	All	June 8, 1989
U108	All	August 8, 1990
U109	All	August 8, 1990
U110	All	August 8, 1990
U111	All	August 8, 1990
U112	All	August 8, 1990
U113	All	August 8, 1990
U114	All	August 8, 1990
U115	All	August 8, 1990
U116	All	August 8, 1990
U117	All	August 8, 1990
U118	All	August 8, 1990
U119	All	August 8, 1990
U120	All	August 8, 1990
U121	All	August 8, 1990
U122	All	August 8, 1990
U123	All	August 8, 1990
U124	All	August 8, 1990

U125	All	August 8, 1990
U126	All	August 8, 1990
U127	All	August 8, 1990
U128	All	August 8, 1990
U129	All	August 8, 1990
U130	All	August 8, 1990
U131	All	August 8, 1990
U132	All	August 8, 1990
U133	All	August 8, 1990
U134	All	August 8, 1990
U135	All	August 8, 1990
U136	Wastewater	August 8, 1990
U136	Nonwastewater	May 8, 1992
U137	All	August 8, 1990
U138	All	August 8, 1990
U140	All	August 8, 1990
U141	All	August 8, 1990
U142	All	August 8, 1990
U143	All	August 8, 1990
U144	All	August 8, 1990
U145	All	August 8, 1990
U146	All	August 8, 1990
U147	All	August 8, 1990
U148	All	August 8, 1990
U149	All	August 8, 1990
U150	All	August 8, 1990
U151	Wastewater	August 8, 1990
U151	Nonwastewater	May 8, 1992
U152	All	August 8, 1990
U153	All	August 8, 1990
U154	All	August 8, 1990
U155	All	August 8, 1990
U156	All	August 8, 1990
U157	All	August 8, 1990
U158	All	August 8, 1990
U159	All	August 8, 1990
U160	All	August 8, 1990
U161	All	August 8, 1990
U162	All	August 8, 1990
U163	All	August 8, 1990
U164	All	August 8, 1990
U165	All	August 8, 1990
U166	All	August 8, 1990
U167	All	August 8, 1990
U168	All	August 8, 1990
U169	All	August 8, 1990

U170	All	August 8, 1990
U171	All	August 8, 1990
U172	All	August 8, 1990
U173	All	August 8, 1990
U174	All	August 8, 1990
U176	All	August 8, 1990
U177	All	August 8, 1990
U178	All	August 8, 1990
U179	All	August 8, 1990
U180	All	August 8, 1990
U181	All	August 8, 1990
U182	All	August 8, 1990
U183	All	August 8, 1990
U184	All	August 8, 1990
U185	All	August 8, 1990
U186	All	August 8, 1990
U187	All	August 8, 1990
U188	All	August 8, 1990
U189	All	August 8, 1990
U190	All	June 8, 1989
U191	All	August 8, 1990
U192	All	August 8, 1990
U193	All	August 8, 1990
U194	All	June 8, 1989
U196	All	August 8, 1990
U197	All	August 8, 1990
U200	All	August 8, 1990
U201	All	August 8, 1990
U202	All	August 8, 1990
U203	All	August 8, 1990
U204	All	August 8, 1990
U205	All	August 8, 1990
U206	All	August 8, 1990
U207	All	August 8, 1990
U208	All	August 8, 1990
U209	All	August 8, 1990
U210	All	August 8, 1990
U211	All	August 8, 1990
U213	All	August 8, 1990
U214	All	August 8, 1990
U215	All	August 8, 1990
U216	All	August 8, 1990
U217	All	August 8, 1990
U218	All	August 8, 1990
U219	All	August 8, 1990
U220	All	August 8, 1990

U221	All	June 8, 1989
U222	All	August 8, 1990
U223	All	June 8, 1989
U225	All	August 8, 1990
U226	All	August 8, 1990
U227	All	August 8, 1990
U228	All	August 8, 1990
U234	All	August 8, 1990
U235	All	June 8, 1989
U236	All	August 8, 1990
U237	All	August 8, 1990
U238	All	August 8, 1990
U239	All	August 8, 1990
U240	All	August 8, 1990
U243	All	August 8, 1990
U244	All	August 8, 1990
U246	All	August 8, 1990
U247	All	August 8, 1990
U248	All	August 8, 1990
U249	All	August 8, 1990
U271	Mixed with radioactive wastes	April 8, 1998
U271	All others	July 8, 1996
U277	Mixed with radioactive wastes	April 8, 1998
U277	All others	July 8, 1996
U278	Mixed with radioactive wastes	April 8, 1998
U278	All others	July 8, 1996
U279	Mixed with radioactive wastes	April 8, 1998
U279	All others	July 8, 1996
U280	Mixed with radioactive wastes	April 8, 1998
U280	All others	July 8, 1996
U328	Mixed with radioactive wastes	June 30, 1994
U328	All others	November 9, 1992
U353	Mixed with radioactive wastes	June 30, 1994
U353	All others	November 9, 1992
U359	Mixed with radioactive wastes	June 30, 1994
U359	All others	November 9, 1992
U364	Mixed with radioactive wastes	April 8, 1998
U364	All others	July 8, 1996
U365	Mixed with radioactive wastes	April 8, 1998
U365	All others	July 8, 1996
U366	Mixed with radioactive wastes	April 8, 1998
U366	All others	July 8, 1996
U367	Mixed with radioactive wastes	April 8, 1998
U367	All others	July 8, 1996
U372	Mixed with radioactive wastes	April 8, 1998
U372	All others	July 8, 1996

U373	Mixed with radioactive wastes	April 8, 1998
U373	All others	July 8, 1996
U375	Mixed with radioactive wastes	April 8, 1998
U375	All others	July 8, 1996
U376	Mixed with radioactive wastes	April 8, 1998
U376	All others	July 8, 1996
U377	Mixed with radioactive wastes	April 8, 1998
U377	All others	July 8, 1996
U378	Mixed with radioactive wastes	April 8, 1998
U378	All others	July 8, 1996
U379	Mixed with radioactive wastes	April 8, 1998
U379	All others	July 8, 1996
U381	Mixed with radioactive wastes	April 8, 1998
U381	All others	July 8, 1996
U382	Mixed with radioactive wastes	April 8, 1998
U382	All others	July 8, 1996
U383	Mixed with radioactive wastes	April 8, 1998
U383	All others	July 8, 1996
U384	Mixed with radioactive wastes	April 8, 1998
U384	All others	July 8, 1996
U385	Mixed with radioactive wastes	April 8, 1998
U385	All others	July 8, 1996
U386	Mixed with radioactive wastes	April 8, 1998
U386	All others	July 8, 1996
U387	Mixed with radioactive wastes	April 8, 1998
U387	All others	July 8, 1996
U389	Mixed with radioactive wastes	April 8, 1998
U389	All others	July 8, 1996
U390	Mixed with radioactive wastes	April 8, 1998
U390	All others	July 8, 1996
U391	Mixed with radioactive wastes	April 8, 1998
U391	All others	July 8, 1996
U392	Mixed with radioactive wastes	April 8, 1998
U392	All others	July 8, 1996
U393	Mixed with radioactive wastes	April 8, 1998
U393	All others	July 8, 1996
U394	Mixed with radioactive wastes	April 8, 1998
U394	All others	July 8, 1996
U395	Mixed with radioactive wastes	April 8, 1998
U395	All others	July 8, 1996
U396	Mixed with radioactive wastes	April 8, 1998
U396	All others	July 8, 1996
U400	Mixed with radioactive wastes	April 8, 1998
U400	All others	July 8, 1996
U401	Mixed with radioactive wastes	April 8, 1998
U401	All others	July 8, 1996

U402	Mixed with radioactive wastes	April 8, 1998
U402	All others	July 8, 1996
U403	Mixed with radioactive wastes	April 8, 1998
U403	All others	July 8, 1996
U404	Mixed with radioactive wastes	April 8, 1998
U404	All others	July 8, 1996
U407	Mixed with radioactive wastes	April 8, 1998
U407	All others	July 8, 1996
U409	Mixed with radioactive wastes	April 8, 1998
U409	All others	July 8, 1996
U410	Mixed with radioactive wastes	April 8, 1998
U410	All others	July 8, 1996
U411	Mixed with radioactive wastes	April 8, 1998
U411	All others	July 8, 1996

[a] ~~This table does not include mixed radioactive wastes (from the First, Second, and Third Third rules) that are receiving a national capacity variance until May 8, 1992.~~ This table also does not include contaminated soil and debris wastes.

[b] The standard was revised in the Third Third Final Rule (adopted by USEPA at 55 Fed. Reg. 22520 (June 1, 1990)~~ and by~~, which the Board adopted in docket R90-11~~ by orders dated April 11, May 23, and August 8 and 22, 1991)~~ at 15 Ill. Reg. 9462, effective June 17, 1991.

[c] USEPA amended the standard in the Third Third Emergency Rule (at 58 Fed. Reg. 29860 (May 24, 1993), which the Board adopted in docket R93-16~~ on March 17, 1994~~ at 18 Ill. Reg. 6799, effective April 26, 1994); the original effective date was August 8, 1990.

[d] The standard was revised in the Phase II Final Rule (that USEPA adopted at 59 Fed. Reg. 47982 (September 19, 1994)~~ and~~, which the Board adopted in docket R95-6~~ by orders dated June 1 and 15, 1995~~ at 19 Ill. Reg. 9660, effective June 27, 1995); the original effective date was August 8, 1990.

[e] The standards for selected reactive wastes was revised in the Phase III Final Rule (that USEPA adopted at 61 Fed. Reg. 15566 (April 8, 1996)~~ and~~, which the Board adopted in docket R96-10/R97-3/R97-5 (consolidated)~~ by an order dated November 6, 1997~~ at 22 Ill. Reg. 783, effective December 16, 1997); the original effective date was August 8, 1990.

TABLE 2
SUMMARY OF EFFECTIVE DATES OF LAND DISPOSAL RESTRICTIONS
FOR CONTAMINATED SOIL AND DEBRIS (CSD)

Restricted hazardous waste in CSD	Effective date
1. Solvent- (F001-F005) and dioxin- (F020-F023 and F026-F028) containing soil and debris from CERCLA response or RCRA corrective actions.	November 8, 1990

2.	Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than one percent total solvents (F001-F005) or dioxins (F020-F023 and F026-F028).	November 8, 1988
3.	All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration.	August 8, 1990
4.	All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration.	June 8, 1991
5.	All soil and debris contaminated with Third Third wastes or, First or Second Third "soft hammer" wastes that had treatment standards promulgated in the Third Third rule, for which treatment standards are based on incineration, vitrification, or mercury retorting, acid leaching followed by chemical precipitation, or thermal recovery of metals, as well as all inorganic solids debris contaminated with D004-D011 wastes, and all soil and debris contaminated with mixed RCRA/radioactive wastes.	May 8, 1992
6.	Soil and debris contaminated with D012-D043, K141-K145, and K147-151 wastes.	December 19, 1994
7.	Debris (only) contaminated with F037, F038, K107-K112, K117, K118, K123-K126, K131, K132, K136, U328, U353, U359.	December 19, 1994
8.	Soil and debris contaminated with K156- K161, P127, P128, P188-P192, P194, P196- P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes.	July 8, 1996
9.	Soil and debris contaminated with K088 wastes.	October 8, 1997
10.	Soil and debris contaminated with radioactive wastes mixed with K088, K156-K161, P127, P128, P188-P192, P194, P196-P199, P201-P205, U271, U277-U280, U364-U367, U372, U373, U375-U379, U381-U387, U389-U396, U400-U404, U407, and U409-U411 wastes.	April 8, 1998
11.	Soil and debris contaminated with F032, F034, and F035.	May 12, 1997
12.	Soil and debris contaminated with newly identified D004-D011 toxicity characteristic wastes and mineral processing wastes.	August 24, 1998
13.	Soil and debris contaminated with mixed radioactive newly identified D011 characteristic wastes and mineral processing wastes.	May 26, 2000

BOARD NOTE: ~~This table is~~ These tables are provided for the convenience of the reader.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Appendix I EP Toxicity Test Method and Structural Integrity Test

~~Note: The EP (~~BOARD NOTE: Method ~~1310~~ 1310B (Extraction Procedure Toxicity Test) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, ~~as~~ incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Table C Technology Codes and Description of Technology-Based Standards

Technology Code	Description of Technology-Based Standard
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)--venting can be accomplished through physical release utilizing valves or piping; physical penetration of the container; or penetration through detonation.
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, or organic constituents, operated so that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations or reagents: 1) hypochlorite (e.g., bleach); 2) chlorine; 3) chlorine dioxide; 4) ozone or UV (ultraviolet light) assisted ozone; 5) peroxides; 6) persulfates;

7) perchlorates;

8) permanganates; or

9) other oxidizing reagents of equivalent efficiency, performed in units operated so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.

CHRED Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents:

1) sulfur dioxide;

2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);

3) sodium hydrosulfide;

4) ferrous salts; or

5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic halogens (TOX) can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.

CMBST High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of Subpart O of 35 Ill. Adm. Code 724, Subpart O of 35 Ill. Adm. Code 725, or Subpart H of 35 Ill. Adm. Code 726, and in other units operated in accordance with applicable technical operating requirements; and certain non-combustive technologies, such as the Catalytic Extraction Process.

DEACT Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, or reactivity.

FSUBS Fuel substitution in units operated in accordance with applicable technical operating requirements.

HLVIT Vitrification of high-level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the federal Nuclear Regulatory Commission.

IMERC Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

INCIN Incineration in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725.

LLEXT Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

MACRO Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 35 Ill. Adm. Code 720.110.

NEUTR Neutralization with the following reagents (or waste reagents) or combinations of reagents:

1) acids;

2) bases; or

3) water (including wastewaters) resulting in a pH greater than two but less than 12.5 as measured in the aqueous residuals.

NLDBR No land disposal based on recycling.

POLYM Formation of complex high-molecular weight solids through polymerization of monomers in high-TOC D001 nonwastewaters that are chemical components in the manufacture of plastics.

PRECP Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or

phosphates. The following reagents (or waste reagents) are typically used alone or in combination:

1) lime (i.e., containing oxides or hydroxides of calcium or magnesium);

2) caustic (i.e., sodium or potassium hydroxides);

3) soda ash (i.e., sodium carbonate);

4) sodium sulfide;

5) ferric sulfate or ferric chloride;

6) alum; or

7) sodium sulfate. Additional flocculating, coagulation, or similar reagents or processes that enhance sludge dewatering characteristics are not precluded from use.

RBERY Thermal recovery of beryllium.

RCGAS Recovery or reuse of compressed gases including techniques such as reprocessing of the gases for reuse or resale; filtering or adsorption of impurities; remixing for direct reuse or resale; and use of the gas as a fuel source.

RCORR Recovery of acids or bases utilizing one or more of the following recovery technologies:

1) distillation (i.e., thermal concentration);

2) ion exchange;

3) resin or solid adsorption;

4) reverse osmosis; or

5) incineration for the recovery of acid

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RLEAD Thermal recovery of lead in secondary lead smelters.

RMERC Retorting or roasting in a thermal processing unit capable of volatilizing mercury

and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following:

a) A federal national emissions standard for hazardous air pollutants (NESHAP) for mercury (subpart E of 40 CFR 61~~, Subpart E~~);

b) A best available control technology (BACT) or a lowest achievable emission rate (LAER) standard for mercury imposed pursuant to a prevention of significant deterioration (PSD) permit (including 35 Ill. Adm. Code 201 through 203); or

c) A state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury, including a permit issued pursuant to 35 Ill. Adm. Code 201. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

RMETL Recovery of metals or inorganics utilizing one or more of the following direct physical or removal technologies:

1) ion exchange;

2) resin or solid (i.e., zeolites) adsorption;

3) reverse osmosis;

4) chelation or solvent extraction;

5) freeze crystallization;

6) ultrafiltration; or

7) simple precipitation (i.e., crystallization)

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RORGS Recovery of organics utilizing one or more of the following technologies:

1) Distillation;

2) thin film evaporation;

3) steam stripping;

4) carbon adsorption;

5) critical fluid extraction;

6) liquid-liquid extraction;

7) precipitation or crystallization (including freeze crystallization); or

8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals).

Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RTHRM Thermal recovery of metals or inorganics from nonwastewaters in units defined as cement kilns, blast furnaces, smelting, melting and refining furnaces, combustion devices used to recover sulfur values from spent sulfuric acid and "other devices" determined by the Agency pursuant to 35 Ill. Adm. Code 720.110, the definition of "industrial furnace."

RZINC Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.

STABL Stabilization with the following reagents (or waste reagents) or combinations of reagents:

1) Portland cement; or

2) lime or pozzolans (e.g., fly ash and cement kiln dust)--this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set or cure time or compressive strength, or to overall reduce the leachability of the metal or inorganic.

SSTRP Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and an extracted wastewater that must undergo further treatment as specified in the standard.

WETOX Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).

WTRRX Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic or ignitable levels of gases released during the reaction.

Note 1: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in Table T to this Part by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

Note 2: When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR." This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

BOARD NOTE: Derived from Table I in 40 CFR 268.42~~, Table 1 (2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Table H Wastes Excluded from CCW Treatment Standards

The following facilities are excluded from the treatment standard under Section 728.143(a) and Table B to this Part, and are subject to the following constituent concentrations. These facilities have received a treatability exception by regulatory action from USEPA pursuant to 40 CFR 268.44 ~~(2002)~~, and have demonstrated that the Board needs to adopt the treatability exception as part of the Illinois RCRA program. The Board may also grant an "adjusted treatment standard" pursuant to Section 728.144.

Facility name and address	Waste Code	See Also	Regulated hazardous constituent	Wastewaters Concentration (~~mg/L~~mg/ℓ)	Notes	Nonwaste-waters Concentration (~~mg/L~~mg/kg)	Notes
Craftsman Plating and Tinning Corp., Chicago, IL	F006	Section 728.140	Cyanides (Total)	1.2	B	~~1800~~1,800	D

			Cyanides (amenable)	0.86	B and C	30	D
			Cadmium	1.6		NA	
			Chromium	0.32		NA	
			Lead	0.40		NA	
			Nickel	0.44		NA	
Northwestern Plating Works, Inc., Chicago, IL	F006	Section 728.140	Cyanides (Total)	1.2	B	970	D
			Cyanides (amenable)	0.86	B and C	30	D
			Cadmium	1.6		NA	
			Chromium	0.32		NA	
			Lead	0.40		NA	
			Nickel	0.44		NA	

Notes:

A An owner or operator may certify compliance with these treatment standards according to the provisions of Section 728.107.

B Cyanide wastewater standards for F006 are based on analysis of composite samples.

C These owners and operators must comply with 0.86 ~~mg/L~~mg/ℓ for amenable cyanides in the wastewater exiting the alkaline chlorination system. These owners and operators must also comply with Section 728.107(a)(4) for appropriate monitoring frequency consistent with the facilities' waste analysis plan.

D Cyanide nonwastewaters are analyzed using ~~SW-846~~ Method ~~9010~~ 9010C (Total and Amenable Cyanide: Distillation) or ~~9012~~ 9012B (Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(b), with a sample size 10 g, distillation time one hour and fifteen minutes. ~~SW-846 is incorporated by reference in 35 Ill. Adm. Code 720.111.~~

NA Not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.44(o) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Table T Treatment Standards for Hazardous Wastes

Note: The treatment standards that heretofore appeared in tables in Sections 728.141, 728.142, and 728.143 have been consolidated into this table.

Waste Code Waste Description and Treatment or Regulatory Subcategory[1] Regulated Hazardous Constituent Common Name	CAS[2] Number	Wastewaters Concentration in ~~mg/l~~mg/ℓ[3]; or Technology Code[4]	Nonwastewaters Concentration in mg/kg[5] unless noted as "~~mg/l~~mg/ℓ TCLP"; or Technology Code[4]
D001[9] Ignitable Characteristic Wastes, except for the 35 Ill. Adm. Code 721.121(a)(1) High TOC Subcategory.			
NA	NA	DEACT and meet Section 728.148 standards[8]; or RORGS; or CMBST	DEACT and meet Section 728.148 standards[8]; or RORGS; or CMBST
D001[9] High TOC Ignitable Characteristic Liquids Subcategory based on 35 Ill. Adm. Code 721.121(a)(1) - Greater than or equal to 10 percent total organic carbon. (Note: This subcategory consists of nonwastewaters only.)			
NA	NA	NA	RORGS; CMBST; or POLYM
D002[9] Corrosive Characteristic Wastes.			
NA	NA	DEACT and meet Section 728.148 standards[8]	DEACT and meet Section 728.148 standards[8]
D002, D004, D005, D006, D007, D008, D009, D010, D011 Radioactive high level wastes generated during the reprocessing of fuel rods. (Note: This subcategory consists of nonwastewaters only.)			
Corrosivity (pH)	NA	NA	HLVIT
Arsenic	7440-38-2	NA	HLVIT
Barium	7440-39-3	NA	HLVIT
Cadmium	7440-43-9	NA	HLVIT
Chromium (Total)	7440-47-3	NA	HLVIT
Lead	7439-92-1	NA	HLVIT

Mercury	7439-97-6	NA	HLVIT
Selenium	7782-49-2	NA	HLVIT
Silver	7440-22-4	NA	HLVIT

D003[9]
Reactive Sulfides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

NA	NA	DEACT	DEACT

D003[9]
Explosive subcategory based on 35 Ill. Adm. Code 721.123(a)(6), (a)(7), and (a)(8).

NA	NA	DEACT and meet Section 728.148 standards[8]	DEACT and meet Section 728.148 standards[8]

D003[9]
Unexploded ordnance and other explosive devices that have been the subject of an emergency response.

NA	NA	DEACT	DEACT

D003[9]
Other Reactives Subcategory based on 35 Ill. Adm. Code 721.123(a)(1).

NA	NA	DEACT and meet Section 728.148 standards[8]	DEACT and meet Section 728.148 standards[8]

D003[9]
Water Reactive Subcategory based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4). (Note: This subcategory consists of nonwastewaters only.)

NA	NA	NA	DEACT and meet Section 728.148 standards[8]

D003[9]
Reactive Cyanides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

Cyanides (Total)[7]	57-12-5	--	590
Cyanides (Amenable)[7]	57-12-5	0.86	30

D004[9]
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Arsenic	7440-38-2	1.4 and meet Section 728.148 standards[8]	5.0 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D005[9]
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Barium	7440-39-3	1.2 and meet Section 728.148 standards[8]	21 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D006[9]
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cadmium	7440-43-9	0.69 and meet Section 728.148 standards[8]	0.11 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D006[9]
Cadmium-Containing Batteries Subcategory.
(Note: This subcategory consists of nonwastewaters only.)

Cadmium	7440-43-9	NA	RTHRM

D006[9]
Radioactively contaminated cadmium-containing batteries.
(Note: This subcategory consists of nonwastewaters only.)

Cadmium	7440-43-9	NA	Macroencapsula-tion in accordance with Section 728.145

D007[9]
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chromium (Total)	7440-47-3	2.77 and meet Section 728.148 standards[8]	0.60 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D008[9]
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Lead	7439-92-1	0.69 and meet Section 728.148 standards[8]	0.75 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D008[9]
Lead Acid Batteries Subcategory
(Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of this Part or exempted under other regulations (see 35 Ill. Adm. Code 726.180). This subcategory consists of nonwastewaters only.)

Lead	7439-92-1	NA	RLEAD

D008[9]
Radioactive Lead Solids Subcategory
(Note: These lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters only.)

Lead	7439-92-1	NA	MACRO

D009[9]
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic

Subcategory)			
Mercury	7439-97-6	NA	IMERC; or RMERC

D009[9]
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)

Mercury	7439-97-6	NA	RMERC

D009[9]
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury. (Low Mercury Subcategory)

Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D009[9]
All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury Subcategory)

Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D009[9]
All D009 wastewaters.

Mercury	7439-97-6	0.15 and meet Section 728.148 standards[8]	NA

D009[9]			
Elemental mercury contaminated with radioactive materials.			
(Note: This subcategory consists of nonwastewaters only.)			
Mercury	7439-97-6	NA	AMLGM
D009[9]			
Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.			
(Note: This subcategory consists of nonwastewaters only.)			
Mercury	7439-97-6	NA	IMERC
D009[9]			
Radioactively contaminated mercury-containing batteries.			
(Note: This subcategory consists of nonwastewaters only.)			
Mercury	7439-97-6	NA	Macroencapsulation in accordance with Section 728.145
D010[9]			
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).			
Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]
D011[9]			
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).			
Silver	7440-22-4	0.43	0.14 ~~mg/l~~mg/ℓ TCLP and meet Section 728.148 standards[8]

D011[9]
Radioactively contaminated silver-containing batteries.
(Note: This subcategory consists of nonwastewaters only.)

Silver	7440-22-4	NA	Macroencapsulation in accordance with Section 728.145

D012[9]
Wastes that are TC for ~~Endrin~~ endrin based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Endrin	72-20-8	BIODG; or CMBST	0.13 and meet Section 728.148 standards[8]
Endrin aldehyde	7421-93-4	BIODG; or CMBST	0.13 and meet Section 728.148 standards[8]

D013[9]
Wastes that are TC for ~~Lindane~~ lindane based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

α-BHC	319-84-6	CARBN; or CMBST	0.066 and meet Section 728.148 standards[8]
β-BHC	319-85-7	CARBN; or CMBST	0.066 and meet Section 728.148 standards[8]
δ-BHC	319-86-8	CARBN; or CMBST	0.066 and meet Section 728.148 standards[8]
γ-BHC (Lindane)	58-89-9	CARBN; or CMBST	0.066 and meet Section 728.148 standards[8]

D014[9]
Wastes that are TC for Methoxychlor based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methoxychlor	72-43-5	WETOX or CMBST	0.18 and meet Section 728.148 standards[8]

D015[9]
Wastes that are TC for Toxaphene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846~~ Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Toxaphene	8001-35-2	BIODG or CMBST	2.6 and meet Section 728.148 standards[8]

D016[9]
Wastes that are TC for 2,4-D (~~2,4-Dichlorophenoxyacetic Acid~~2,4-dichlorophenoxyacetic acid) based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846~~ Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-D (~~2,4-Dichloro-phenoxyacetic Acid~~ 2,4-dichlorophenoxyacetic acid)	94-75-7	CHOXD; BIODG; or CMBST	10 and meet Section 728.148 standards[8]

D017[9]
Wastes that are TC for 2,4,5-TP (Silvex) based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846~~ Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-TP (Silvex)	93-72-1	CHOXD or CMBST	7.9 and meet Section 728.148 standards[8]

D018[9]
Wastes that are TC for ~~Benzene~~ benzene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846~~ Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Benzene	71-43-2	0.14 and meet Section 728.148 standards[8]	10 and meet Section 728.148 standards[8]

D019[9]
Wastes that are TC for ~~Carbon~~ carbon tetrachloride based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846~~ Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Carbon tetrachloride	56-23-5	0.057 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D020[9]
Wastes that are TC for ~~Chlordane~~ chlordane based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chlordane (α and χ isomers)	57-74-9	0.0033 and meet Section 728.148 standards[8]	0.26 and meet Section 728.148 standards[8]

D021[9]
Wastes that are TC for ~~Chlorobenzene~~ chlorobenzene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chlorobenzene	108-90-7	0.057 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D022[9]
Wastes that are TC for ~~Chloroform~~ chloroform based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chloroform	67-66-3	0.046 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D023[9]
Wastes that are TC for ~~o-Cresol~~ o-cresol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

o-Cresol	95-48-7	0.11 and meet Section 728.148 standards[8]	5.6 and meet Section 728.148 standards[8]

D024[9]
Wastes that are TC for ~~m-Cresol~~ m-cresol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77 and meet Section 728.148 standards[8]	5.6 and meet Section 728.148 standards[8]

D025[9]
Wastes that are TC for ~~p-Cresol~~ p-cresol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77 and meet Section 728.148 standards[8]	5.6 and meet Section 728.148 standards[8]

D026[9]
Wastes that are TC for ~~Cresols (Total)~~ cresols (total) based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88 and meet Section 728.148 standards[8]	11.2 and meet Section 728.148 standards[8]

D027[9]
Wastes that are TC for ~~p-Dichlorobenzene~~ p-dichlorobenzene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	0.090 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D028[9]
Wastes that are TC for ~~1,2-Dichloroethane~~ 1,2-dichloroethane based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,2-Dichloroethane	107-06-2	0.21 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D029[9]
Wastes that are TC for ~~1,1-Dichloroethylene~~ 1,1-dichloroethylene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,1-Dichloroethylene	75-35-4	0.025 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D030[9]
Wastes that are TC for ~~2,4-Dinitrotoluene~~ 2,4-dinitrotoluene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-Dinitrotoluene	121-14-2	0.32 and meet Section 728.148 standards[8]	140 and meet Section 728.148 standards[8]

D031[9]
Wastes that are TC for ~~Heptachlor~~ heptachlor based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Heptachlor	76-44-8	0.0012 and meet Section 728.148 standards[8]	0.066 and meet Section 728.148 standards[8]
Heptachlor epoxide	1024-57-3	0.016 and meet Section 728.148 standards[8]	0.066 and meet Section 728.148 standards[8]

D032[9]
Wastes that are TC for ~~Hexachlorobenzene~~ hexachlorobenzene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachlorobenzene	118-74-1	0.055 and meet Section 728.148 standards[8]	10 and meet Section 728.148 standards[8]

D033[9]
Wastes that are TC for ~~Hexachlorobutadiene~~ hexachlorobutadiene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm.

Code 720.111(a).

Hexachlorobutadiene	87-68-3	0.055 and meet Section 728.148 standards[8]	5.6 and meet Section 728.148 standards[8]

D034[9]

Wastes that are TC for ~~Hexachloroethane~~ hexachloroethane based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachloroethane	67-72-1	0.055 and meet Section 728.148 standards[8]	30 and meet Section 728.148 standards[8]

D035[9]

Wastes that are TC for ~~Methyl~~ methyl ethyl ketone based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methyl ethyl ketone	78-93-3	0.28 and meet Section 728.148 standards[8]	36 and meet Section 728.148 standards[8]

D036[9]

Wastes that are TC for ~~Nitrobenzene~~ nitrobenzene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Nitrobenzene	98-95-3	0.068 and meet Section 728.148 standards[8]	14 and meet Section 728.148 standards[8]

D037[9]

Wastes that are TC for ~~Pentachlorophenol~~ pentachlorophenol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Pentachlorophenol	87-86-5	0.089 and meet Section 728.148 standards[8]	7.4 and meet Section 728.148 standards[8]

D038[9]
Wastes that are TC for ~~Pyridine~~ pyridine based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Pyridine	110-86-1	0.014 and meet Section 728.148 standards[8]	16 and meet Section 728.148 standards[8]

D039[9]
Wastes that are TC for ~~Tetrachloroethylene~~ tetrachloroethylene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Tetrachloroethylene	127-18-4	0.056 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D040[9]
Wastes that are TC for ~~Trichloroethylene~~ trichloroethylene based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Trichloroethylene	79-01-6	0.054 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

D041[9]
Wastes that are TC for ~~2,4,5-Trichlorophenol~~ 2,4,5-trichlorophenol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-Trichlorophenol	95-95-4	0.18 and meet Section 728.148 standards[8]	7.4 and meet Section 728.148 standards[8]

D042[9]

Wastes that are TC for ~~2,4,6-Trichlorophenol~~ 2,4,6-trichlorophenol based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,6-Trichlorophenol	88-06-2	0.035 and meet Section 728.148 standards[8]	7.4 and meet Section 728.148 standards[8]

D043[9]

Wastes that are TC for ~~Vinyl~~ vinyl chloride based on ~~the toxicity characteristic leaching procedure~~ Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 ~~Method 1311~~, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Vinyl chloride	75-01-4	0.27 and meet Section 728.148 standards[8]	6.0 and meet Section 728.148 standards[8]

F001, F002, F003, F004 & F005

F001, F002, F003, F004, or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichloromonofluoromethane, or xylenes (except as specifically noted in other subcategories). See further details of these listings in 35 Ill. Adm. Code 721.131.

Acetone	67-64-1	0.28	160
Benzene	71-43-2	0.14	10
n-Butyl alcohol	71-36-3	5.6	2.6
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlorobenzene	108-90-7	0.057	6.0
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2

Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
Isobutyl alcohol	78-83-1	5.6	170
Methanol	67-56-1	5.6	NA
Methylene chloride	75-9-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Nitrobenzene	98-95-3	0.068	14
Pyridine	110-86-1	0.014	16
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
1,1,2-Trichloro-1,2,2-trifluoro-ethane	76-13-1	0.057	30
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30

F001, F002, F003, F004 & F005
F003 and F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001 through F005 solvents: carbon disulfide, cyclohexanone, or methanol. (Formerly Section 728.141(c)).

Carbon disulfide	75-15-0	3.8	4.8 ~~mg/l~~mg/ℓ TCLP
Cyclohexanone	108-94-1	0.36	0.75 ~~mg/l~~mg/ℓ TCLP
Methanol	67-56-1	5.6	0.75 ~~mg/l~~mg/ℓ TCLP

F001, F002, F003, F004 & F005
F005 solvent waste containing 2-Nitropropane as the only listed F001 through F005 solvent.

2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

F001, F002, F003, F004 & F005
F005 solvent waste containing 2-Ethoxyethanol as the only listed F001 through F005 solvent.

2-Ethoxyethanol	110-80-5	BIODG; or CMBST	CMBST

F006
Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning or stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F007
Spent cyanide plating bath solutions from electroplating operations.

Cadmium	7440-43-9	NA	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F008
Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F009
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F010
Quenching bath residues from oil baths from metal heat-treating operations where cyanides are used in the process.

Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	NA

F011
Spent cyanide solutions from salt bath pot cleaning from metal heat-treating operations.

Cadmium	7440-43-9	NA	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F012
Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590

Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP

F019
Wastewater treatment sludges from the chemical conversion coating of aluminum, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30

F020, F021, F022, F023, F026
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (i.e., F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022) and wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F023) or (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).

HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063	0.001
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035	0.001
Pentachlorophenol	87-86-5	0.089	7.4
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

F024
Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 35 Ill. Adm. Code 721.131 or 721.132.)

All F024 wastes	NA	CMBST[11]	CMBST[11]
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
3-Chloropropylene	107-05-1	0.036	30
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Hexachloroethane	67-72-1	0.055	30
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

F025
Condensed light ends from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one up to and including five, with varying amounts and positions of chlorine substitution. F025--Light Ends Subcategory.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
Methylene chloride	75-9-2	0.089	30
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

F025
Spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. F025--Spent Filters/Aids and Desiccants Subcategory.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30

Methylene chloride	75-9-2	0.089	30
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

F027
Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	0.000035	0.001
Pentachlorophenol	87-86-5	0.089	7.4
TCDDs (All Tetrachlorodibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	55722-27-5	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

F028
Residues resulting from the incineration or thermal treatment of soil contaminated with USEPA hazardous waste numbers F020, F021, F023, F026, and F027.

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	55684-94-1	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	30402-15-4	0.000035	0.001
Pentachlorophenol	87-86-5	0.089	7.4
TCDDs (All Tetrachlorodibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	55722-27-5	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

F032
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 35 Ill. Adm. Code 721.135 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or penta-chlorophenol.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k) fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b) fluoranthene)	207-08-9	0.11	6.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
2-4-Dimethyl phenol	105-67-9	0.036	14
Fluorene	86-73-7	0.059	3.4
Hexachlorodibenzo-p-dioxins	NA	0.000063 or CMBST[11]	0.001 or CMBST[11]
Hexachlorodibenzofurans	NA	0.000063 or CMBST[11]	0.001 or CMBST[11]
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Pentachlorodibenzo-p-dioxins	NA	0.000063 or CMBST[11]	0.001 or CMBST[11]
Pentachlorodibenzofurans	NA	0.000035 or CMBST[11]	0.001 or CMBST[11]
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Tetrachlorodibenzo-p-dioxins	NA	0.000063 or CMBST[11]	0.001 or CMBST[11]
Tetrachlorodibenzofurans	NA	0.000063 or CMBST[11]	0.001 or CMBST[11]
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4

Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP

F034
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Fluorene	86-73-7	0.059	3.4
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP

F035
Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes that are generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP

F037
Petroleum refinery primary oil/water/solids separation sludge--Any sludge generated from the

gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks, and impoundments; ditches, and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 35 Ill. Adm. Code 721.131(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.

Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

F038

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation (IAF) units, tanks, and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges, and floats generated in aggressive biological treatment units as defined in 35 Ill. Adm. Code 721.131(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological units) and F037, K048, and K051 are not included in this listing.

Benzene	71-43-2	0.14	10

Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

F039

Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of this Part. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste numbers: F020, F021, F022, F026, F027, or F028.).

Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	NA
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylonitrile	107-13-1	0.24	84
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
α-BHC	319-84-6	0.00014	0.066
β-BHC	319-85-7	0.00014	0.066
δ-BHC	319-86-8	0.023	0.066
γ-BHC	58-89-9	0.0017	0.066
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4

Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-methane)	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	NA
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
Chloromethane (Methyl chloride)	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15

Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
2,4-D (2,4-Dichlorophenoxy-acetic acid)	94-75-7	0.72	10
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
Diethyl phthalate	84-66-2	0.20	28
2-4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitros-amine)	122-39-4	0.92	NA

Diphenylnitrosamine (difficult to distinguish from diphenyl-amine)	86-30-6	0.92	NA
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Endosulfan I	939-98-8	0.023	0.066
Endosulfan II	33213-6-5	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
Ethyl acetate	141-78-6	0.34	33
Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
1,2,3,4,6,7,8-Heptachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachloro-dibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachloro-dibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-8	0.0011	0.13

Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	NA
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloro-aniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	NA
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)	3268-87-9	0.000063	0.0025
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035	0.001
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
1,3-Phenylenediamine	108-45-2	0.010	0.66
Phorate	298-02-2	0.021	4.6
Phthalic anhydride	85-44-9	0.055	NA

Pronamide	23950-58-5	0.093	1.5
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
2,4,5-T	93-76-5	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromomethane)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoro-ethane	76-13-1	0.057	30
tris(2,3-Dibromopropyl) phosphate	126-72-7	0.11	NA
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Antimony	7440-36-0	1.9	1.15 ~~mg/l~~mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Barium	7440-39-3	1.2	21 ~~mg/l~~mg/ℓ TCLP
Beryllium	7440-41-7	0.82	NA
Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	NA

Fluoride	16964-48-8	35	NA
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Mercury	7439-97-6	0.15	0.025 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	0.43	0.14 ~~mg/l~~mg/ℓ TCLP
Sulfide	8496-25-8	14	NA
Thallium	7440-28-0	1.4	NA
Vanadium	7440-62-2	4.3	NA

K001
Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.

Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K002
Wastewater treatment sludge from the production of chrome yellow and orange pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K003
Wastewater treatment sludge from the production of molybdate orange pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K004
Wastewater treatment sludge from the production of zinc yellow pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP

Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K005
Wastewater treatment sludge from the production of chrome green pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590

K006
Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous).

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K006
Wastewater treatment sludge from the production of chrome oxide green pigments (hydrated).

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	NA

K007
Wastewater treatment sludge from the production of iron blue pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590

K008
Oven residue from the production of chrome oxide green pigments.

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K009
Distillation bottoms from the production of acetaldehyde from ethylene.

Chloroform	67-66-3	0.046	6.0

K010
Distillation side cuts from the production of acetaldehyde from ethylene.

Chloroform	67-66-3	0.046	6.0

K011
Bottom stream from the wastewater stripper in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K013
Bottom stream from the acetonitrile column in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K014
Bottoms from the acetonitrile purification column in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K015
Still bottoms from the distillation of benzyl chloride.

Anthracene	120-12-7	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

K016
Heavy ends or distillation residues from the production of carbon tetrachloride.

Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4

Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.056	6.0

K017
Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.

bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
1,2-Dichloropropane	78-87-5	0.85	18
1,2,3-Trichloropropane	96-18-4	0.85	30

K018
Heavy ends from the fractionation column in ethyl chloride production.

Chloroethane	75-00-3	0.27	6.0
Chloromethane	74-87-3	0.19	NA
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0

K019
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.

bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
p-Dichlorobenzene	106-46-7	0.090	NA
1,2-Dichloroethane	107-06-2	0.21	6.0
Fluorene	86-73-7	0.059	NA
Hexachloroethane	67-72-1	0.055	30
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0

K020
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.

1,2-Dichloroethane	107-06-2	0.21	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0

K021
Aqueous spent antimony catalyst waste from fluoromethanes production.

Carbon tetrachloride	56-23-5	0.057	6.0

Chloroform	67-66-3	0.046	6.0
Antimony	7440-36-0	1.9	1.15 ~~mg/l~~mg/ℓ TCLP

K022
Distillation bottom tars from the production of phenol or acetone from cumene.

Toluene	108-88-3	0.080	10
Acetophenone	96-86-2	0.010	9.7
Diphenylamine (difficult to distinguish from diphenylnitros-amine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenyl-amine)	86-30-6	0.92	13
Phenol	108-95-2	0.039	6.2
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

K023
Distillation light ends from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28

K024
Distillation bottoms from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28

K025
Distillation bottoms from the production of nitrobenzene by the nitration of benzene.

NA	NA	LLEXT fb SSTRP fb CARBN; or CMBST	CMBST

K026
Stripping still tails from the production of methyl ethyl pyridines.

NA	NA	CMBST	CMBST

K027
Centrifuge and distillation residues from toluene diisocyanate production.

NA	NA	CARBN; or CMBST	CMBST

K028
Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.

1,1-Dichloroethane	75-34-3	0.059	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Cadmium	7440-43-9	0.69	NA
Chromium(Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

K029
Waste from the product steam stripper in the production of 1,1,1-trichloroethane.

Chloroform	67-66-3	0.046	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

K030
Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.

o-Dichlorobenzene	95-50-1	0.088	NA
p-Dichlorobenzene	106-46-7	0.090	NA
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	NA	30
Pentachlorobenzene	608-93-5	NA	10
Pentachloroethane	76-01-7	NA	6.0
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K031
By-product salts generated in the production of MSMA and cacodylic acid.

Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP

K032
Wastewater treatment sludge from the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Chlordane (α and γ isomers)	57-74-9	0.0033	0.26
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066

K033
Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4

K034
Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4

K035
Wastewater treatment sludges generated in the production of creosote.

Acenaphthene	83-32-9	NA	3.4
Anthracene	120-12-7	NA	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Dibenz(a,h)anthracene	53-70-3	NA	8.2
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	NA	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2

K036
Still bottoms from toluene reclamation ~~distillaiton~~ distillation in the production of disulfoton.

Disulfoton	298-04-4	0.017	6.2

K037
Wastewater treatment sludges from the production of disulfoton.

Disulfoton	298-04-4	0.017	6.2
Toluene	108-88-3	0.080	10

K038
Wastewater from the washing and stripping of phorate production.

Phorate	298-02-2	0.021	4.6

K039
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.

NA	NA	CARBN; or CMBST	CMBST

K040
Wastewater treatment sludge from the production of phorate.

Phorate	298-02-2	0.021	4.6

K041
Wastewater treatment sludge from the production of toxaphene.

Toxaphene	8001-35-2	0.0095	2.6

K042
Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.

o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K043
2,6-Dichlorophenol waste from the production of 2,4-D.

2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	187-65-0	0.044	14
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4
Tetrachloroethylene	127-18-4	0.056	6.0
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001

HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063	0.001
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035	0.001
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063	0.001

K044
Wastewater treatment sludges from the manufacturing and processing of explosives.

NA	NA	DEACT	DEACT

K045
Spent carbon from the treatment of wastewater containing explosives.

NA	NA	DEACT	DEACT

K046
Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.

Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K047
Pink or red water from TNT operations.

NA	NA	DEACT	DEACT

K048
Dissolved air flotation (DAF) float from the petroleum refining industry.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-33	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

K049
Slop oil emulsion solids from the petroleum refining industry.

Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Carbon disulfide	75-15-0	3.8	NA
Chrysene	2218-01-9	0.059	3.4
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

K050
Heat exchanger bundle cleaning sludge from the petroleum refining industry.

Benzo(a)pyrene	50-32-8	0.061	3.4
Phenol	108-95-2	0.039	6.2
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

K051
API separator sludge from the petroleum refining industry.

Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10

Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	2218-01-9	0.059	3.4
Di-n-butyl phthalate	105-67-9	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.08	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

K052
Tank bottoms (leaded) from the petroleum refining industry.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Toluene	108-88-3	0.08	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 ~~mg/l~~mg/ℓ TCLP

K060
Ammonia still lime sludge from coking operations.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2
Cyanides (Total)[7]	57-12-5	1.2	590

K061
Emission control dust or sludge from the primary production of steel in electric furnaces.

Antimony	7440-36-0	NA	1.15 ~~mg/l~~mg/ℓ TCLP
Arsenic	7440-38-2	NA	5.0 ~~mg/l~~mg/ℓ TCLP
Barium	7440-39-3	NA	21 ~~mg/l~~mg/ℓ TCLP
Beryllium	7440-41-7	NA	1.22 ~~mg/l~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Selenium	7782-49-2	NA	5.7 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 ~~mg/l~~mg/ℓ TCLP
Thallium	7440-28-0	NA	0.20 ~~mg/l~~mg/ℓ TCLP
Zinc	7440-66-6	NA	4.3 ~~mg/l~~mg/ℓ TCLP

K062
Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).

Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	NA

K069
Emission control dust or sludge from secondary lead smelting - Calcium sulfate (Low Lead)

Subcategory.			
Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
K069			
Emission control dust or sludge from secondary lead smelting - Non-Calcium sulfate (High Lead) Subcategory.			
NA	NA	NA	RLEAD
K071			
K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are residues from RMERC.			
Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP
K071			
K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are not residues from RMERC.			
Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP
K071			
All K071 wastewaters.			
Mercury	7439-97-6	0.15	NA
K073			
Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.			
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
K083			
Distillation bottoms from aniline production.			
Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
Cyclohexanone	108-94-1	0.36	NA
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13

Diphenylnitrosamine (difficult to distinguish from diphenyl-amine)	86-30-6	0.92	13
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP

K084
Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP

K085
Distillation or fractionation column bottoms from the production of chlorobenzenes.

Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K086
Solvent wastes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

Acetone	67-64-1	0.28	160
Acetophenone	96-86-2	0.010	9.7
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
n-Butyl alcohol	71-36-3	5.6	2.6
Butylbenzyl phthalate	85-68-7	0.017	28
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Diethyl phthalate	84-66-2	0.20	28
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
Di-n-octyl phthalate	117-84-0	0.017	28
Ethyl acetate	141-78-6	0.34	33
Ethylbenzene	100-41-4	0.057	10
Methanol	67-56-1	5.6	NA

Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methylene chloride	75-09-2	0.089	30
Naphthalene	91-20-3	0.059	5.6
Nitrobenzene	98-95-3	0.068	14
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K087
Decanter tank tar sludge from coking operations.

Acenaphthylene	208-96-8	0.059	3.4
Benzene	71-43-2	0.14	10
Chrysene	218-01-9	0.059	3.4
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K088
Spent potliners from primary aluminum reduction.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene	205-99-2	0.11	6.8
Benzo(k)fluoranthene	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4

Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Antimony	7440-36-0	1.9	1.15 ~~mg/l~~mg/ℓ TCLP
Arsenic	7440-38-2	1.4	26.1 ~~mg/l~~mg/ℓ
Barium	7440-39-3	1.2	21 ~~mg/l~~mg/ℓ TCLP
Beryllium	7440-41-7	0.82	1.22 ~~mg/l~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Mercury	7439-97-6	0.15	0.025 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	0.43	0.14 ~~mg/l~~mg/ℓ TCLP
Cyanide (Total)[7]	57-12-5	1.2	590
Cyanide (Amenable)[7]	57-12-5	0.86	30
Fluoride	16984-48-8	35	NA

K093
Distillation light ends from the production of phthalic anhydride from ortho-xylene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28

K094
Distillation bottoms from the production of phthalic anhydride from ortho-xylene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28

K095
Distillation bottoms from the production of 1,1,1-trichloroethane.

Hexachloroethane	67-72-1	0.055	30

Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0

K096
Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.

m-Dichlorobenzene	541-73-1	0.036	6.0
Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0

K097
Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.

Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorocyclopentadiene	77-47-4	0.057	2.4

K098
Untreated process wastewater from the production of toxaphene.

Toxaphene	8001-35-2	0.0095	2.6

K099
Untreated wastewater from the production of 2,4-D.

2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	10
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063	0.001
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035	0.001
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063	0.001

K100
Waste leaching solution from acid leaching of emission control dust or sludge from secondary lead smelting.

Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

K101
Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

o-Nitroaniline	88-74-4	0.27	14
Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA

K102
Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

o-Nitrophenol	88-75-5	0.028	13
Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA

K103
Process residues from aniline extraction from the production of aniline.

Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2

K104
Combined wastewater streams generated from nitrobenzene or aniline production.

Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Cyanides (Total)[7]	57-12-5	1.2	590

K105
Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.

Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
2-Chlorophenol	95-57-8	0.044	5.7
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Phenol	108-95-2	0.039	6.2
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4

K106
K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.

Mercury	7439-97-6	NA	RMERC

K106
K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC.

Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP

K106
Other K106 nonwastewaters that contain less than 260 mg/kg total mercury and are not residues from RMERC.

Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP

K106
All K106 wastewaters.

Mercury	7439-97-6	0.15	NA

K107
Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

K108
Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

K109
Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

K110
Condensed column overheads from intermediate separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

K111
Product washwaters from the production of dinitrotoluene via nitration of toluene.

2,4-Dinitrotoluene	121-1-1	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28

K112
Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA	NA	CMBST; or CHOXD fb CARBN; or BIODG fb CARBN	CMBST

K113
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA	NA	CARBN; or CMBST	CMBST

K114
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA	NA	CARBN; or CMBST	CMBST

K115
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
NA	NA	CARBN; or CMBST	CMBST

K116
Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.

NA	NA	CARBN; or CMBST	CMBST

K117
Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K118
Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K123
Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST

K124
Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST

K125
Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST

K126
Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or CHOXD fb (BIODG or CARBN)	CMBST

K131
Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.

Methyl bromide (Bromomethane)	74-83-9	0.11	15

K132
Spent absorbent and wastewater separator solids from the production of methyl bromide.

Methyl bromide (Bromomethane)	74-83-9	0.11	15

K136
Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K141
Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal.

This listing does not include K087 (decanter tank tar sludge from coking operations).

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-2-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K142

Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K143

Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4

K144
Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2

K145
Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Naphthalene	91-20-3	0.059	5.6

K147
Tar storage tank residues from coal tar refining.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K148
Residues from coal tar distillation, including, but not limited to, still bottoms.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4

Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K149

Distillation bottoms from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillations of benzyl chloride.)

Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Toluene	108-88-3	0.080	10

K150

Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,1,2,2- Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K151

Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Benzene	71-43-2	0.14	10
Carbon tetrachloride	56-23-5	0.057	6.0

Chloroform	67-66-3	0.046	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10

K156
Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.[10]

Acetonitrile	75-05-8	5.6	1.8
Acetophenone	96-86-2	0.010	9.7
Aniline	62-53-3	0.81	14
Benomyl	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Carbaryl	63-25-21	0.006	0.14
Carbenzadim	10605-21-7	0.056	1.4
Carbofuran	1563-66-2	0.006	0.14
Carbosulfan	55285-14-8	0.028	1.4
Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
Methomyl	16752-77-5	0.028	0.14
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyridine	110-86-1	0.014	16
Toluene	108-88-3	0.080	10
Triethylamine	121-44-8	0.081	1.5

K157
Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
Methomyl	16752-77-5	0.028	0.14
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Pyridine	110-86-1	0.014	16
Triethylamine	121-44-8	0.081	1.5

K158
Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.

Benomyl	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Carbenzadim	10605-21-7	0.056	1.4
Carbofuran	1563-66-2	0.006	0.14
Carbosulfan	55285-14-8	0.028	1.4
Chloroform	67-66-3	0.046	6.0
Methylene chloride	75-09-2	0.089	30
Phenol	108-95-2	0.039	6.2

K159
Organics from the treatment of thiocarbamate wastes.[10]

Benzene	71-43-2	0.14	10
Butylate	2008-41-5	0.042	1.4
EPTC (Eptam)	759-94-4	0.042	1.4
Molinate	2212-67-1	0.042	1.4
Pebulate	1114-71-2	0.042	1.4
Vernolate	1929-77-7	0.042	1.4

K161
Purification solids (including filtration, evaporation, and centrifugation solids), baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts.

Antimony	7440-36-0	1.9	1.15[11]
Arsenic	7440-38-2	1.4	5.0[11]
Carbon disulfide	75-15-0	3.8	4.8[11]
Dithiocarbamates (total)	137-30-4	0.028	28
Lead	7439-92-1	0.69	0.75[11]
Nickel	7440-02-0	3.98	11[11]
Selenium	7782-49-2	0.82	5.7[11]

K169
Crude oil tank sediment from petroleum refining operations.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Ethyl benzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	81-05-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total)	1330-20-7	0.32	30

K170
Clarified slurry oil sediment from petroleum refining operations.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Ethyl benzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	3.4
Indeno(1,2,3,-cd)pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	81-05-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total	1330-20-7	0.32	30

K171
Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)

Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Chrysene	218-01-9	0.059	3.4
Ethyl benzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	81-05-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total)	1330-20-7	0.32	30
Arsenic	7740-38-2	1.4	5 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11.0 ~~mg/l~~mg/ℓ TCLP
Vanadium	7440-62-2	4.3	1.6 ~~mg/l~~mg/ℓ TCLP
Reactive sulfides	NA	DEACT	DEACT

K172
Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)

Benzene	71-43-2	0.14	10
Ethyl benzene	100-41-4	0.057	10
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total)	1330-20-7	0.32	30
Antimony	7740-36-0	1.9	1.15 ~~mg/l~~mg/ℓ TCLP
Arsenic	7740-38-2	1.4	5 ~~mg/l~~mg/ℓ TCLP

Nickel	7440-02-0	3.98	11.0 ~~mg/l~~mg/ℓ TCLP
Vanadium	7440-62-2	4.3	1.6 ~~mg/l~~mg/ℓ TCLP
Reactive Sulfides	NA	DEACT	DEACT

K174
Wastewater treatment sludge from the production of ethylene dicholoride or vinyl choloride monomer.

1,2,3,4,6,7,8-Heptachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035 or CMBST[11]	0.0025 or CMBST[11]
1,2,3,4,6,7,8-Heptachloro-dibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035 or CMBST[11]	0.0025 or CMBST[11]
1,2,3,4,7,8,9-Heptachloro-dibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035 or CMBST[11]	0.0025 or CMBST[11]
All hexachlorodibenzo-p-dioxins (HxCDDs)	34465-46-8	0.000063 or CMBST[11]	0.001 or CMBST[11]
All hexachlorodibenzofurans (HxCDFs)	55684-94-1	0.000063 or CMBST[11]	0.001 or CMBST[11]
1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)	3268-87-9	0.000063 or CMBST[11]	0.005 or CMBST[11]
1,2,3,4,6,7,8,9-Octachloro-dibenzofuran (1,2,3,4,6,7,8,9-OCDF)	39001-02-0	0.000063 or CMBST[11]	0.005 or CMBST[11]
All pentachlorodibenzo-p-dioxins (PeCDDs)	36088-22-9	0.000063 or CMBST[11]	0.001 or CMBST[11]
All pentachlorodibenzofurans (PeCDFs)	30402-15-4	0.000035 or CMBST[11]	0.001 or CMBST[11]
All tetrachlorodibenzo-p-dioxins (TCDDs)	41903-57-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
All tetrachlorodibenzofurans (TCDFs)	55722-27-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
Arsenic	7440-36-0	1.4	5.0 ~~mg/L~~mg/ℓ TCLP

K175
Wastewater treatment sludge from the production of vinyl choloride monomer using mercuric chloride catalyst in an acetylene-based process.

Mercury[12]	7439-97-6	NA	0.025 ~~mg/L~~mg/ℓ TCLP
PH[12]		NA	pH≤6.0

K175
All K175 wastewaters.

Mercury	7439-97-6	0.15	NA

K176
Baghouse filters from the production of antimony oxide, including filters from the production of intermediates e.g., antimony metal or crude antimony oxide).

Antimony	7440-36-0	1.9	1.15 ~~mg/L~~mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 ~~mg/L~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	0.11 ~~mg/L~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/L~~mg/ℓ TCLP
Mercury	7439-97-6	0.15	0.025 ~~mg/L~~mg/ℓ TCLP

K177
Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).

Antimony	7440-36-0	1.9	1.15 ~~mg/L~~mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 ~~mg/L~~mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 ~~mg/L~~mg/ℓ TCLP

K178
Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.

1,2,3,4,6,7,8-Heptachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035 or CMBST[11]	0.0025 or CMBST[11]
1,2,3,4,6,7,8-Heptachloro-dibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035 or CMBST[11]	0.0025 or CMBST[11]
1,2,3,4,7,8,9-Heptachloro-dibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035 or CMBST[11]	0.0025 or CMBST[11]
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	34465-46-8	0.000063 or CMBST[11]	0.001 or CMBST[11]
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063 or CMBST[11]	0.001 or CMBST[11]

1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)	3268-87-9	0.000063 or CMBST[11]	0.005 or CMBST[11]
1,2,3,4,6,7,8,9-Octachloro-dibenzofuran (OCDF)	39001-02-0	0.000063 or CMBST[11]	0.005 or CMBST[11]
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063 or CMBST[11]	0.001 or CMBST[11]
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035 or CMBST[11]	0.001 or CMBST[11]
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063 or CMBST[11]	0.001 or CMBST[11]
Thallium	7440-28-0	1.4	0.20 ~~mg/L~~mg/ℓ TCLP

K181

Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in Section 721.132(c) which are equal to or greater than the corresponding Section 721.132(c) levels, as determined on a calendar-year basis.

Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
4-Chloroaniline	106-47-8	0.46	16
p-Cresidine	120-71-8	0.010	0.66
2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
1,2-Phenylenediamine	95-54-5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN
1,3-Phenylenediamine	108-45-2	0.010	0.66

P001

Warfarin, & salts, when present at concentrations greater than 0.3 percent.

Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P002 1-Acetyl-2-thiourea. 1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P003 Acrolein. Acrolein	107-02-8	0.29	CMBST
P004 Aldrin. Aldrin	309-00-2	0.021	0.066
P005 Allyl alcohol. Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P006 Aluminum phosphide. Aluminum phosphide	20859-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P007 5-Aminomethyl-3-isoxazolol. 5-Aminomethyl-3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P008 4-Aminopyridine. 4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P009 Ammonium picrate. Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST

P010 Arsenic acid. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
P011 Arsenic pentoxide. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
P012 Arsenic trioxide. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
P013 Barium cyanide. Barium Cyanides (Total)[7] Cyanides (Amenable)[7]	7440-39-3 57-12-5 57-12-5	NA 1.2 0.86	21 ~~mg/l~~mg/ℓ TCLP 590 30
P014 Thiophenol (Benzene thiol). Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P015 Beryllium dust. Beryllium	7440-41-7	RMETL;or RTHRM	RMETL; or RTHRM
P016 Dichloromethyl ether (Bis(chloromethyl)ether). Dichloromethyl ether	542-88-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P017 Bromoacetone. Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P018 Brucine. Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P020 2-sec-Butyl-4,6-dinitrophenol (Dinoseb). 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
P021 Calcium cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7]	57-12-5 57-12-5	1.2 0.86	590 30
P022 Carbon disulfide. Carbon disulfide Carbon disulfide; alternate[6] standard for nonwastewaters only	75-15-0 75-15-0	3.8 NA	CMBST 4.8 ~~mg/l~~mg/ℓ TCLP
P023 Chloroacetaldehyde. Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P024 p-Chloroaniline. p-Chloroaniline	106-47-8	0.46	16

P026 1-(o-Chlorophenyl)thiourea. 1-(o-Chlorophenyl)thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P027 3-Chloropropionitrile. 3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P028 Benzyl chloride. Benzyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P029 Copper cyanide. Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P030 Cyanides (soluble salts and complexes). Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P031 Cyanogen. Cyanogen	460-19-5	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P033 Cyanogen chloride. Cyanogen chloride	506-77-4	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST

P034 2-Cyclohexyl-4,6-dinitrophenol. 2-Cyclohexyl-4,6-dinitrophenol	131-89-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P036 Dichlorophenylarsine. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
P037 Dieldrin. Dieldrin	60-57-1	0.017	0.13
P038 Diethylarsine. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
P039 Disulfoton. Disulfoton	298-04-4	0.017	6.2
P040 O,O-Diethyl-O-pyrazinyl-phosphorothioate. O,O-Diethyl-O-pyrazinyl-phosphorothioate	297-97-2	CARBN; or CMBST	CMBST
P041 Diethyl-p-nitrophenyl phosphate. Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or CMBST	CMBST
P042 Epinephrine. Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P043 Diisopropylfluorophosphate (DFP). Diisopropylfluorophosphate (DFP)	55-91-4	CARBN; or CMBST	CMBST

P044 Dimethoate. Dimethoate	60-51-5	CARBN; or CMBST	CMBST
P045 Thiofanox. Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P046 α,α-Dimethylphenethylamine. α,α-Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P047 4,6-Dinitro-o-cresol. 4,6-Dinitro-o-cresol	543-52-1	0.28	160
P047 4,6-Dinitro-o-cresol salts. NA	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P048 2,4-Dinitrophenol. 2,4-Dinitrophenol	51-28-5	0.12	160
P049 Dithiobiuret. Dithiobiuret	541-53-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P050 Endosulfan. Endosulfan I Endosulfan II	939-98-8 33213-6-5	0.023 0.029	0.066 0.13

Endosulfan sulfate	1031-07-8	0.029	0.13
P051			
Endrin.			
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
P054			
Aziridine.			
Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P056			
Fluorine.			
Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR
P057			
Fluoroacetamide.			
Fluoroacetamide	640-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P058			
Fluoroacetic acid, sodium salt.			
Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P059			
Heptachlor.			
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
P060			
Isodrin.			
Isodrin	465-73-6	0.021	0.066
P062			
Hexaethyl tetraphosphate.			
Hexaethyl tetraphosphate	757-58-4	CARBN; or CMBST	CMBST

P063			
Hydrogen cyanide.			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P064			
Isocyanic acid, ethyl ester.			
Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P065			
P065 (mercury fulminate) nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.			
Mercury	7439-97-6	NA	IMERC
P065			
P065 (mercury fulminate) nonwastewaters that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260 mg/kg total mercury.			
Mercury	7339-97-6	NA	RMERC
P065			
P065 (mercury fulminate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP
P065			
P065 (mercury fulminate) nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP
P065			
All P065 (mercury fulminate) wastewaters.			
Mercury	7439-97-6	0.15	NA
P066			
Methomyl.			
Methomyl	16752-77-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P067 2-Methyl-aziridine. 2-Methyl-aziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P068 Methyl hydrazine. Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED, or CMBST
P069 2-Methyllactonitrile. 2-Methyllactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P070 Aldicarb. Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P071 Methyl parathion. Methyl parathion	298-00-0	0.014	4.6
P072 1-Naphthyl-2-thiourea. 1-Naphthyl-2-thiourea	86-88-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P073 Nickel carbonyl. Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
P074 Nickel cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7]	57-12-5 57-12-5	1.2 0.86	590 30

Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
P075 Nicotine and salts. Nicotine and salts	54-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P076 Nitric oxide. Nitric oxide	10102-43-9	ADGAS	ADGAS
P077 p-Nitroaniline. p-Nitroaniline	100-01-6	0.028	28
P078 Nitrogen dioxide. Nitrogen dioxide	10102-44-0	ADGAS	ADGAS
P081 Nitroglycerin. Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIODG or CMBST	CHOXD; CHRED; or CMBST
P082 N-Nitrosodimethylamine. N-Nitrosodimethylamine	62-75-9	0.40	2.3
P084 N-Nitrosomethylvinylamine. N-Nitrosomethylvinylamine	4549-40-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P085 Octamethylpyrophosphoramide. Octamethylpyrophosphoramide	152-16-9	CARBN; or CMBST	CMBST

P087 Osmium tetroxide.			
Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM
P088 Endothall.			
Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P089 Parathion.			
Parathion	56-38-2	0.014	4.6
P092 P092 (phenyl mercuric acetate) nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.			
Mercury	7439-97-6	NA	IMERC; or RMERC
P092 P092 (phenyl mercuric acetate) nonwastewaters that are either incinerator residues or are residues from RMERC; and still contain greater than or equal to 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	RMERC
P092 P092 (phenyl mercuric acetate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP
P092 P092 (phenyl mercuric acetate) nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP
P092 All P092 (phenyl mercuric acetate) wastewaters.			
Mercury	7439-97-6	0.15	NA

P093 Phenylthiourea. Phenylthiourea	103-85-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P094 Phorate. Phorate	298-02-2	0.021	4.6
P095 Phosgene. Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P096 Phosphine. Phosphine	7803-51-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P097 Famphur. Famphur	52-85-7	0.017	15
P098 Potassium cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7]	57-12-5 57-12-5	1.2 0.86	590 30
P099 Potassium silver cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7] Silver	57-12-5 57-12-5 7440-22-4	1.2 0.86 0.43	590 30 0.14 ~~mg/l~~mg/ℓ TCLP
P101 Ethyl cyanide (Propanenitrile). Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360

P102 Propargyl alcohol. Propargyl alcohol	107-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P103 Selenourea. Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
P104 Silver cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7] Silver	 57-12-5 57-12-5 7440-22-4	 1.2 0.86 0.43	 590 30 0.14 ~~mg/l~~mg/ℓ TCLP
P105 Sodium azide. Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P106 Sodium cyanide. Cyanides (Total)[7] Cyanides (Amenable)[7]	 57-12-5 57-12-5	 1.2 0.86	 590 30
P108 Strychnine and salts. Strychnine and salts	57-24-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P109 Tetraethyldithiopyrophosphate. Tetraethyldithiopyrophosphate	3689-24-5	CARBN; or CMBST	CMBST
P110 Tetraethyl lead. Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP

P111 Tetraethylpyrophosphate. Tetraethylpyrophosphate	107-49-3	CARBN; or CMBST	CMBST
P112 Tetranitromethane. Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P113 Thallic oxide. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P114 Thallium selenite. Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
P115 Thallium (I) sulfate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P116 Thiosemicarbazide. Thiosemicarbazide	79-19-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P118 Trichloromethanethiol. Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P119 Ammonium vanadate. Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL

P120 Vanadium pentoxide. Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P121 Zinc cyanide. Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P122 Zinc phosphide Zn_3P_2, when present at concentrations greater than 10 percent. Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P123 Toxaphene. Toxaphene	8001-35-2	0.0095	2.6
P127 Carbofuran. Carbofuran	1563-66-2	0.006	0.14
P128 Mexacarbate. Mexacarbate	315-18-4	0.056	1.4
P185 Tirpate.[10] Tirpate	26419-73-8	0.056	0.28
P188 Physostigimine salicylate. Physostigmine salicylate	57-64-7	0.056	1.4
P189 Carbosulfan. Carbosulfan	55285-14-8	0.028	1.4
P190 Metolcarb. Metolcarb	1129-41-5	0.056	1.4
P191 Dimetilan.[10] Dimetilan	644-64-4	0.056	1.4

P192 Isolan.[10] Isolan	119-38-0	0.056	1.4
P194 Oxamyl. Oxamyl	23135-22-0	0.056	0.28
P196 Manganese dimethyldithiocarbamates (total). Dithiocarbamates (total)	NA	0.028	28
P197 Formparanate.[10] Formparanate	17702-57-7	0.056	1.4
P198 Formetanate hydrochloride. Formetanate hydrochloride	23422-53-9	0.056	1.4
P199 Methiocarb. Methiocarb	2032-65-7	0.056	1.4
P201 Promecarb. Promecarb	2631-37-0	0.056	1.4
P202 m-Cumenyl methylcarbamate. m-Cumenyl methylcarbamate	64-00-6	0.056	1.4
P203 Aldicarb sulfone. Aldicarb sulfone	1646-88-4	0.056	0.28
P204 Physostigmine. Physostigmine	57-47-6	0.056	1.4
P205 Ziram. Dithiocarbamates (total)	NA	0.028	28

U001 Acetaldehyde. Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U002 Acetone. Acetone	67-64-1	0.28	160
U003 Acetonitrile. Acetonitrile	75-05-8	5.6	CMBST
Acetonitrile; alternate[6] standard for nonwastewaters only	75-05-8	NA	38
U004 Acetophenone. Acetophenone	98-86-2	0.010	9.7
U005 2-Acetylaminofluorene. 2-Acetylaminofluorene	53-96-3	0.059	140
U006 Acetyl chloride. Acetyl chloride	75-36-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U007 Acrylamide. Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U008 Acrylic acid. Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U009 Acrylonitrile. Acrylonitrile	107-13-1	0.24	84
U010 Mitomycin C. Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U011 Amitrole. Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U012 Aniline. Aniline	62-53-3	0.81	14
U014 Auramine. Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U015 Azaserine. Azaserine	115-02-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U016 Benz(c)acridine. Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U017 Benzal chloride. Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U018 Benz(a)anthracene. Benz(a)anthracene	56-55-3	0.059	3.4
U019 Benzene. Benzene	71-43-2	0.14	10
U020 Benzenesulfonyl chloride. Benzenesulfonyl chloride	98-09-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U021 Benzidine. Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U022 Benzo(a)pyrene. Benzo(a)pyrene	50-32-8	0.061	3.4
U023 Benzotrichloride. Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U024 bis(2-Chloroethoxy)methane. bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
U025 bis(2-Chloroethyl)ether. bis(2-Chloroethyl)ether	111-44-4	0.033	6.0

U026 Chlornaphazine. Chlornaphazine	494-03-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U027 bis(2-Chloroisopropyl)ether. bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
U028 bis(2-Ethylhexyl)phthalate. bis(2-Ethylhexyl)phthalate	117-81-7	0.28	28
U029 Methyl bromide (Bromomethane). Methyl bromide (Bromo-methane)	74-83-9	0.11	15
U030 4-Bromophenyl phenyl ether. 4-Bromophenyl phenyl ether	101-55-3	0.055	15
U031 n-Butyl alcohol. n-Butyl alcohol	71-36-3	5.6	2.6
U032 Calcium chromate. Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
U033 Carbon oxyfluoride. Carbon oxyfluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U034 Trichloroacetaldehyde (Chloral).			
Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U035 Chlorambucil.			
Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U036 Chlordane.			
Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
U037 Chlorobenzene.			
Chlorobenzene	108-90-7	0.057	6.0
U038 Chlorobenzilate.			
Chlorobenzilate	510-15-6	0.10	CMBST
U039 p-Chloro-m-cresol.			
p-Chloro-m-cresol	59-50-7	0.018	14
U041 Epichlorohydrin (1-Chloro-2,3-epoxypropane).			
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U042 2-Chloroethyl vinyl ether.			
2-Chloroethyl vinyl ether	110-75-8	0.062	CMBST
U043 Vinyl chloride.			
Vinyl chloride	75-01-4	0.27	6.0

U044			
Chloroform.			
Chloroform	67-66-3	0.046	6.0
U045			
Chloromethane (Methyl chloride).			
Chloromethane (Methyl chloride)	74-87-3	0.19	30
U046			
Chloromethyl methyl ether.			
Chloromethyl methyl ether	107-30-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U047			
2-Chloronaphthalene.			
2-Chloronaphthalene	91-58-7	0.055	5.6
U048			
2-Chlorophenol.			
2-Chlorophenol	95-57-8	0.044	5.7
U049			
4-Chloro-o-toluidine hydrochloride.			
4-Chloro-o-toluidine hydrochloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U050			
Chrysene.			
Chrysene	218-01-9	0.059	3.4
U051			
Creosote.			
Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30

Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
U052			
Cresols (Cresylic acid).			
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
U053			
Crotonaldehyde.			
Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U055			
Cumene.			
Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U056			
Cyclohexane.			
Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U057			
Cyclohexanone.			
Cyclohexanone	108-94-1	0.36	CMBST
Cyclohexanone; alternate[6] standard for nonwastewaters only	108-94-1	NA	0.75 ~~mg/l~~mg/ℓ TCLP

U058 Cyclophosphamide.			
Cyclophosphamide	50-18-0	CARBN; or CMBST	CMBST
U059 Daunomycin.			
Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U060 DDD.			
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
U061 DDT.			
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
U062 Diallate.			
Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U063 Dibenz(a,h)anthracene.			
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
U064 Dibenz(a,i)pyrene.			
Dibenz(a,i)pyrene	189-55-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U066 1,2-Dibromo-3-chloropropane.			
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
U067 Ethylene dibromide (1,2-Dibromoethane).			
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
U068 Dibromomethane.			
Dibromomethane	74-95-3	0.11	15
U069 Di-n-butyl phthalate.			
Di-n-butyl phthalate	84-74-2	0.057	28
U070 o-Dichlorobenzene.			
o-Dichlorobenzene	95-50-1	0.088	6.0
U071 m-Dichlorobenzene.			
m-Dichlorobenzene	541-73-1	0.036	6.0
U072 p-Dichlorobenzene.			
p-Dichlorobenzene	106-46-7	0.090	6.0
U073 3,3'-Dichlorobenzidine.			
3,3'-Dichlorobenzidine	91-94-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U074 1,4-Dichloro-2-butene.			
cis-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
trans-1,4-Dichloro-2-butene	764-41-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U075			
Dichlorodifluoromethane.			
Dichlorodifluoromethane	75-71-8	0.23	7.2
U076			
1,1-Dichloroethane.			
1,1-Dichloroethane	75-34-3	0.059	6.0
U077			
1,2-Dichloroethane.			
1,2-Dichloroethane	107-06-2	0.21	6.0
U078			
1,1-Dichloroethylene.			
1,1-Dichloroethylene	75-35-4	0.025	6.0
U079			
1,2-Dichloroethylene.			
trans-1,2-Dichloroethylene	156-60-5	0.054	30
U080			
Methylene chloride.			
Methylene chloride	75-09-2	0.089	30
U081			
2,4-Dichlorophenol.			
2,4-Dichlorophenol	120-83-2	0.044	14
U082			
2,6-Dichlorophenol.			
2,6-Dichlorophenol	87-65-0	0.044	14
U083			
1,2-Dichloropropane.			
1,2-Dichloropropane	78-87-5	0.85	18
U084			
1,3-Dichloropropylene.			
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18

U085 1,2:3,4-Diepoxybutane. 1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U086 N,N'-Diethylhydrazine. N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U087 O,O-Diethyl-S-methyldithiophosphate. O,O-Diethyl-S-methyldithio-phosphate	3288-58-2	CARBN; or CMBST	CMBST
U088 Diethyl phthalate. Diethyl phthalate	84-66-2	0.20	28
U089 Diethyl stilbestrol. Diethyl stilbestrol	56-53-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U090 Dihydrosafrole. Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U091 3,3'-Dimethoxybenzidine. 3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U092 Dimethylamine. Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U093 p-Dimethylaminoazobenzene. p-Dimethylaminoazobenzene	60-11-7	0.13	CMBST
U094 7,12-Dimethylbenz(a)anthracene. 7,12-Dimethylbenz(a)-anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U095 3,3'-Dimethylbenzidine. 3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U096 α, α-Dimethyl benzyl hydroperoxide. α, α-Dimethyl benzyl hydro-peroxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U097 Dimethylcarbamoyl chloride. Dimethylcarbamoyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U098 1,1-Dimethylhydrazine. 1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST

U099 1,2-Dimethylhydrazine. 1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U101 2,4-Dimethylphenol. 2,4-Dimethylphenol	105-67-9	0.036	14
U102 Dimethyl phthalate. Dimethyl phthalate	131-11-3	0.047	28
U103 Dimethyl sulfate. Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U105 2,4-Dinitrotoluene. 2,4-Dinitrotoluene	121-14-2	0.32	140
U106 2,6-Dinitrotoluene. 2,6-Dinitrotoluene	606-20-2	0.55	28
U107 Di-n-octyl phthalate. Di-n-octyl phthalate	117-84-0	0.017	28
U108 1,4-Dioxane. 1,4-Dioxane	123-91-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
1,4-Dioxane; alternate[6] standard for nonwastewaters only	123-91-1	12.0	170
U109 1,2-Diphenylhydrazine. 1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST

1,2-Diphenylhydrazine; alternate[6] standard for wastewaters only	122-66-7	0.087	NA
U110 Dipropylamine.			
Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U111 Di-n-propylnitrosamine.			
Di-n-propylnitrosamine	621-64-7	0.40	14
U112 Ethyl acetate.			
Ethyl acetate	141-78-6	0.34	33
U113 Ethyl acrylate.			
Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U114 Ethylenebisdithiocarbamic acid salts and esters.			
Ethylenebisdithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U115 Ethylene oxide.			
Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or CMBST	CHOXD; or CMBST
Ethylene oxide; alternate[6] standard for wastewaters only	75-21-8	0.12	NA

U116 Ethylene thiourea. Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U117 Ethyl ether. Ethyl ether	60-29-7	0.12	160
U118 Ethyl methacrylate. Ethyl methacrylate	97-63-2	0.14	160
U119 Ethyl methane sulfonate. Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U120 Fluoranthene. Fluoranthene	206-44-0	0.068	3.4
U121 Trichloromonofluoromethane. Trichloromonofluoromethane	75-69-4	0.020	30
U122 Formaldehyde. Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U123 Formic acid. Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U124 Furan. Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U125 Furfural. Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U126 Glycidylaldehyde. Glycidylaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U127 Hexachlorobenzene. Hexachlorobenzene	118-74-1	0.055	10
U128 Hexachlorobutadiene. Hexachlorobutadiene	87-68-3	0.055	5.6
U129 Lindane. α-BHC	319-84-6	0.00014	0.066
β-BHC	319-85-7	0.00014	0.066
δ-BHC	319-86-8	0.023	0.066
γ-BHC (Lindane)	58-89-9	0.0017	0.066
U130 Hexachlorocyclopentadiene. Hexachlorocyclopentadiene	77-47-4	0.057	2.4
U131 Hexachloroethane. Hexachloroethane	67-72-1	0.055	30

U132 Hexachlorophene. Hexachlorophene	70-30-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U133 Hydrazine. Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U134 Hydrogen fluoride. Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR; or NEUTR
U135 Hydrogen sulfide. Hydrogen sulfide	7783-06-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U136 Cacodylic acid. Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
U137 Indeno(1,2,3-c,d)pyrene. Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
U138 Iodomethane. Iodomethane	74-88-4	0.19	65
U140 Isobutyl alcohol. Isobutyl alcohol	78-83-1	5.6	170
U141 Isosafrole. Isosafrole	120-58-1	0.081	2.6

U142 Kepone. Kepone	143-50-8	0.0011	0.13
U143 Lasiocarpine. Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U144 Lead acetate. Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
U145 Lead phosphate. Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
U146 Lead subacetate. Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
U147 Maleic anhydride. Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U148 Maleic hydrazide. Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U149 Malononitrile. Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U150 Melphalan. Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U151 U151 (mercury) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury. Mercury	7439-97-6	NA	RMERC
U151 U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are residues from RMERC only. Mercury	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP
U151 U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are not residues from RMERC only. Mercury	7439-97-6	NA	0.025 ~~mg/l~~mg/ℓ TCLP
U151 All U151 (mercury) wastewater. Mercury	7439-97-6	0.15	NA
U151 Elemental Mercury Contaminated with Radioactive Materials. Mercury	7439-97-6	NA	AMLGM
U152 Methacrylonitrile. Methacrylonitrile	126-98-7	0.24	84
U153 Methanethiol. Methanethiol	74-93-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U154 Methanol.			
Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
Methanol; alternate[6] set of standards for both wastewaters and nonwastewaters	67-56-1	5.6	0.75 ~~mg/l~~mg/ℓ TCLP
U155 Methapyrilene.			
Methapyrilene	91-80-5	0.081	1.5
U156 Methyl chlorocarbonate.			
Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U157 3-Methylcholanthrene.			
3-Methylcholanthrene	56-49-5	0.0055	15
U158 4,4'-Methylene bis(2-chloroaniline).			
4,4'-Methylene bis(2-chloro-aniline)	101-14-4	0.50	30
U159 Methyl ethyl ketone.			
Methyl ethyl ketone	78-93-3	0.28	36
U160 Methyl ethyl ketone peroxide.			
Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U161 Methyl isobutyl ketone.			
Methyl isobutyl ketone	108-10-1	0.14	33

U162 Methyl methacrylate. Methyl methacrylate	80-62-6	0.14	160
U163 N-Methyl-N'-nitro-N-nitrosoguanidine. N-Methyl-N'-nitro-N-nitroso-guanidine	70-25-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U164 Methylthiouracil. Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U165 Naphthalene. Naphthalene	91-20-3	0.059	5.6
U166 1,4-Naphthoquinone. 1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U167 1-Naphthylamine. 1-Naphthylamine	134-32-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U168 2-Naphthylamine. 2-Naphthylamine	91-59-8	0.52	CMBST
U169 Nitrobenzene. Nitrobenzene	98-95-3	0.068	14

U170 p-Nitrophenol. p-Nitrophenol	100-02-7	0.12	29
U171 2-Nitropropane. 2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U172 N-Nitrosodi-n-butylamine. N-Nitrosodi-n-butylamine	924-16-3	0.40	17
U173 N-Nitrosodiethanolamine. N-Nitrosodiethanolamine	1116-54-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U174 N-Nitrosodiethylamine. N-Nitrosodiethylamine	55-18-5	0.40	28
U176 N-Nitroso-N-ethylurea. N-Nitroso-N-ethylurea	759-73-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U177 N-Nitroso-N-methylurea. N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U178 N-Nitroso-N-methylurethane. N-Nitroso-N-methylurethane	615-53-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U179 N-Nitrosopiperidine. N-Nitrosopiperidine	100-75-4	0.013	35
U180 N-Nitrosopyrrolidine. N-Nitrosopyrrolidine	930-55-2	0.013	35
U181 5-Nitro-o-toluidine. 5-Nitro-o-toluidine	99-55-8	0.32	28
U182 Paraldehyde. Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U183 Pentachlorobenzene. Pentachlorobenzene	608-93-5	0.055	10
U184 Pentachloroethane. Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
Pentachloroethane; alternate[6] standards for both wastewaters and nonwastewaters	76-01-7	0.055	6.0
U185 Pentachloronitrobenzene. Pentachloronitrobenzene	82-68-8	0.055	4.8
U186 1,3-Pentadiene. 1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U187 Phenacetin. Phenacetin	62-44-2	0.081	16
U188 Phenol. Phenol	108-95-2	0.039	6.2
U189 Phosphorus sulfide. Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U190 Phthalic anhydride. Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
U191 2-Picoline. 2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U192 Pronamide. Pronamide	23950-58-5	0.093	1.5
U193 1,3-Propane sultone. 1,3-Propane sultone	1120-71-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U194 n-Propylamine. n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U196 Pyridine. Pyridine	110-86-1	0.014	16
U197 p-Benzoquinone. p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U200 Reserpine. Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U201 Resorcinol Resorcinol.	108-46-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U202 Saccharin and salts. Saccharin	81-07-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U203 Safrole. Safrole	94-59-7	0.081	22
U204 Selenium dioxide. Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
U205 Selenium sulfide. Selenium	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP

U206 Streptozotocin. Streptozotocin	18883-66-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U207 1,2,4,5-Tetrachlorobenzene. 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
U208 1,1,1,2-Tetrachloroethane. 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
U209 1,1,2,2-Tetrachloroethane. 1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
U210 Tetrachloroethylene. Tetrachloroethylene	127-18-4	0.056	6.0
U211 Carbon tetrachloride. Carbon tetrachloride	56-23-5	0.057	6.0
U213 Tetrahydrofuran. Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U214 Thallium (I) acetate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U215 Thallium (I) carbonate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL

U216 Thallium (I) chloride. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U217 Thallium (I) nitrate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U218 Thioacetamide. Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U219 Thiourea. Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U220 Toluene. Toluene	108-88-3	0.080	10
U221 Toluenediamine. Toluenediamine	25376-45-8	CARBN; or CMBST	CMBST
U222 o-Toluidine hydrochloride. o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U223 Toluene diisocyanate. Toluene diisocyanate	26471-62-5	CARBN; or CMBST	CMBST

U225 Bromoform (Tribromomethane).			
Bromoform (Tribromomethane)	75-25-2	0.63	15
U226 1,1,1-Trichloroethane.			
1,1,1-Trichloroethane	71-55-6	0.054	6.0
U227 1,1,2-Trichloroethane.			
1,1,2-Trichloroethane	79-00-5	0.054	6.0
U228 Trichloroethylene.			
Trichloroethylene	79-01-6	0.054	6.0
U234 1,3,5-Trinitrobenzene.			
1,3,5-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U235 tris-(2,3-Dibromopropyl)-phosphate.			
tris-(2,3-Dibromopropyl)-phosphate	126-72-7	0.11	0.10
U236 Trypan Blue.			
Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U237 Uracil mustard.			
Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U238 Urethane (Ethyl carbamate).			
Urethane (Ethyl carbamate)	51-79-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U239 Xylenes.			
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
U240 2,4-D (2,4-Dichlorophenoxyacetic acid).			
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	0.72	10
2,4-D (2,4-Dichloro-phenoxyacetic acid) salts and esters	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U243 Hexachloropropylene.			
Hexachloropropylene	1888-71-7	0.035	30
U244 Thiram.			
Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U246 Cyanogen bromide.			
Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247 Methoxychlor.			
Methoxychlor	72-43-5	0.25	0.18

U248 Warfarin, & salts, when present at concentrations of 0.3 percent or less.			
Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U249 Zinc phosphide, Zn_3P_2, when present at concentrations of 10 percent or less.			
Zinc Phosphide	1314-84-7	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U271 Benomyl.			
Benomyl	17804-35-2	0.056	1.4
U278 Bendiocarb.			
Bendiocarb	22781-23-3	0.056	1.4
U279 Carbaryl.			
Carbaryl	63-25-2	0.006	0.14
U280 Barban.			
Barban	101-27-9	0.056	1.4
U328 o-Toluidine.			
o-Toluidine	95-53-4	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U353 p-Toluidine.			
p-Toluidine	106-49-0	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST

U359 2-Ethoxyethanol. 2-Ethoxyethanol	110-80-5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U364 Bendiocarb phenol.[10] Bendiocarb phenol	22961-82-6	0.056	1.4
U367 Carbofuran phenol. Carbofuran phenol	1563-38-8	0.056	1.4
U372 Carbendazim. Carbendazim	10605-21-7	0.056	1.4
U373 Propham. Propham	122-42-9	0.056	1.4
U387 Prosulfocarb. Prosulfocarb	52888-80-9	0.042	1.4
U389 Triallate. Triallate	2303-17-5	0.042	1.4
U394 A2213.[10] A2213	30558-43-1	0.042	1.4
U395 Diethylene glycol, dicarbamate.[10] Diethylene glycol, dicarbamate	5952-26-1	0.056	1.4
U404 Triethylamine. Triethylamine	101-44-8	0.081	1.5

U409 Thiophanate-methyl. Thiophanate-methyl	23564-05-8	0.056	1.4
U410 Thiodicarb. Thiodicarb	59669-26-0	0.019	1.4
U411 Propoxur. Propoxur	114-26-1	0.056	1.4

Notes:

1 The waste descriptions provided in this table do not replace waste descriptions in 35 Ill. Adm. Code 721. Descriptions of Treatment or Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.

2 CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.

3 Concentration standards for wastewaters are expressed in ~~mg/l~~mg/ℓ and are based on analysis of composite samples.

4 All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in Table C of this Part, "Technology Codes and Descriptions of Technology-Based Standards." "fb" inserted between waste codes denotes "followed by," so that the first-listed treatment is followed by the second-listed treatment. A semicolon (;) separates alternative treatment schemes.

5 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or based on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

6 Where an alternate treatment standard or set of alternate standards has been indicated, a facility may comply with this alternate standard, but only for the Treatment or Regulatory Subcategory or physical form (i.e., wastewater or nonwastewater) specified for that alternate standard.

7 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed

using Method ~~9010~~ 9010C or ~~9012~~ 9012B, ~~found~~ in "Test Methods for Evaluating Solid Waste, Physical or Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

8 These wastes, when rendered non-hazardous and then subsequently managed in CWA or CWA-equivalent systems, are not subject to treatment standards. (See Section 728.101(c)(3) and (c)(4).)

9 These wastes, when rendered non-hazardous and then subsequently injected in a Class I SDWA well, are not subject to treatment standards. (See 35 Ill. Adm. Code 738.101(d).)

10 The treatment standard for this waste may be satisfied by either meeting the constituent concentrations in the table in this Section or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at Table C, for nonwastewaters; and biodegradation, as defined by the technology code BIODG; carbon adsorption, as defined by the technology code CARBN; chemical oxidation, as defined by the technology code CHOXD; or combustion, as defined as technology code CMBST, at Table C, for wastewaters.

11 For these wastes, the definition of CMBST is limited to any of the following that have obtained a determination of equivalent treatment under Section 728.142(b): (1) combustion units operating under 35 Ill. Adm. Code 726, (2) combustion units permitted under Subpart O of 35 Ill. Adm. Code 724, or (3) combustion units operating under Subpart O of 35 Ill. Adm. Code 725.

12 Disposal of USEPA hazardous waste number K175 waste that has complied with all applicable Section 728.140 treatment standards must also be macroencapsulated in accordance with Table F of this Part, unless the waste is placed in either of the following types of facilities:

a) A RCRA Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or

b) A dedicated RCRA Subtitle C landfill cell in which all other wastes being co-disposed are at pH≤6.0.

BOARD NOTE: Derived from table to 40 CFR 268.40 ~~(2002)~~ (2005).

NA means not applicable.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 728.Table U Universal Treatment Standards (UTS)

Regulated Constituent-Common Name	CAS[1] No.	Wastewater Standard Concentration (in ~~mg/l~~mg/ℓ[2])	Nonwastewater Standard Concentration (in mg/kg[3] unless noted as "~~mg/l~~mg/ℓ TCLP")
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldicarb sulfone[6]	1646-88-4	0.056	0.28
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxy-aniline)	90-04-0	0.010	0.66
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
α-BHC	319-84-6	0.00014	0.066
β-BHC	319-85-7	0.00014	0.066
δ-BHC	319-86-8	0.023	0.066
γ-BHC	58-89-9	0.0017	0.066
Barban[6]	101-27-9	0.056	1.4
Bendiocarb[6]	22781-23-3	0.056	1.4
Benomyl[6]	17804-35-2	0.056	1.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzene	71-43-2	0.14	10
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-methane)	74-83-9	0.11	15

4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butylate[6]	2008-41-5	0.042	1.4
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
Carbaryl[6]	63-25-2	0.006	0.14
Carbenzadim[6]	10605-21-7	0.056	1.4
Carbofuran[6]	1563-66-2	0.006	0.14
Carbofuran phenol[6]	1563-38-8	0.056	1.4
Carbon disulfide	75-15-0	3.8	4.8 ~~mg/l~~mg/ℓ TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Carbosulfan[6]	55285-14-8	0.028	1.4
Chlordane (α and γ isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
p-Chloro-m-cresol	59-50-7	0.018	14
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
Chloromethane (Methyl chloride)	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
m-Cumenyl methyl-carbamate[6]	64-00-6	0.056	1.4
Cyclohexanone	108-94-1	0.36	0.75 ~~mg/l~~mg/ℓ TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087

p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloro-propane	96-12-8	0.11	15
1,2-Dibromoethane/Ethylene dibromide	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic acid/2,4-D	94-75-7	0.72	10
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2,4-Dimethylaniline (2,4-xylidine)	95-68-1	0.010	0.66
2,4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13

Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total)[6]	137-30-4	0.028	28
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
EPTC[6]	759-94-4	0.042	1.4
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
Ethylene oxide	75-21-8	0.12	NA
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Formetanate hydrochloride[6]	23422-53-9	0.056	1.4
Heptachlor	76-44-8	0.0012	0.066
1,2,3,4,6,7,8-Heptachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD)	35822-46-9	0.000035	0.0025
1,2,3,4,6,7,8-Heptachloro-dibenzofuran (1,2,3,4,6,7,8-HpCDF)	67562-39-4	0.000035	0.0025
1,2,3,4,7,8,9-Heptachloro-dibenzofuran (1,2,3,4,7,8,9-HpCDF)	55673-89-7	0.000035	0.0025
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65

Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-0	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 ~~mg/l~~mg/ℓ TCLP
Methapyrilene	91-80-5	0.081	1.5
Methiocarb[6]	2032-65-7	0.056	1.4
Methomyl[6]	16752-77-5	0.028	0.14
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloro-aniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Metolcarb[6]	1129-41-5	0.056	1.4
Mexacarbate[6]	315-18-4	0.056	1.4
Molinate[6]	2212-67-1	0.042	1.4
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)	3268-87-9	0.000063	0.005
1,2,3,4,6,7,8,9-Octachloro-dibenzofuran (1,2,3,4,6,7,8,9-OCDF)	39001-02-0	0.000063	0.005
Oxamyl[6]	23135-22-0	0.056	0.28
Parathion	56-38-2	0.014	4.6

Total PCBs (sum of all PCB isomers, or all Aroclors)[8]	1336-36-3	0.10	10
Pebulate[6]	1114-71-2	0.042	1.4
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
1,3-Phenylenediamine	108-45-2	0.010	0.66
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine[6]	57-47-6	0.056	1.4
Physostigmine salicylate[6]	57-64-7	0.056	1.4
Promecarb[6]	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham[6]	122-42-9	0.056	1.4
Propoxur[6]	114-26-1	0.056	1.4
Prosulfocarb[6]	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Thiodicarb[6]	59669-26-0	0.019	1.4
Thiophanate-methyl[6]	23564-05-8	0.056	1.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate[6]	2303-17-5	0.042	1.4
Tribromomethane (Bromoform)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19

1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic acid/2,4,5-T	93-76-5	0.72	7.9
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Triethylamine[6]	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10
Vernolate[6]	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Antimony	7440-36-0	1.9	1.15 ~~mg/l~~mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 ~~mg/l~~mg/ℓ TCLP
Barium	7440-39-3	1.2	21 ~~mg/l~~mg/ℓ TCLP
Beryllium	7440-41-7	0.82	1.22 ~~mg/l~~mg/ℓ TCLP
Cadmium	7440-43-9	0.69	0.11 ~~mg/l~~mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 ~~mg/l~~mg/ℓ TCLP
Cyanides (Total)[4]	57-12-5	1.2	590
Cyanides (Amenable)[4]	57-12-5	0.86	30
Fluoride[5]	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 ~~mg/l~~mg/ℓ TCLP
Mercury-Nonwastewater from Retort	7439-97-6	NA	0.20 ~~mg/l~~mg/ℓ TCLP
Mercury-All Others	7439-97-6	0.15	0.025 ~~mg/l~~mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 ~~mg/l~~mg/ℓ TCLP
Selenium[7]	7782-49-2	0.82	5.7 ~~mg/l~~mg/ℓ TCLP
Silver	7440-22-4	0.43	0.14 ~~mg/l~~mg/ℓ TCLP
Sulfide	18496-25-8	14	NA

Thallium	7440-28-0	1.4	0.20 ~~mg/l~~mg/ℓ TCLP
Vanadium[5]	7440-62-2	4.3	1.6 ~~mg/l~~mg/ℓ TCLP
Zinc[5]	7440-66-6	2.61	4.3 ~~mg/l~~mg/ℓ TCLP

~~1~~[1] CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.

~~2~~[2] Concentration standards for wastewaters are expressed in ~~mg/l~~ mg/ℓ are based on analysis of composite samples.

~~3~~[3] Except for metals (EP or TCLP) and cyanides (total and amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

~~4~~[4] Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method ~~9010~~ 9010C or ~~9012~~ 9012B, ~~found~~ in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA ~~Publication~~ publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code ~~720.111~~ 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

~~5~~[5] These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at Section 728.102(i).

~~6~~[6] This footnote corresponds with footnote 6 to the table to 40 CFR 268.48(a), which has already expired by its own terms. This statement maintains structural consistency with the corresponding federal regulations.

~~7~~[7] This constituent is not an underlying hazardous constituent, as defined at Section 728.102(i), because its UTS level is greater than its TC level. Thus, a treated selenium waste would always be characteristically hazardous unless it is treated to below its characteristic level.

~~8~~[8] This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to USEPA hazardous waste numbers D004 through D011 only.

Note: NA means not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.48(a) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER d: UNDERGROUND INJECTION CONTROL AND UNDERGROUND STORAGE TANK PROGRAMS

PART 738
HAZARDOUS WASTE INJECTION RESTRICTIONS

SUBPART A: GENERAL

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738.101 Purpose, Scope, and Applicability
738.102 Definitions
738.103 Dilution Prohibited as a Substitute for Treatment
738.104 Case-by-Case Extensions of an Effective Date
738.105 Waste Analysis

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SUBPART C: PETITION STANDARDS AND PROCEDURES

Section
738.120 Petitions to Allow Injection of a Prohibited Waste
738.121 Required Information to Support Petitions
738.122 Submission, Review, and Approval or Denial of Petitions
738.123 Review of Adjusted Standards
738.124 Termination of Approved Petition

AUTHORITY: Implementing Sections 7.2, 13, and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 13, 22.4, and 27].

SOURCE: Adopted in R89-2 at 14 Ill. Reg. 3059, effective February 20, 1990; amended in R89-11 at 14 Ill. Reg. 11948, effective July 9, 1990; amended in R90-14 at 15 Ill. Reg. 11425, effective July 24, 1991; amended in R92-13 at 17 Ill. Reg. 6190, effective April 5, 1993;

amended in R93-6 at 17 Ill. Reg. 15641, effective September 14, 1993; amended in R95-4 at 19 Ill. Reg. 9501, effective June 27, 1995; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 238, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17486, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1695, effective January 19, 1999; amended in R00-11/R01-1 at 24 Ill. Reg. 18576, effective December 7, 2000; amended in R01-21/R01-23 at 25 Ill. Reg. 9161, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6835, effective April 22, 2002; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL

Section 738.101 Purpose, Scope, and Applicability

a) This Part identifies hazardous wastes that are restricted from disposal into Class I injection wells and defines those circumstances under which a waste, otherwise prohibited from injection, may be injected.

b) The requirements of this Part apply to owners or operators of the following Class I injection wells:

1) Hazardous waste injection wells that are used to inject hazardous waste; and

2) Injection wells that are used to inject wastes ~~which~~ that once exhibited a prohibited characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721.~~Subpart C~~, at the point of generation, and which no longer exhibit the characteristic at the point of injection.

c) Wastes otherwise prohibited from injection may continue to be injected under any of the following circumstances:

1) If USEPA has granted an extension from the effective date of a prohibition, ~~has been granted pursuant to~~ as described in Section 738.104; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition filed under Section 738.120; or

3) If the waste is generated by a conditionally exempt small quantity generator, as defined in 35 Ill. Adm. Code 721.105.

d) A waste that is hazardous only because it exhibits a characteristic of hazardous waste and which is otherwise prohibited from injection under this Part or 35 Ill. Adm. Code 728 is not prohibited from injection if the following is true of the waste:

1) It is disposed into a non-hazardous or hazardous waste injection well, as defined under 35 Ill. Adm. Code 730.106(a); and

2) It does not exhibit any prohibited characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721~~.Subpart C~~ at the point of injection.

BOARD NOTE: Derived from 40 CFR 148.1 ~~(1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.102 Definitions

~~"EPA Hazardous Waste Number" means the number assigned by EPA pursuant to each hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D and to each characteristic identified in 35 Ill. Adm. Code 721.Subpart C.~~

"Injection interval" means that part of the injection zone in which the well is screened~~,~~ or in which the waste is otherwise directly emplaced.

"Transmissive fault or fracture" is a fault or fracture that has sufficient permeability and vertical extent to allow fluids to move between formations.

"USEPA hazardous waste number" means the number assigned by USEPA pursuant to each hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 and to each characteristic identified in Subpart C of 35 Ill. Adm. Code 721.

BOARD NOTE: Derived from 40 CFR 148.2 ~~(1988), as added at 53 Fed. Reg. 28155, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.103 Dilution Prohibited as a Substitute for Treatment

a) The provisions of 35 Ill. Adm. Code 728.103 ~~shall~~ apply to owners or operators of Class I injection wells used to inject a waste that is hazardous at the point of generation whether or not the waste is hazardous at the point of injection.

b) ~~Owners or operators~~ The owner or operator of a Class I ~~nonhazardous~~ non-hazardous waste injection ~~wells~~ well that ~~inject~~ injects waste formerly exhibiting a hazardous characteristic ~~which~~ that has been removed by dilution may address underlying hazardous constituents by treating the hazardous waste, by obtaining an exemption pursuant to a petition filed under Section 738.120, or by complying with the provisions set forth in 35 Ill. Adm. Code 728.109.

BOARD NOTE: Derived from 40 CFR 148.3 ~~(1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.104 Case-by-Case Extensions of an Effective Date

The owner or operator of a Class I hazardous or ~~nonhazardous~~ non-hazardous waste injection well may submit an application to USEPA for an extension of the effective date of any applicable prohibition established under Subpart B of this Part pursuant to 40 CFR 268.5. ~~(See 35 Ill. Adm. Code 728.105.)~~ Any extension that is granted by USEPA will be deemed an extension of the effective date of the derivative Board rule.

BOARD NOTE: Derived from 40 CFR 148.4 ~~(1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.105 Waste Analysis

~~Generators~~ The generator of hazardous ~~wastes~~ waste that ~~are~~ is disposed of into a Class I injection ~~wells~~ well must comply with the applicable requirements of 35 Ill. Adm. Code 728.107(a) and (b). ~~Owners or operators~~ The owner or operator of a Class I hazardous waste injection ~~wells~~ well must comply with the applicable requirements of 35 Ill. Adm. Code 728.107(c).

BOARD NOTE: Derived from 40 CFR 148.5 ~~(1988), as added at 53 Fed. Reg. 28155, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART B: PROHIBITIONS ON INJECTION

Section 738.110 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~-~~ Solvent Wastes

a) The spent solvent wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: F001, F002, F003, F004, and F005.

~~F001~~
~~F002~~
~~F003~~
~~F004~~
~~F005~~

b) The requirements of subsection (a) ~~above~~ of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the standards of

Subpart D of 35 Ill. Adm. Code 728.~~Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension has been granted ~~under~~ by USEPA as referenced in Section ~~738.Subpart D~~ 738.104.

BOARD NOTE: Derived from 40 CFR 148.10 ~~(1991), as amended at 57 Fed. Reg. 8088, March 6, 1992~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.111 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~-~~ Dioxin-Containing Wastes

a) The dioxin-containing wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: F020, F021, F022, F023, F026, F027, and F028.

~~F020~~
~~F021~~
~~F022~~
~~F023~~
~~F026~~
~~F027~~
~~F028~~

b) The requirements of subsection (a) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the standards of Subpart D of 35 Ill. Adm. Code 728.~~Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension has been granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.11 ~~(1989)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.112 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~-~~ California List Wastes

a) The hazardous wastes listed in 35 Ill. Adm. Code 728.132 containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm or halogenated organic compounds at concentrations greater than or equal to 10,000 mg/kg are prohibited from underground injection.

b) The following hazardous wastes are prohibited from underground injection:

1) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to ~~1000 mg/l~~1,000 mg/ℓ;

2) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals (or elements) or compounds of these metals (or elements) at concentrations greater than or equal to those specified below:

A) Arsenic or compounds (as As) 500 ~~mg/l~~mg/ℓ;

B) Cadmium or compounds (as Cd) 100 ~~mg/l~~mg/ℓ;

C) Chromium (VI) or compounds (as Cr VI) 500 ~~mg/l~~mg/ℓ;

D) Lead or compounds (as Pb) 500 ~~mg/l~~mg/ℓ;

E) Mercury or compounds (as Hg) 20 ~~mg/l~~mg/ℓ;

F) Nickel or compounds (as Ni) 134 ~~mg/l~~mg/ℓ;

G) Selenium or compounds (as Se) 100 ~~mg/l~~mg/ℓ; and

H) Thallium or compounds (as Tl) 130 ~~mg/l~~mg/ℓ;

3) Liquid hazardous waste having a pH less than or equal to two (2.0); and

4) Hazardous wastes containing halogenated organic compounds in total concentration less than 10,000 mg/kg but greater than or equal to ~~1000~~ 1,000 mg/kg.

c) The requirements of subsections (a) and (b) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728~~.Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension is granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.12 ~~(1990)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.114 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~-~~ First Third Wastes

a) Prohibitions.

1) The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste number~~ USEPA hazardous waste numbers are prohibited from underground injection: F006 (wastewaters and nonwastewaters), F008, F009, F019.

~~F006 (wastewaters and nonwastewaters)~~
~~F008~~
~~F009~~
~~F019~~

2) The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: K001, K004, K008, K015 (wastewaters and nonwastewaters), K016 (at concentrations greater than or equal to one percent), K017, K018, K019, K020, K021 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes), K022 (wastewaters and nonwastewaters), K024, K030, K031, K035, K036 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes), K037, K044, K045, K046 (wastewaters and nonwastewaters), K047, K048, K049, K050, K051, K052, K060 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes), K061 (wastewaters and nonwastewaters), K062, K069 (calcium sulfate nonwastewaters; all wastewaters; and noncalcium sulfate nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes), K071, K073, K083, K084, K085, K086, K087, K099, K101 (all wastewaters and nonwastewaters), K102 (all wastewaters and nonwastewaters), K103, K104, and K106.

~~K001~~
~~K004~~
~~K008~~
~~K015 (wastewaters and nonwastewaters)~~
~~K016 (at concentrations greater than or equal to one percent)~~
~~K017~~
~~K018~~
~~K019~~
~~K020~~
~~K021 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes)~~
~~K022 (wastewaters and nonwastewaters)~~
~~K024~~
~~K030~~
~~K031~~
~~K035~~
~~K036 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes)~~
~~K037~~
~~K044~~
~~K045~~
~~K046 (wastewaters and nonwastewaters)~~
~~K047~~
~~K048~~
~~K049~~
~~K050~~
~~K051~~
~~K052~~
~~K060 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes)~~
~~K061 (wastewaters and nonwastewaters)~~
~~K062~~
~~K069 (calcium sulfate nonwastewaters; all wastewaters; and noncalcium sulfate nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes)~~
~~K071~~
~~K073~~

~~K083~~
~~K084~~
~~K085~~
~~K086~~
~~K087~~
~~K099~~
~~K101 (all wastewaters and nonwastewaters)~~
~~K102 (all wastewaters and nonwastewaters)~~
~~K103~~
~~K104~~
~~K106~~

3) The wastes specified in 35 Ill. Adm. Code 721.133 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: P001, P004, P005, P010, P011, P012, P015, P016, P018, P020, P030, P036, P037, P039, P041, P048, P050, P058, P059, P063, P068, P069, P070, P071, P081, P082, P084, P087, P089, P092, P094, P097, P102, P105, P108, P110, P115, P120, P122, P123, U007, U009, U010, U012, U016, U018, U019, U022, U029, U031, U036, U037, U041, U043, U044, U046, U050, U051, U053, U061, U063, U064, U066, U067, U074, U077, U078, U086, U089, U103, U105, U108, U115, U122, U124, U129, U130, U133, U134, U137, U151, U154, U155, U157, U158, U159, U171, U177, U180, U185, U188, U192, U200, U209, U210, U211, U219, U220, U221, U223, U226, U227, U228, U237, U238, U248, and U249.

~~P001~~
~~P004~~
~~P005~~
~~P010~~
~~P011~~
~~P012~~
~~P015~~
~~P016~~
~~P018~~
~~P020~~
~~P030~~
~~P036~~
~~P037~~
~~P039~~
~~P041~~
~~P048~~
~~P050~~
~~P058~~
~~P059~~
~~P063~~

~~P068~~
~~P069~~
~~P070~~
~~P071~~
~~P081~~
~~P082~~
~~P084~~
~~P087~~
~~P089~~
~~P092~~
~~P094~~
~~P097~~
~~P102~~
~~P105~~
~~P108~~
~~P110~~
~~P115~~
~~P120~~
~~P122~~
~~P123~~
~~U007~~
~~U009~~
~~U010~~
~~U012~~
~~U016~~
~~U018~~
~~U019~~
~~U022~~
~~U029~~
~~U031~~
~~U036~~
~~U037~~
~~U041~~
~~U043~~
~~U044~~
~~U046~~
~~U050~~
~~U051~~
~~U053~~
~~U061~~
~~U063~~
~~U064~~
~~U066~~
~~U067~~
~~U074~~
~~U077~~

~~U078~~
~~U086~~
~~U089~~
~~U103~~
~~U105~~
~~U108~~
~~U115~~
~~U122~~
~~U124~~
~~U129~~
~~U130~~
~~U133~~
~~U134~~
~~U137~~
~~U151~~
~~U154~~
~~U155~~
~~U157~~
~~U158~~
~~U159~~
~~U171~~
~~U177~~
~~U180~~
~~U185~~
~~U188~~
~~U192~~
~~U200~~
~~U209~~
~~U210~~
~~U211~~
~~U219~~
~~U220~~
~~U221~~
~~U223~~
~~U226~~
~~U227~~
~~U228~~
~~U237~~
~~U238~~
~~U248~~
~~U249~~

b) ~~Effective June 7, 1991, the~~ The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste number are prohibited from underground injection: K016 (at concentrations less than one percent).

~~K016 (at concentrations less than one percent)~~

c) Prohibitions.

1) ~~Effective June 8, 1991, the~~ The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste number are prohibited from underground injection: F007.

~~F007~~

2) ~~Effective June 8, 1991, the~~ The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: K011 (nonwastewaters) and K013 (nonwastewaters).

~~K011 (nonwastewaters)~~
~~K013 (nonwastewaters)~~

d) ~~Effective May 8, 1992, the~~ The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: K011 (wastewaters), K013 (wastewaters), and K014.

~~K011 (wastewaters)~~
~~K013 (wastewaters)~~
~~K014~~

e) The requirements of subsections (a) through (d) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728~~.Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition ~~under~~ by USEPA as referenced in Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension is granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.14 ~~(1990)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.115 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~-~~ Second Third Wastes

a) Prohibitions.

1) The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: F010 and F024.

~~F010~~
~~F024~~

2) The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: K009 (nonwastewaters), K010, K025 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes), K027, K028, K029 (wastewaters and nonwastewaters), K038, K039, K040, K041, K042, K043, K095 (wastewaters and nonwastewaters), K096 (wastewaters and nonwastewaters), K097, K098, K105, K113, K114, K115, and K116.

~~K009 (nonwastewaters)~~
~~K010~~
~~K025 (wastewaters, and nonwastewaters generated by the process described in the waste listing description, and not those generated in the course of treating wastewater forms of these wastes)~~
~~K027~~
~~K028~~
~~K029 (wastewaters and nonwastewaters)~~
~~K038~~
~~K039~~
~~K040~~
~~K041~~
~~K042~~
~~K043~~
~~K095 (wastewaters and nonwastewaters)~~
~~K096 (wastewaters and nonwastewaters)~~
~~K097~~
~~K098~~
~~K105~~
~~K113~~
~~K114~~
~~K115~~
~~K116~~

3) The wastes specified in 35 Ill. Adm. Code 721.133 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: P002, P003, P007, P008, P014, P026, P027, P029, P040, P043, P044, P049, P054, P057, P060, P062, P066, P067, P072, P074, P085, P098, P104, P106, P107, P111, P112, P113, P114, U002, U003, U005, U008, U011, U014, U015, U020, U021, U023, U025, U026, U028, U032, U035, U047, U049, U057, U058, U059, U060, U062, U070, U073, U080, U083, U092, U093, U094, U095, U097, U098, U099, U101, U106, U107, U109, U110, U111, U114, U116, U119, U127, U128, U131, U135, U138, U140, U142, U143, U144, U146, U147, U149, U150, U161, U162, U163, U164, U165, U168, U169, U170, U172, U173, U174, U176, U178, U179, U189, U193, U196, U203, U205, U206, U208, U213, U214, U215, U216, U217, U218, U235, U239, and U244.

~~P002~~
~~P003~~
~~P007~~
~~P008~~
~~P014~~
~~P026~~
~~P027~~
~~P029~~
~~P040~~
~~P043~~
~~P044~~
~~P049~~
~~P054~~
~~P057~~
~~P060~~
~~P062~~
~~P066~~
~~P067~~
~~P072~~
~~P074~~
~~P085~~
~~P098~~
~~P104~~
~~P106~~
~~P107~~
~~P111~~
~~P112~~
~~P113~~
~~P114~~
~~U002~~
~~U003~~
~~U005~~

~~U008~~
~~U011~~
~~U014~~
~~U015~~
~~U020~~
~~U021~~
~~U023~~
~~U025~~
~~U026~~
~~U028~~
~~U032~~
~~U035~~
~~U047~~
~~U049~~
~~U057~~
~~U058~~
~~U059~~
~~U060~~
~~U062~~
~~U070~~
~~U073~~
~~U080~~
~~U083~~
~~U092~~
~~U093~~
~~U094~~
~~U095~~
~~U097~~
~~U098~~
~~U099~~
~~U101~~
~~U106~~
~~U107~~
~~U109~~
~~U110~~
~~U111~~
~~U114~~
~~U116~~
~~U119~~
~~U127~~
~~U128~~
~~U131~~
~~U135~~
~~U138~~
~~U140~~
~~U142~~

~~U143~~
~~U144~~
~~U146~~
~~U147~~
~~U149~~
~~U150~~
~~U161~~
~~U162~~
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~~U165~~
~~U168~~
~~U169~~
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~~U172~~
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~~U178~~
~~U179~~
~~U189~~
~~U193~~
~~U196~~
~~U203~~
~~U205~~
~~U206~~
~~U208~~
~~U213~~
~~U214~~
~~U215~~
~~U216~~
~~U217~~
~~U218~~
~~U235~~
~~U239~~
~~U244~~

b) The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection pursuant to the treatment standards specified in 35 Ill. Adm. Code 728.141 and 728.143 applicable to F011 and F012 wastewaters and nonwastewaters: F011 (nonwastewaters) and F012 (nonwastewaters).

~~F011 (nonwastewaters)~~
~~F012 (nonwastewaters)~~

c) ~~Effective June 8, 1991, the~~ The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste number are prohibited from underground injection: K009 (wastewaters).

~~K009 (wastewaters)~~

d) The requirements of subsections (a) through (c) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728~~.Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension is granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.15 ~~(1990)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.116 ~~Waste Specific~~ Waste-Specific Prohibitions: ~~–~~ Third Third Wastes

a) Prohibitions.

1) The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: F025 and F039 (nonwastewaters).

~~F025~~
~~F039 (nonwastewaters)~~

2) The wastes specified in 35 Ill. Adm. Code 721.132 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: K002, K003, K005 (wastewaters and nonwastewaters), K006, K007 (wastewaters and nonwastewaters), K023, K026, K032, K033, K034, K093, K094, and K100.

~~K002~~
~~K003~~
~~K005 (wastewaters and nonwastewaters)~~
~~K006~~
~~K007 (wastewaters and nonwastewaters)~~
~~K023~~
~~K026~~

~~K032~~
~~K033~~
~~K034~~
~~K093~~
~~K094~~
~~K100~~

3) The wastes specified in 35 Ill. Adm. Code 721.133 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: P006, P009, P013, P017, P021, P022, P023, P024, P028, P031, P033, P034, P038, P042, P045, P046, P047, P051, P056, P064, P065, P073, P075, P076, P077, P078, P088, P093, P095, P096, P099, P101, P103, P109, P116, P118, P119, P121, U001, U004, U006, U017, U024, U027, U030, U033, U034, U038, U039, U042, U045, U048, U052, U055, U056, U068, U069, U071, U072, U075, U076, U079, U081, U082, U084, U085, U087, U088, U090, U091, U096, U102, U112, U113, U117, U118, U120, U121, U123, U125, U126, U132, U136, U141, U145, U148, U152, U153, U156, U160, U166, U167, U181, U182, U183, U184, U186, U187, U190, U191, U194, U197, U201, U202, U204, U207, U222, U225, U234, U236, U240, U243, U246, and U247.

~~P006~~
~~P009~~
~~P013~~
~~P017~~
~~P021~~
~~P022~~
~~P023~~
~~P024~~
~~P028~~
~~P031~~
~~P033~~
~~P034~~
~~P038~~
~~P042~~
~~P045~~
~~P046~~
~~P047~~
~~P051~~
~~P056~~
~~P064~~
~~P065~~
~~P073~~
~~P075~~
~~P076~~
~~P077~~

~~P078~~
~~P088~~
~~P093~~
~~P095~~
~~P096~~
~~P099~~
~~P101~~
~~P103~~
~~P109~~
~~P116~~
~~P118~~
~~P119~~
~~P121~~
~~U001~~
~~U004~~
~~U006~~
~~U017~~
~~U024~~
~~U027~~
~~U030~~
~~U033~~
~~U034~~
~~U038~~
~~U039~~
~~U042~~
~~U045~~
~~U048~~
~~U052~~
~~U055~~
~~U056~~
~~U068~~
~~U069~~
~~U071~~
~~U072~~
~~U075~~
~~U076~~
~~U079~~
~~U081~~
~~U082~~
~~U084~~
~~U085~~
~~U087~~
~~U088~~
~~U090~~
~~U091~~
~~U096~~

~~U102~~
~~U112~~
~~U113~~
~~U117~~
~~U118~~
~~U120~~
~~U121~~
~~U123~~
~~U125~~
~~U126~~
~~U132~~
~~U136~~
~~U141~~
~~U145~~
~~U148~~
~~U152~~
~~U153~~
~~U156~~
~~U160~~
~~U166~~
~~U167~~
~~U181~~
~~U182~~
~~U183~~
~~U184~~
~~U186~~
~~U187~~
~~U190~~
~~U191~~
~~U194~~
~~U197~~
~~U201~~
~~U202~~
~~U204~~
~~U207~~
~~U222~~
~~U225~~
~~U234~~
~~U236~~
~~U240~~
~~U243~~
~~U246~~
~~U247~~

4) The wastes specified in 35 Ill. Adm. Code 721.121 or 721.124 by characteristic alone and designated by the following ~~EPA Hazardous~~

~~Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: D001, D004, D005, D006, D008, D009 (wastewaters), D010, D011, D012, D013, D014, D015, D016, and D017.

~~D001~~
~~D004~~
~~D005~~
~~D006~~
~~D008~~
~~D009 (wastewaters)~~
~~D010~~
~~D011~~
~~D012~~
~~D013~~
~~D014~~
~~D015~~
~~D016~~
~~D017~~

b) Mixed ~~radioactive/hazardous~~ radioactive and hazardous wastes in 35 Ill. Adm. Code 728.110, 728.111, and 728.112, which are mixed radioactive and hazardous wastes, are prohibited from underground injection.

c) Prohibitions.

1) ~~Effective May 8, 1992, the~~ The wastes specified in 35 Ill. Adm. Code 721.131 by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste number are prohibited from underground injection: F039 (nonwastewaters).

~~F039 (nonwastewaters)~~

2) ~~Effective May 8, 1992, the~~ The wastes specified in 35 Ill. Adm. Code 721.122, 721.123, or 721.124 as hazardous based on a characteristic alone and designated by the following ~~EPA Hazardous Waste~~ USEPA hazardous waste numbers are prohibited from underground injection: D002 (wastewaters and nonwastewaters), D003 (wastewaters and nonwastewaters), D007 (wastewaters and nonwastewaters), and D009 (nonwastewaters).

~~D002 (wastewaters and nonwastewaters)~~
~~D003 (wastewaters and nonwastewaters)~~
~~D007 (wastewaters and nonwastewaters)~~
~~D009 (nonwastewaters)~~

~~3) The effective date of subsections (c)(1) and (c)(2) do not apply to the~~

~~wastes listed in Section 148.112(b) which are prohibited from underground injection effective August 8, 1990.~~

d) The requirements of subsections (a) through (c) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728~~.Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension is granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.16 ~~(1990)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.117 Waste-Specific Prohibitions: ~~-~~ Newly-Listed Wastes

a) The wastes specified in Subpart D of 35 Ill. Adm. Code 721~~.Subpart D~~ by the following USEPA hazardous waste numbers are prohibited from underground injection: F037, F038, K107, K108, K109, K110, K111, K112, K117, K118, K123, K124, K125, K126, K131, K136, U328, U353, and U359.

~~F037~~
~~F038~~
~~K107~~
~~K108~~
~~K109~~
~~K110~~
~~K111~~
~~K112~~
~~K117~~
~~K118~~
~~K123~~
~~K124~~
~~K125~~
~~K126~~
~~K131~~
~~K136~~
~~U328~~
~~U353~~
~~U359~~

b) The wastes specified in Subpart D of 35 Ill. Adm. Code 721~~.Subpart D~~ by the following USEPA hazardous waste numbers are prohibited from underground injection: K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151.

~~K141~~
~~K142~~
~~K143~~
~~K144~~
~~K145~~
~~K147~~
~~K148~~
~~K149~~
~~K150~~
~~K151~~

c) This subsection (c) corresponds with 40 CFR 148.17(c), removed and marked "reserved" by USEPA at 61 Fed. Reg. 15662 (April 8, 1996). This statement maintains structural consistency with USEPA rules.

d) ~~Effective June 30, 1995, the~~ The wastes specified in Subpart D of 35 Ill. Adm. Code 721~~.Subpart D~~ by the following USEPA hazardous waste numbers are prohibited from underground injection: K117, K118, K131, and K132.

~~K117~~
~~K118~~
~~K131~~
~~K132~~

e) The requirements of subsections (a) ~~and (b)~~ through (d) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728~~.Subpart D~~; or

2) If the Board has granted an adjusted standard ~~has been granted~~ in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension is granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.17 ~~(1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.118 Waste-Specific Prohibitions: – Newly-Listed and Identified Wastes

a) All newly identified D004 through D011 wastes and characteristic mineral processing wastes, except those identified in subsection (b) of this Section, are prohibited from underground injection.

b) Characteristic hazardous wastes from titanium dioxide mineral processing, and radioactive wastes mixed with newly identified D004 through D011 or mixed with newly identified characteristic mineral processing wastes, are prohibited from underground injection.

c) The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, F035 are prohibited from underground injection.

d) The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, F035 that are mixed with radioactive wastes are prohibited from underground injection.

e) The wastes specified in 35 Ill. Adm. Code 721.132 as having the following USEPA hazardous waste numbers are prohibited from underground injection: K156, K157, K158, K159, K160, K161, P127, P128, P185, P188, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201, P202, P203, P204, P205, U271, U277, U278, U279, U280, U364, U365, U366, U367, U372, U373, U375, U376, U377, U378, U379, U381, U382, U383, U384, U385, U386, U387, U389, U390, U391, U392, U393, U394, U395, U396, U400, U401, U402, U403, U404, U407, U409, U410, and U411.

f) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K088 ~~is~~ are prohibited from underground injection.

g) The wastes specified in 35 Ill. Adm. Code 721 as having the following USEPA hazardous waste numbers and Mixed TC/Radioactive wastes are prohibited from underground injection: D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043.

h) This subsection (h) corresponds with 40 CFR 148.18(h), which USEPA has removed and marked “reserved.” This statement maintains structural consistency with the federal regulations.

i) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste numbers K169 through K172 are prohibited from underground injection.

j) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste numbers K174 and K175 are prohibited from underground injection.

k) ~~Effective May 20, 2002, the~~ The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste numbers K176, K177, and K178 are prohibited from underground injection.

l) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K181 are prohibited from underground injection.

~~l~~m) The requirements of subsections (a) through ~~(k)~~ (l) of this Section do not apply under any of the following circumstances:

1) If the ~~wastes meet~~ waste meets or ~~are~~ is treated to meet the applicable standards specified in Subpart D of 35 Ill. Adm. Code 728; or

2) If the Board has granted an ~~exemption from a prohibition has been granted~~ adjusted standard in response to a petition under Subpart C of this Part; or

3) During the period of extension of the applicable effective date, if an extension has been granted ~~under~~ by USEPA as referenced in Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.18 (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: PETITION STANDARDS AND PROCEDURES

Section 738.120 Petitions to Allow Injection of a Prohibited Waste

a) Any person seeking an exemption from a prohibition under Subpart B of this Part for the injection of a restricted hazardous waste, including a hazardous waste that exhibits a characteristic of hazardous waste and which contains underlying hazardous constituents at the point of generation, but which no longer exhibits a characteristic of hazardous waste when injected into a Class I injection well or wells, ~~shall~~ must submit a petition for an adjusted standard to the Board, pursuant to Subpart D of 35 Ill. Adm. Code ~~106.Subpart G~~ 104, demonstrating that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous. This demonstration requires a showing ~~that~~ of the following:

1) The hydrogeological and geochemical conditions at the ~~site(s)~~ site and the physiochemical nature of the waste ~~stream(s)~~ stream are such that reliable predictions can be made ~~that~~ with regard to each of the following:

A) Fluid movement conditions are such that the injected fluids will not migrate within 10,000 years in either of the following ways:

i) Vertically upward out of the injection zone; or

ii) Laterally within the injection zone to a point of discharge or interface with an ~~Underground Source~~ underground source of ~~Drinking Water~~ drinking water (USDW), as defined in 35 Ill. Adm. Code 730; or

B) Before the injected fluids migrate out of the injection zone or to a point of discharge or interface with a USDW, the fluid will no longer be hazardous because of attenuation, transformation, or immobilization of hazardous constituents within the injection zone by hydrolysis, chemical interactions, or other means; and

2) For each well, the petition has fulfilled the following requirements:

A) ~~Demonstrated~~ It has demonstrated that the injection well's area of review complies with the substantive requirements of 35 Ill. Adm. Code 730.163;

B) ~~Located,~~ It has located, identified, and ascertained the condition of all wells within the injection well's area of review (as specified in 35 Ill. Adm. Code 730.163) that penetrate the injection zone or the confining zone by use of a protocol acceptable to the Board that meets the substantive requirements of 35 Ill. Adm. Code 730.164;

C) ~~Submitted~~ It has provided a corrective action plan that meets the substantive requirements of 35 Ill. Adm. Code 730.164, the implementation of which ~~shall~~ will become a condition of any adjusted standard granted; and

D) ~~Submitted~~ It has provided the results of pressure and radioactive tracer tests performed within one year prior to submission of the petition demonstrating the mechanical integrity of the well's long string casing, injection tube, annular seal, and bottom hole cement. In cases where the petition has not been approved or denied within one year after the initial demonstration of mechanical integrity, the Board may require the owner or operator to perform the tests again and submit the results of the new tests.

BOARD NOTE: The requirements of subsection (a)(2) of this Section need not be incorporated in a permit at the time the Board grants an adjusted standard.

b) A demonstration under subsection (a)(1)(A) of this Section must identify the strata within the injection zone which will confine fluid movement above the injection interval, and it must include a showing that this strata is free of known

transmissive faults of fractures and that there is a confining zone above the injection zone.

c) A demonstration under subsection (a)(1)(B) of this Section must identify the strata within the injection zone where waste transformation will be accomplished, and it must include a showing that this strata is free of known transmissive faults or fractures and that there is a confining zone above the injection zone.

d) A demonstration may include ~~a showing that~~ either of the following features, which will become a condition of the adjusted standard:

1) Treatment methods that the owner or operator will use to reduce the toxicity or mobility of the wastes~~, the implementation of which will become a condition of any adjusted standard, must be utilized~~; or

2) A monitoring plan~~, the implementation of which will become a condition of any adjusted standard, must be utilized~~ that the owner or operator will use to enhance confidence in one or more aspects of the demonstration.

e) Any person that has been granted an adjusted standard pursuant to this Section may submit a petition for reissuance of the adjusted standard to include an additional restricted waste or wastes or to modify any conditions ~~placed~~ imposed on that adjusted standard by the Board. The Board will reissue the adjusted standard if the petitioner complies with subsections (a), (b), and (c) of this Section.

f) Any person that has been granted an adjusted standard pursuant to this Section may submit a petition to modify that adjusted standard to include an additional (hazardous) waste or wastes. The Board ~~may~~ will grant the modification if it determines, to a reasonable degree of certainty, that the additional waste or wastes will behave hydraulically and chemically in a manner similar to previously included wastes and that ~~it~~ the additional waste or wastes will not interfere with the containment capability of the injection zone.

BOARD NOTE: Derived from 40 CFR 148.20 ~~(1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.121 Required Information to Support Petitions

a) Information submitted in support of a Section 738.120 petition must meet the following ~~criteria~~ requirements:

1) All data from waste analyses and any new testing performed by the petitioner must be approved by the Board and must provide data that are accurate, reproducible, and performed in accordance with quality

assurance standards;

2) ~~Estimation~~ The following must be true with regard to estimation and monitoring techniques and the identification of applicable existing ~~EPA-certified~~ USEPA-certified test protocols:

A) All estimation and monitoring techniques must be approved by the Board; and

B) The petition must identify all applicable USEPA-certified test protocols in existence at the time the estimation and monitoring was performed;

3) Predictive models must have been verified and validated, must be appropriate for the specific site, ~~wastestreams~~ waste streams, and injection conditions of the operation, and they must be calibrated for existing sites where sufficient data are available;

4) A quality assurance and quality control plan addressing all aspects of the demonstration must be provided to and approved by the Board;

5) Reasonably conservative values must be used whenever values taken from the literature or estimated on the basis of known information are used instead of site-specific measurements; and

6) An analysis must be performed to identify and assess aspects of the demonstration that contribute significantly to uncertainty. The petitioner ~~shall~~ must conduct a sensitivity analysis to determine the effect that significant uncertainty may contribute to the demonstration. The demonstration must then be based on conservative assumptions identified in the analysis.

b) Any petitioner under Section 738.120(a)(1)(A) ~~shall~~ must provide sufficient site-specific information to support the demonstration, such as the following:

1) ~~Thickness,~~ The thickness, porosity, permeability and extent of the various strata in the injection zone;

2) ~~Thickness,~~ The thickness, porosity, permeability, extent and continuity of the confining zone;

3) ~~Hydraulic~~ The hydraulic gradient in the injection zone;

4) ~~Hydrostatic~~ The hydrostatic pressure in the injection zone; and

5) ~~Geochemical~~ The geochemical conditions of the site.

c) In addition to the information in subsection ~~738.121(b)~~ (b) of this Section, any petitioner under Section 738.120(a)(1)(B) of this Part ~~shall~~ must provide sufficient waste-specific information to ensure reasonably reliable predictions about the waste transformation. The petitioner ~~shall~~ must provide the information necessary to support the demonstration, such as the following:

1) ~~Description~~ A description of the chemical processes or other means that will lead to waste transformation; and

2) Results of laboratory experiments verifying the waste transformation.

BOARD NOTE: Derived from 40 CFR 148.21 ~~(1988), as added at 53 Fed. Reg. 28156, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.122 Submission, Review, and Approval or Denial of Petitions

a) Any petition submitted to the Board, pursuant to Section 738.120(a) of this Part, must include the following:

1) An identification of the specific waste or wastes and the specific injection well or wells for which the demonstration will be made;

2) A waste analysis fully describing the chemical and physical characteristics of the subject wastes;

3) Such additional information as the Board requires to support the petition under Section 738.120 and Section 738.121 of this Part; and

4) ~~This~~ The following statement signed by the petitioner or an authorized representative:

> I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

b) The Board will provide public notice and an opportunity for public comment in accordance with the procedures in Subpart D of 35 Ill. Adm. Code ~~106.Subpart G~~ 104.

c) An adjusted standard will apply only to the underground injection of the specific restricted waste or wastes identified in the petition into a Class I hazardous waste injection well or wells specifically identified in the petition (unless the adjusted standard is modified or reissued pursuant to Section 738.120(e) or (f)).

d) Upon request by any petitioner who obtains an adjusted standard for a well under this Subpart C, the Agency ~~shall~~ must initiate and reasonably expedite the necessary procedures to issue or reissue a permit or permits for the hazardous waste well or wells covered by the adjusted standard for a term not to exceed ~~ten~~ 10 years.

e) Each adjusted standard granted under this Part is subject to the following condition, whether or not this condition appears as part of the adjusted standard, and the Board will include this condition as part of each adjusted standard granted: "This adjusted standard does not affect the enforceability of any provisions of the Environmental Protection Act, Board rules, or other laws, except to the extent that its provisions expressly state otherwise."

BOARD NOTE: Derived from 40 CFR 148.22 ~~(1988), as added at 53 Fed. Reg. 28156, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.123 Review of Adjusted Standards

a) Agency review.

1) When considering whether to reissue a permit for the operation of a Class I hazardous waste injection well, the Agency ~~shall~~ must review any adjusted ~~standard(s)~~ standard granted by the Board pursuant to this Subpart C.

2) If the Agency determines that new information shows that the basis for granting the adjusted standard may no longer be valid, the Agency ~~shall~~ must request in writing that the permittee submit a petition to the Board to modify the adjusted standard.

3) All petitions requested by the Agency pursuant to subsection (a)(2) of this Section must be filed pursuant to section 738.120(f). Such a petition may seek reaffirmation of the adjusted standard without modification.

4) Permittee's failure to file a petition, Agency petitions for reconsideration, and Board reconsideration of adjusted standards~~:~~.

A) If the permittee fails to file a petition requested by the Agency under subsection (a)(2) of this Section, the Agency may petition

the Board for reconsideration of any adjusted standard granted under this Part at any time during the effectiveness of that adjusted standard, the limitation periods of 35 Ill. Adm. Code ~~101.300~~ 101.520 and ~~101.301~~ 101.904 notwithstanding.

B) Board review.

i) The Board may conduct a plenary review of the substance of any adjusted standard on reconsideration to the same extent that it would review a new petition for an adjusted standard.

ii) The Board may treat a motion for reconsideration of an adjusted standard as a new petition under Section 738.120 and require that the full requirements of that ~~section~~ Section and of Subpart D of 35 Ill. Adm. Code ~~106.Subpart G~~ 104 apply to the proceeding, with the Agency acting as the petitioner.

b) Whenever the Board determines that the basis for approval of a petition may no longer be valid, the Board will require a new demonstration in accordance with Section 738.120.

BOARD NOTE: Derived from 40 CFR 148.23 ~~(1988), as added at 53 Fed. Reg. 28157, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 738.124 Termination of Approved Petition

a) Termination through an enforcement action.

1) ~~Enforcement actions~~ An enforcement action against an ~~owners or operators~~ owner or operator having an adjusted ~~standards~~ standard and ~~limitations~~ limitation on Agency petitions for reconsideration of an adjusted ~~standards~~ standard:

A) Any person may file an enforcement action against an owner or operator of an underground injection well pursuant to Section 33 of the Environmental Protection Act~~, Ill. Rev. Stat. ch. 111 1/2, par. 1033,~~ [415 ILCS 5/33] for any violation of the Act or Board rules, notwithstanding the existence of any adjusted standard.

B) The Agency may petition the Board for reconsideration of any adjusted standard at any time during the effectiveness of that adjusted standard, the limitation periods of 35 Ill. Adm. Code

~~101.300~~ 101.520 and ~~101.301~~ 101.904 notwithstanding.

2) In any action under subsection (a)(1) of this Section, if the Board finds a violation of the Act or Board regulations, the Board may terminate any adjusted standard granted under Section 738.120 for any of the following causes:

A) Noncompliance by the owner or operator with any condition of the adjusted standard;

B) The owner or operator's failure in the petition or during the review and approval to disclose fully all relevant facts, or the petitioner's misrepresentation of any relevant facts at any time; or

C) A determination that new information shows that the basis for approval of the petition is no longer valid.

b) In any action under subsection (a)(1) of this Section, the Board will terminate an adjusted standard granted under Section 738.120 for the following ~~cases~~ causes:

1) The petitioner's willful withholding during the review and approval of the petition of facts directly and materially relevant to the Board's decision on the petition;

2) A determination that there has been migration from the injection zone or the well that is not in accordance with the terms of the adjusted standard, except that the Board, may at its discretion decide not to terminate where both of the following conditions are fulfilled:

A) The migration resulted from a mechanical failure of the well that can be promptly corrected ~~promptly~~ through a repair to the injection well itself or from an undetected well or conduit that can be plugged promptly; and

B) The requirements of 35 Ill. Adm. Code 730.167 are satisfied.

BOARD NOTE: Derived from 40 CFR 148.24 ~~(1988), as added at 53 Fed. Reg. 28157, July 26, 1988~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 739
STANDARDS FOR THE MANAGEMENT OF USED OIL

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SUBPART B: APPLICABILITY

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739.111 Used Oil Specifications
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Section
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SUBPART I: ~~STANDARDS FOR USE AS A DUST SUPPRESSANT~~ DISPOSAL OF USED OIL

Section
739.180 Applicability
739.181 Disposal
739.182 Use As a Dust Suppressant

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6931, effective April 26, 1994; amended in R94-17 at 18 Ill. Reg. 17616, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 10036, effective June 27, 1995; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 767, effective December 16, 1997; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2274, effective January 19, 1999; amended in R04-16 at 28 Ill. Reg. 10706, effective July 19, 2004; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART B: APPLICABILITY

Section 739.110 Applicability

This Section identifies those materials that are subject to regulation as used oil under this Part. This Section also identifies some materials that are not subject to regulation as used oil under this Part, and indicates whether these materials may be subject to regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, 720 through 726, and 728.

a) Used oil. Used oil is presumed to be recycled, unless a used oil handler disposes of used oil or sends used oil for disposal. Except as provided in Section 739.111, the regulations of this Part apply to used oil and to materials identified in this Section as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721.

b) Mixtures of used oil and hazardous waste.

1) Listed hazardous waste.

A) A mixture of used oil and hazardous waste that is listed in Subpart D of 35 Ill. Adm. Code 721 is subject to regulation as hazardous waste under 35 Ill. Adm. Code 703, 720 through 726, and 728, rather than as used oil under this Part.

B) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. ~~Persons~~ An owner or operator may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by ~~using an analytical method from SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, to show~~ showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of 35 Ill. Adm. Code 721).

i) This rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils or fluids. This presumption does apply to metalworking oils or fluids if such oils or fluids are recycled in any other manner, or disposed.

ii) This rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed

from refrigeration units where the CFCs are destined for reclamation. This rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

2) Characteristic hazardous waste. A mixture of used oil and hazardous waste that exhibits a hazardous waste characteristic identified in Subpart C of 35 Ill. Adm. Code 721 and a mixture of used oil and hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721 is subject to the following:

A) Except as provided in subsection (b)(2)(C) of this Section, regulation as hazardous waste under 35 Ill. Adm. Code 703, 720 through 726, and 728 rather than as used oil under this Part, if the resultant mixture exhibits any characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721; or

B) Except as provided in subsection (b)(2)(C) of this Section, regulation as used oil under this Part, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under Subpart C of 35 Ill. Adm. Code 721.

C) Regulation as used oil under this Part, if the mixture is of used oil and a waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability under 35 Ill. Adm. Code 721.121.

3) Conditionally exempt small quantity generator hazardous waste. A mixture of used oil and conditionally exempt small quantity generator hazardous waste regulated under 35 Ill. Adm. Code 721.105 is subject to regulation as used oil under this Part.

c) Materials containing or otherwise contaminated with used oil.

1) Except as provided in subsection (c)(2) of this Section, the following is true of a material containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible so that no visible signs of free-flowing oil remain in or on the material:

A) The material is not used oil, so it is not subject to this Part, and

B) If applicable, the material is subject to the hazardous waste regulations of 35 Ill. Adm. Code 703, 705, 720 through 726, and

728.

2) A material containing or otherwise contaminated with used oil that is burned for energy recovery is subject to regulation as used oil under this Part.

3) Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under this Part.

d) Mixtures of used oil with products.

1) Except as provided in subsection (d)(2) of this Section, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this Part.

2) Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to this Part once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of Subpart C of this Part.

e) Materials derived from used oil.

1) The following is true of materials that are reclaimed from used oil, which are used beneficially, and which are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants):

A) The materials are not used oil and thus are not subject to this Part, and

B) The materials are not solid wastes and are thus not subject to the hazardous waste regulations of 35 Ill. Adm. Code 703, 720 through 726, and 728, as provided in 35 Ill. Adm. Code 721.103(e)(1).

2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this Part.

3) Except as provided in subsection (e)(4) of this Section, the following is true of materials derived from used oil that are disposed of or used in a manner constituting disposal:

A) The materials are not used oil and thus are not subject to this Part, and

B) The materials are solid wastes and thus are subject to the hazardous waste regulations of 35 Ill. Adm. Code 703, 720 through

726, and 728 if the materials are listed or identified as hazardous waste.

4) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to this Part.

f) Wastewater. Wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the federal Clean Water Act (including wastewaters at facilities that have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil are not subject to the requirements of this Part. For purposes of this subsection, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.

g) Used oil introduced into crude oil pipelines or a petroleum refining facility.

1) Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of this Part. The used oil is subject to the requirements of this Part prior to the mixing of used oil with crude oil or natural gas liquids.

2) Mixtures of used oil and crude oil or natural gas liquids containing less than one percent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of this Part.

3) Used oil that is inserted into the petroleum refining process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of this Part, provided that the used oil contains less than one percent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining process, the used oil is subject to the requirements of this Part.

4) Except as provided in subsection (g)(5) of this Section, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of this Part only if the used oil meets the specification of Section 739.111. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of this Part.

5) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of this Part. This exemption does not extend to used oil that is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).

6) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of this Part.

h) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to this Part until it is transported ashore.

i) Used oil containing PCBs. Used oil containing PCBs, as defined at 40 CFR 761.3 (Definitions), incorporated by reference at 35 Ill. Adm. Code 720.111(b), at any concentration less than 50 ppm is subject to the requirements of this Part unless, because of dilution, it is regulated under federal 40 CFR 761 as a used oil containing PCBs at 50 ppm or greater. PCB-containing used oil subject to the requirements of this Part may also be subject to the prohibitions and requirements of 40 CFR 761, including 40 CFR 761.20(d) and (e). Used oil containing PCBs at concentrations of 50 ppm or greater is not subject to the requirements of this Part, but is subject to regulation under federal 40 CFR 761. No person may avoid these provisions by diluting used oil containing PCBs, unless otherwise specifically provided for in this Part or federal 40 CFR 761.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART C: STANDARDS FOR USED OIL GENERATORS

Section 739.120 Applicability

a) General. This Subpart C applies to all generators of used oil, except the following:

1) Household "do-it-yourselfer" used oil generators. Household "do-it-yourselfer" used oil generators are not subject to regulation under this Part.

2) Vessels. Vessels at sea or at port are not subject to this Subpart C. For purposes of this Subpart C, used oil produced on vessels from normal shipboard operations is considered to be generated at the time it is transported ashore. The owner or operator of the vessel and the persons removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the waste in compliance with this Subpart C once the used oil is transported ashore. The co-generators may

decide among themselves which party will fulfill the requirements of this Subpart C.

3) Diesel fuel. Mixtures of used oil and diesel fuel mixed by the generator of the used oil for use in the generator's own vehicles are not subject to this Part once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil fuel is subject to the requirements of this Subpart C.

4) Farmers. Farmers who generate an average of 25 gallons per month or less of used oil from vehicles or machinery used on the farm in a calendar year are not subject to the requirements of this Part.

b) Other applicable provisions. A used oil generator that conducts any of the following activities is subject to the requirements of other applicable provisions of this Part, as indicated in subsections (b)(1) through (b)(5):

1) A generator that transports used oil, except under the self-transport provisions of Section 739.124(a) and (b), must also comply with Subpart E of this Part.

2) A generator that processes or re-refines used oil.

A) Except as provided in subsection (b)(2)(B) of this Section, a generator that processes or re-refines used oil must also comply with Subpart F of this Part.

B) A generator that performs the following activities is not a used oil processor, provided that the used oil is generated on-site and is not being sent off-site to a burner of on- or off-specification used oil fuel:

i) Filtering, cleaning, or otherwise reconditioning used oil before returning it for reuse by the generator;

ii) Separating used oil from wastewater generated on-site to make the wastewater acceptable for discharge or reuse pursuant to Section 402 or 307(b) for the federal Clean Water Act (33 USC 1317 or 1342), 40 CFR 403 through 499, or 35 Ill. Adm. Code 310 or 309, governing the discharge of wastewaters;

iii) Using oil mist collectors to remove small droplets of used oil from in-plant air to make plant air suitable for continued recirculation;

iv) Draining or otherwise removing used oil from materials containing or otherwise contaminated with used oil in order

to remove excessive oil to the extent possible pursuant to Section 739.110(c); or

v) Filtering, separating, or otherwise reconditioning used oil before burning it in a space heater pursuant to Section 739.123.

3) A generator that burns off-specification used oil for energy recovery, except under the on-site space heater provisions of Section 739.123, must also comply with Subpart G of this Part.

4) A generator that directs shipments of off-specification used oil from their facility to a used oil burner or first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in Section 739.111 must also comply with Subpart H of this Part.

5) A generator that disposes of used oil~~, including the use of used oil as a dust suppressant,~~ must also comply with Subpart I of this Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.122 Used Oil Storage

A used oil generator is subject to all applicable federal Spill Prevention, Control and Countermeasures (40 CFR 112) in addition to the requirements of this Subpart C. A used oil generator is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart C.

a) Storage units. A used oil generator may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.

b) Condition of units. The following must be true of containers and aboveground tanks used to store used oil at a generator facility:

1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and

2) The containers may not be leaking (no visible leaks).

c) Labels.

1) Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words “Used Oil.”

2) Fill pipes used to transfer used oil into underground storage tanks at

generator facilities must be labeled or marked clearly with the words "Used Oil."

d) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280~~, Subpart F~~ and which has occurred after October 4, 1996, a generator must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.22(d) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the November 22, 1993 effective date of the Illinois used oil standards.

1) Stop the release;

2) Contain the released used oil;

3) Properly clean up and manage the released used oil and other materials; and

4) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART E: STANDARDS FOR USED OIL TRANSPORTER AND TRANSFER FACILITIES

Section 739.140 Applicability

a) General. Except as provided in subsections (a)(1) through (a)(4) of this Section, this Subpart E applies to all used oil transporters. A used oil transporter is a person that transports used oil, a person that collects used oil from more than one generator and transport the collected oil, and an owner or operator of a used oil transfer facility.

1) This Subpart E does not apply to on-site transportation.

2) This Subpart E does not apply to a generator that transports shipments of used oil totaling 55 gallons or less from the generator to a used oil collection center as specified in Section 739.124(a).

3) This Subpart E does not apply to a generator that transports shipments of used oil totaling 55 gallons or less from the generator to a used oil aggregation point owned or operated by the same generator as specified in Section 739.124(b).

4) This Subpart E does not apply to transportation of used oil from household do-it-yourselfers to a regulated used oil generator, collection center, aggregation point, processor, or burner subject to the requirements of this Part. Except as provided in subsections (a)(1) through (a)(3) of this Section, this Subpart E does, however, apply to transportation of collected household do-it-yourselfer used oil from regulated used oil generators, collection centers, aggregation points, or other facilities where household do-it-yourselfer used oil is collected.

BOARD NOTE: A generator that qualifies for an exemption under Section 739.124 may still be subject to the State's special waste hauling permit requirements under Part 809.

b) Imports and exports. A transporter that imports used oil from abroad or export used oil outside of the United States are subject to the requirements of this Subpart E from the time the used oil enters and until the time it exits the United States.

c) Trucks used to transport hazardous waste. Unless trucks previously used to transport hazardous waste are emptied as described in 35 Ill. Adm. Code 721.107 prior to transporting used oil, the used oil is considered to have been mixed with the hazardous waste and must be managed as hazardous waste unless, under the provisions of Section 739.110(b), the hazardous waste and used oil mixture is determined not to be hazardous waste.

d) Other applicable provisions. A used oil transporter that conducts the following activities are also subject to other applicable provisions of this Part as indicated in subsections (d)(1) through (d)(5) of this Section:

1) A transporter that generates used oil must also comply with Subpart C of this Part;

2) A transporter that processes or re-refines used oil, except as provided in Section 739.141, must also comply with Subpart F of this Part;

3) A transporter that burns off-specification used oil for energy recovery must also comply with Subpart G of this Part;

4) A transporter that directs shipments of off-specification used oil from its facility to a used oil burner or first claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in Section

739.111 must also comply with Subpart H of this Part; and

5) A transporter that disposes of used oil~~, including the use of used oil as a dust suppressant,~~ must also comply with Subpart I of this Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.143 Used Oil Transportation

a) Deliveries. A used oil transporter must deliver all used oil received to one of the following:

1) Another used oil transporter, provided that the transporter has obtained a USEPA identification number and an Illinois special waste identification number;

2) A used oil processing facility that has obtained a USEPA identification number and an Illinois special waste identification number;

3) An off-specification used oil burner facility that has obtained a USEPA identification number and an Illinois special waste identification number; or

4) An on-specification used oil burner facility.

b) ~~U.S. DOT~~ USDOT requirements. A used oil transporter must comply with all applicable USDOT requirements ~~under the U.S. Department of Transportation~~ in 49 CFR 171 through 180. A person transporting used oil that meets the definition of a hazardous material in 49 CFR 171.8 (Definitions and Abbreviations), incorporated by reference in 35 Ill. Adm. Code 720.111(b), must comply with all applicable ~~U.S. Department of Transportation~~ USDOT Hazardous Materials Regulations in 49 CFR 171~~ through~~ (General Information, Regulations, and Definitions), 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), 173 (Shippers--General Requirements for Shipments and Packages), 174 (Carriage by Rail), 175 (Carriage by Aircraft), 176 (Carriage by Vessel), 177 (Carriage by Public Highway), 178 (Specifications for Packagings), 179 (Specifications for Tank Cars), and 180 (Continuing Qualification and Maintenance of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

c) Used oil discharges.

1) In the event of a discharge of used oil during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area).

2) If a discharge of used oil occurs during transportation and an official (State or local government or a ~~Federal Agency~~ federal agency) acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by a transporter that does not have a USEPA identification number and an Illinois special waste identification number.

3) An air, rail, highway, or water transporter that has discharged used oil must do the following:

A) Give notice, if required by federal 49 CFR 171.15 (Immediate Notice of Certain Hazardous Materials Incidents), incorporated by reference in 35 Ill. Adm. Code 720.111(b), to the National Response Center (800-424-8802 or 202-426-2675); and

B) Report in writing as required by federal 49 CFR 171.16 (Detailed Hazardous Materials Incident Reports), incorporated by reference in 35 Ill. Adm. Code 720.111(b), to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.

4) A water transporter that has discharged used oil must give notice as required by federal 33 CFR 153.203 (Procedure for the Notice of Discharge), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

5) A transporter must clean up any used oil discharged that occurs during transportation or take such action as may be required or approved by federal, state, or local officials so that the used oil discharge no longer presents a hazard to human health or the environment.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.144 Rebuttable Presumption for Used Oil

a) To ensure that used oil is not a hazardous waste under the rebuttable presumption of Section 739.110(b)(1)(ii), the used oil transporter must determine whether the total halogen content of used oil being transporter or stored at a transfer facility is above or below 1,000 ppm.

b) The transporter must make this determination by the following means:

1) Testing the used oil; or

2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.

c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by ~~using an analytical method from SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, to show~~ showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of 35 Ill. Adm. Code 721).

1) The rebuttable presumption does not apply to metalworking oils and fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils and fluids. The presumption does apply to metalworking oils and fluids if such oils and fluids are recycled in any other manner, or disposed.

2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFC are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

d) Record retention. Records of analyses conducted or information used to comply with subsections (a), (b), and (c) of this Section must be maintained by the transporter for at least three years.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.145 Used Oil Storage at Transfer Facilities

A used oil transporter is subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR 112) in addition to the requirements of this Subpart E. A used oil transporter is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart.

a) Applicability. This Section applies to used oil transfer facilities. Used oil transfer facilities are transportation-related facilities including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24 hours during the normal course of transportation and not longer than 35 days. A transfer facility that store used oil for more than 35 days are subject to regulation under Subpart F.

b) Storage units. An owner or operator of a used oil transfer facility may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.

c) Condition of units. The following must be true of containers and aboveground tanks used to store used oil at a transfer facility:

1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and

2) The containers may not be leaking (no visible leaks).

d) Secondary containment for containers. Containers used to store used oil at a transfer facility must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dikes, berms, or retaining walls; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

e) Secondary containment for existing aboveground tanks. Existing aboveground tanks used to store used oil at a transfer facility must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

f) Secondary containment for new aboveground tanks. New aboveground tanks used to store used oil at a transfer facility must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

g) Labels.

1) Containers and aboveground tanks used to store used oil at transfer facilities must be labeled or marked clearly with the words "Used Oil."

2) Fill pipes used to transfer used oil into underground storage tanks at transfer facilities must be labeled or marked clearly with the words "Used Oil."

h) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280~~, Subpart F~~ and which has occurred after October 4, 1996, an owner or operator of a transfer facility must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.45(h) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois

program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the November 22, 1993 effective date of the Illinois used oil standards.

1) Stop the release;

2) Contain the released used oil;

3) Properly clean up and manage the released used oil and other materials; and

4) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART F: STANDARDS FOR USED OIL PROCESSORS

Section 739.150 Applicability

a) The requirements of this Subpart F apply to owners and operators of facilities that process used oil. Processing means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to the following: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation, and re-refining. The requirements of this Subpart F do not apply to the following:

1) A transporter that conducts incidental processing operations that occur during the normal course of transportation, as provided in Section 739.141; or

2) A burner that conducts incidental processing operations that occur during the normal course of used oil management prior to burning, as provided in Section 739.161(b).

b) Other applicable provisions. A used oil processor that conducts the following activities are also subject to the requirements of other applicable provisions of this Part, as indicated in subsections (b)(1) through (b)(5) of this Section.

1) A processor that generates used oil must also comply with Subpart C of this Part;

2) A processor that transports used oil must also comply with Subpart E of this Part;

3) Except as provided in subsections (b)(3)(A) and (b)(3)(B) of this Section, a processor that burns off-specification used oil for energy recovery must also comply with Subpart G of this Part. Processors burning used oil for energy recovery under the following conditions are not subject to Subpart G of this Part:

A) The used oil is burned in an on-site space heater that meets the requirements of Section 739.123; or

B) The used oil is burned for purposes of processing used oil, which is considered burning incidentally to used oil processing;

4) A processor that directs shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in Section 739.111 must also comply with Subpart H of this Part; and

5) A ~~processors~~ processor that disposes of used oil~~, including the use of used oil as a dust suppressant,~~ also must comply with Subpart I of this Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.153 Rebuttable Presumption for Used Oil

a) To ensure that used oil is not a hazardous waste under the rebuttable presumption of Section 739.110(b)(1)(ii), the owner or operator of a used oil processing facility must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

b) The owner or operator must make this determination by the following means:

1) Testing the used oil; or

2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.

c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by ~~using an analytical method from SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, to show~~ showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of 35 Ill. Adm. Code 721).

1) The rebuttable presumption does not apply to metalworking oils and fluids

containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils and fluids. The presumption does apply to metalworking oils and fluids if such oils and fluids are recycled in any other manner, or disposed.

2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFC are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.154 Used Oil Management

A used oil processor is subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR 112) in addition to the requirements of this Subpart F. A used oil processor or re-refiner is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart F.

a) Management units. A used oil processor may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.

b) Condition of units. The following must be true of containers and aboveground tanks used to store or process used oil at a processing facility:

1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and

2) The containers may not be leaking (no visible leaks).

c) Secondary containment for containers. Containers used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

d) Secondary containment for existing aboveground tanks. Existing aboveground tanks used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

e) Secondary containment for new aboveground tanks. New aboveground tanks used to store or process used oil at processing and re-refining facilities must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floor, must be

sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

f) Labels.

1) Containers and aboveground tanks used to store used oil at processing facilities must be labeled or marked clearly with the words "Used Oil."

2) Fill pipes used to transfer used oil into underground storage tanks at processing facilities must be labeled or marked clearly with the words "Used Oil."

g) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280~~, Subpart F~~ and which has occurred after October 4, 1996, a processor must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.54(g) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the November 22, 1993 effective date of the Illinois used oil standards.

1) Stop the release;

2) Contain the released used oil;

3) Properly clean up and manage the released used oil and other materials; and

4) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

h) Closure.

1) Aboveground tanks. An owner or operator that stores or processes used oil in aboveground tanks must comply with the following requirements:

A) At closure of a tank system, the owner or operator must remove or decontaminate used oil residues in tanks, contaminated containment

system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste under this chapter.

B) If the owner or operator demonstrates that not all contaminated soils can be practicably removed or decontaminated as required in subsection (h)(1)(A) of this Section, then the owner or operator must close the tank system and perform post-closure care in accordance with the closure and post-closure care requirements that apply to hazardous waste landfills (35 Ill. Adm. Code 725.410).

2) Containers. An owner or operator that stores used oil in containers must comply with the following requirements:

A) At closure, containers holding used oils or residues of used oil must be removed from the site;

B) The owner or operator must remove or decontaminate used oil residues, contaminated containment system components, contaminated soils, and structures and equipment contaminated with used oil, and manage them as hazardous waste, unless the materials are not hazardous waste 35 Ill. Adm. Code 721.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART G: STANDARDS FOR USED OIL BURNERS THAT BURN OFF-SPECIFICATION USED OIL FOR ENERGY RECOVERY

Section 739.160 Applicability

a) General. The requirements of this Subpart G apply to used oil burners except as specified in subsections (a)(1) and (a)(2) of this Section. A used oil burner is a facility where used oil not meeting the specification requirements in Section 739.111 is burned for energy recovery in devices identified in Section 739.161(a). Facilities burning used oil for energy recovery under the following conditions are not subject to this Subpart G:

1) The used oil is burned by the generator in an on-site space heater under the provisions of Section 739.123; or

2) The used oil is burned by a processor for purposes of processing used oil, which is considered burning incidentally to used oil processing.

b) Other applicable provisions. A used oil burner that conducts the following activities is also subject to the requirements of other applicable provisions of this Part as

indicated below.

1) A burner that generates used oil must also comply with Subpart C of this Part;

2) A burner that transports used oil must also comply with Subpart E of this Part;

3) Except as provided in Section 739.161(b), a burner that processes or re-refines used oil must also comply with Subpart F of this Part;

4) A burner that directs shipments of off-specification used oil from their facility to a used oil burner or first claim that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in Section 739.111 must also comply with Subpart H of this Part; and

5) A burner that disposes of used oil~~, including the use of used oil as a dust suppressant,~~ must comply with Subpart I of this Part.

c) Specification fuel. This Subpart G does not apply to a person burning used oil that meets the used oil fuel specification of Section 739.111, provided that the burner complies with the requirements of Subpart H of this Part.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.163 Rebuttable Presumption for Used Oil

a) To ensure that used oil managed at a used oil burner facility is not hazardous waste under the rebuttable presumption of Section 739.110(b)(1)(ii), a used oil burner must determine whether the total halogen content of used oil managed at the facility is above or below 1,000 ppm.

b) The used oil burner must determine if the used oil contains above or below 1,000 ppm total halogens by the following means:

1) Testing the used oil;

2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used; or

3) If the used oil has been received from a processor subject to regulation under Subpart F of this Part, using information provided by the processor.

c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. The owner or

operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by ~~using an analytical method from SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, to show~~ showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of 35 Ill. Adm. Code 721).

1) The rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils or fluids. The presumption does apply to metalworking oils or fluids if such oils and fluids are recycled in any other manner, or disposed.

2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

d) Record retention. Records of analyses conducted or information used to comply with subsections (a), (b), and (c) of this Section must be maintained by the burner for at least three years.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.164 Used Oil Storage

A used oil burner is subject to all applicable Spill Prevention, Control and Countermeasures (federal 40 CFR 112) in addition to the requirements of this Subpart G. A used oil burner is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart G.

a) Storage units. A used oil burner may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.

b) Condition of units. The following must be true of containers and aboveground tanks used to store used oil at a burner facility:

1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and

2) The containers may not be leaking (no visible leaks).

c) Secondary containment for containers. Containers used to store used oil at a burner facility must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Dikes, berms, or retaining walls; and

B) A floor. The floor must cover the entire area within the dike, berm, or retaining wall.

2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

d) Secondary containment for existing aboveground tanks. Existing aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

e) Secondary containment for existing aboveground tanks. A new aboveground tank used to store used oil at burner facilities must be equipped with a secondary containment system.

1) The secondary containment system must consist of the following, at a minimum:

A) Both of the following:

i) Dikes, berms, or retaining walls; and

ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or

B) An equivalent secondary containment system.

2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.

f) Labels.

1) A container or aboveground tank used to store used oil at a burner facility must be labeled or marked clearly with the words "Used Oil."

2) Fill pipes used to transfer used oil into underground storage tanks at burner facilities must be labeled or marked clearly with the words "Used Oil."

g) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280~~, Subpart F~~ and which has occurred after October 4, 1996, a burner must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.64(g) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the November 22, 1993 effective date of the Illinois used oil standards.

1) Stop the release;

2) Contain the released used oil;

3) Properly clean up and manage the released used oil and other materials; and

4) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART H: STANDARDS FOR USED OIL FUEL MARKETERS

Section 739.175 Notices

a) Certification. Before a used oil generator, transporter, or processor directs the first shipment of off-specification used oil fuel to a burner, it must obtain a one-time written and signed notice from the burner certifying the following:

1) That the burner has notified USEPA stating the location and general description of used oil management activities; and

2) That the burner will burn the off-specification used oil only in an industrial furnace or boiler identified in Section 739.161(a).

b) Certification retention. The certification described in subsection (a) of this Section must be maintained for three years from the date the last shipment of off-specification used oil is shipped to the burner.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART I: ~~STANDARDS FOR USE AS A DUST SUPPRESSANT~~
DISPOSAL OF USED OIL

Section 739.180 Applicability

The requirements of this Subpart I apply to all used oils that cannot be recycled and are therefore being disposed of.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 739.181 Disposal

a) Disposal of hazardous used oils. A used oil that is identified as a hazardous waste and which cannot be recycled in accordance with this Part must be managed in accordance with the hazardous waste management requirements of 35 Ill. Adm. Code 703, 720 through 726, and 728.

b) Disposal of nonhazardous used oils. A used oil that is not a hazardous waste and cannot be recycled under this Part must be disposed of in accordance with the requirements of 35 Ill. Adm. Code 807 through 815 and 40 CFR 257 and 258.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 810
SOLID WASTE DISPOSAL: GENERAL PROVISIONS

Section
810.101 Scope and Applicability
810.102 Severability
810.103 Definitions
810.104 Incorporations by Reference

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17, and 28.1 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 21.1, 22, 22.17, 28.1 and 27].

SOURCE: Adopted in R88-7 at 14 Ill. Reg. 15838, effective September 18, 1990; amended in R93-10 at 18 Ill. Reg. 1268, effective January 13, 1994; amended in R90-26 at 18 Ill. Reg. 12457, effective August 1, 1994; amended in R95-9 at 19 Ill. Reg. 14427, effective September 29, 1995; amended in R96-1 at 20 Ill. Reg. 11985, effective August 15, 1996; amended in R97-20 at 21 Ill. Reg. 15825, effective November 25, 1997; amended in R04-5/R04-15 at 28 Ill. Reg. 9090, effective June 18, 2004; amended in R05-1 at 29 Ill. Reg. 5028, effective March 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

Section 810.104 Incorporations by Reference

a) The Board incorporates the following material by reference:

1) Code of Federal Regulations:

40 CFR 141.40 ~~(1996)~~ (2005) (Monitoring Requirements for Unregulated Contaminants).

Appendix II to 40 CFR 258~~.Appendix II (1996)~~ (2005), as corrected at 70 Fed. Reg. 44150 (August 1, 2005) (List of Hazardous and Organic Constituents).

2) American Institute of Certified Public Accountants, 1211 Avenue of the Americas, New York NY 10036:

Auditing Standards--Current Text, August 1, 1990 Edition.

3) ASTM. American Society for Testing and Materials, 1976 Race Street, Philadelphia PA 19103 215-299-5585:

Method D2234-76, "Test Method for Collection of Gross Samples

of Coal," approved 1976.

Method D3987-85, "Standard Test Method for Shake Extraction of Solid Waste with Water," approved 1985.

4) GASB. Government Accounting Standards Board, 401 Merritt 7, P.O. Box 5116, Norwalk CT 06856-5116:

Statement 18.

5) U.S. Army Corps of Engineers, Publication Department, 2803 52nd Ave., Hyattville, Maryland 20781, 301-394-0081:

Engineering Manual 1110-2-1906 Appendix VII, Falling-Head Permeability Cylinder (1986).

6) U.S. Government Printing Office, Washington, D.C. 20402, Ph: 202-783-3238:

"Test Methods for Evaluating Solid Waste, Physical/Chemical ~~methods,~~ Methods," ~~EPA Publication~~ USEPA publication number EPA-530/SW-846 (Third Edition, 1986; Revision 6, January 2005), as amended by Update I ~~(November, 1990):~~ (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998), and IIIB (November 2004) (document number 955-001-00000-1).

b) This incorporation includes no later amendments or editions.

(Source: Amended at 30 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 811
STANDARDS FOR NEW SOLID WASTE LANDFILLS

SUBPART A: GENERAL STANDARDS FOR ALL LANDFILLS

Section
811.101 Scope and Applicability
811.102 Location Standards
811.103 Surface Water Drainage
811.104 Survey Controls
811.105 Compaction

811.106 Daily Cover
811.107 Operating Standards
811.108 Salvaging
811.109 Boundary Control
811.110 Closure and Written Closure Plan
811.111 Postclosure Maintenance
811.112 Recordkeeping Requirements for MSWLF Units

SUBPART B: INERT WASTE LANDFILLS

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SUBPART C: PUTRESCIBLE AND CHEMICAL WASTE LANDFILLS

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811.302 Facility Location
811.303 Design Period
811.304 Foundation and Mass Stability Analysis
811.305 Foundation Construction
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811.319 Groundwater Monitoring Programs
811.320 Groundwater Quality Standards
811.321 Waste Placement
811.322 Final Slope and Stabilization
811.323 Load Checking Program
811.324 Corrective Action Measures for MSWLF Units
811.325 Selection of remedy for MSWLF Units
811.326 Implementation of the corrective action program at MSWLF Units

SUBPART D: MANAGEMENT OF SPECIAL WASTES AT LANDFILLS

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811.406 Procedures for Excluding Regulated Hazardous Wastes

SUBPART E: CONSTRUCTION QUALITY ASSURANCE PROGRAMS

Section
811.501 Scope and Applicability
811.502 Duties and Qualifications of Key Personnel
811.503 Inspection Activities
811.504 Sampling Requirements
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SUBPART G: FINANCIAL ASSURANCE

Section
811.700 Scope, Applicability and Definitions
811.701 Upgrading Financial Assurance
811.702 Release of Financial Institution
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811.Appendix A Financial Assurance Forms

Illustration A	Trust Agreement
Illustration B	Certificate of Acknowledgment
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Illustration D	Performance Bond
Illustration E	Irrevocable Standby Letter of Credit
Illustration F	Certificate of Insurance for Closure and/or Postclosure Care
Illustration G	Operator's Bond Without Surety
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Illustration I	Letter from Chief Financial Officer

811.Appendix B Section-by-Section correlation between the Standards of the RCRA Subtitle D MSWLF regulations and the Board's nonhazardous waste landfill regulations.

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17 and 28.1 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 21, 21.1, 22, 22.17, 28.1, and 27].

SOURCE: Adopted in R88-7 at 14 Ill. Reg. 15861, effective September 18, 1990; amended in R92-19 at 17 Ill. Reg. 12413, effective July 19, 1993; amended in R93-10 at 18 Ill. Reg. 1308, effective January 13, 1994; expedited correction at 18 Ill. Reg. 7504, effective July 19, 1993; amended in R90-26 at 18 Ill. Reg. 12481, effective August 1, 1994; amended in R95-13 at 19 Ill. Reg. 12257, effective August 15, 1995; amended in R96-1 at 20 Ill. Reg. 12000, effective August 15, 1996; amended in R97-20 at 21 Ill. Reg.15831, effective November 25, 1997; amended in R98-9 at 22 Ill. Reg.11491, effective June 23, 1998; amended in R99-1 at 23 Ill. Reg. 2794, effective February 17, 1999; amended in R98-29 at 23 Ill. Reg.6880, effective July 1, 1999; amended in R04-5/R04-15 at 28 Ill. Reg. 9107, effective June 18, 2004; amended in R05-1 at 29 Ill. Reg. 5044, effective March 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL STANDARDS FOR ALL LANDFILLS

Section 811.107 Operating Standards

a) Phasing of Operations.

1) Waste must be placed in a manner and at such a rate that mass stability is provided during all phases of operation. Mass stability means that the mass of waste deposited will not undergo settling or slope failure that interrupts operations at the facility or causes damage to any of the various landfill operations or structures, such as the liner, leachate or drainage collection system, gas collection system, or monitoring system.

2) The phasing of operations at the facility must be designed in such a way as to allow the sequential construction, filling, and closure of discrete units or parts of units.

3) The operator must design and sequence the waste placement operation in each discrete unit or parts of units, in conjunction with the overall operations of the facility, so as to shorten the operational phase and allow wastes to be built up to the planned final grade.

b) Size and Slope of Working Face.

1) The working face of the unit must be no larger than is necessary, based on the terrain and equipment used in waste placement, to conduct operations in a safe and efficient manner.

2) The slopes of the working face area must be no steeper than two to one (horizontal to vertical) unless the waste is stable at steeper slopes.

c) Equipment.

Equipment must be maintained and available for use at the facility during all hours of operation, so as to achieve and maintain compliance with the requirements of this Part.

d) Utilities.

All utilities, including but no limited to heat, lights, power and communications equipment, necessary for safe operation in compliance with the requirements of this Part must be available at the facility at all times.

e) Maintenance.

The operator must maintain and operate all systems and related appurtenances and structures in a manner that facilitates proper operations in compliance with this Part.

f) Open Burning.

Open burning is prohibited, except in accordance with 35 Ill. Adm. Code 200 through 245.

g) Dust Control.

The operator must implement methods for controlling dust, so as to prevent wind dispersal of particulate matter.

h) Noise Control.

The facility must be designed, constructed, and maintained to minimize the level

of equipment noise audible outside the facility. The facility must not cause or contribute to a violation of 35 Ill. Adm. Code 900 through 905 or of Section 24 of the Act [415 ILCS 5/24].

i) Vector Control.

The operator must implement measures to control the population of disease and nuisance vectors.

j) Fire Protection.

The operator must institute fire protection measures including, but not limited to, maintaining a supply of water onsite and radio or telephone access to the nearest fire department.

k) Litter Control.

1) The operator must patrol the facility daily to check for litter accumulation. All litter must be collected and placed in the fill or in a secure, covered container for later disposal.

2) The facility must not accept solid waste from vehicles that do not utilize devices such as covers or tarpaulins to control litter, unless the nature of the solid waste load is such that it cannot cause any litter during its transportation to the facility.

l) Mud Tracking. The facility must implement methods, such as use of wheel washing units, to prevent tracking of mud by hauling vehicles onto public roadways.

m) Liquids Restrictions for MSWLF Units.

1) Bulk or noncontainerized liquid waste may not be placed in MSWLF units, unless one of the following conditions is true:

A) The waste is household waste other than septic waste;

B) The waste is leachate or gas condensate derived from the MSWLF unit and the MSWLF unit, whether it is a new or existing MSWLF unit or lateral expansion, is designed with a composite liner and leachate collection system that complies with the requirements of Sections 811.306 through 811.309; or

C) The Agency has issued an RD&D permit pursuant to 35 Ill. Adm. Code 813.112(a)(2) that allows the placement of noncontainerized liquids in the landfill, and that permit is in effect.

2) Containers holding liquid waste may not be placed in an MSWLF unit, unless one of the following conditions is true:

A) The container is a small container similar in size to that normally found in household waste;

B) The container is designed to hold liquids for use other than storage; or

C) The waste is household waste.

3) For purposes of this Section, the following definitions apply:

A) "Liquid waste" means any waste material that is determined to contain "free liquids," as defined by Method ~~9095~~ 9095B (Paint Filter Liquids Test) (Revision 2, November 2004), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," ~~(USEPA Pub. No.~~ USEPA publication number EPA-530/SW-846~~)~~, incorporated by reference in 35 Ill. Adm. Code 810.104.

B) "Gas condensate" means the liquid generated as a result of gas recovery processes at the MSWLF unit.

BOARD NOTE: Subsections (m)(1) through (m)(3) are derived from 40 CFR 258.28 ~~(2004)~~ (2005). Subsection (m)(1)(C) of this Section relating to RD&D permits is derived from 40 CFR 258.4(a)(2) ~~(2004)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

SUBPART G: FINANCIAL ASSURANCE

Section 811.710 Trust Fund

a) An owner or operator may satisfy the requirements of this Subpart G by establishing a trust fund ~~which~~ that conforms to the requirements of this Section and submitting an original signed duplicate of the trust agreement to the Agency.

b) The trustee ~~shall~~ must be an entity ~~which~~ that has the authority to act as a trustee and of whom either of the following is true:

1) ~~Whose~~ It is an entity whose trust operations are examined by the Illinois Commissioner of Banks and Trust Companies pursuant to the Illinois Banking Act ~~(Ill. Rev. Stat. 1991, ch. 17, pars. 301 et seq.~~ [205 ILCS 5~~/1 et seq.~~]~~)~~; or

2) ~~Who~~ It is an entity that complies with the Corporate Fiduciary Act ~~(Ill. Rev. Stat. 1991, ch. 17, pars. 1551-1 et seq.~~ [205 ILCS 620~~/1-1 et seq.])~~.

c) The trust agreement must be on the forms specified in Appendix A, Illustration A of this Part, and the trust agreement must be accompanied by a formal certification of acknowledgement, on the form specified in Appendix A, Illustration B of this Part.

d) Payments into the trust~~:~~.

1) For closure and post-closure care~~:~~.

A) The owner or operator ~~shall~~ must make a payment into the trust fund each year during the pay-in period.

B) The pay-in period is the number of years remaining until the assumed closure date.

C) Annual payments are determined by the following formula:

~~Annual payment = (CE-CV)/Y~~

$$\text{Annual payment} = \frac{CE - CV}{Y}$$

~~where~~Where the variables are defined as follows:

CE = Current cost estimate

CV = Current value of the trust fund

Y = Number of years remaining in the pay in period.

D) The owner or operator ~~shall~~ must make the first annual payment prior to the initial receipt of waste for disposal. The owner or operator ~~shall~~ must also, prior to such initial receipt of waste, submit to the Agency a receipt from the trustee for the first annual payment.

E) Subsequent annual payments must be made no later than 30 days after each anniversary of the first payment.

F) The owner or operator may accelerate payments into the trust fund,

or may deposit the full amount of the current cost estimate at the time the fund is established.

G) An owner or operator required to provide additional financial assurance for an increase in the cost estimate because of an amendment to this Subchapter i may provide such additional financial assurance pursuant to this subsection (d)(1)(G). The owner or operator may provide the increase by contributing to a new or existing trust fund pursuant to this Section. Subsection (d)(2) of this Section notwithstanding, the pay-in period for such additional financial assurance ~~shall~~ must be not less than three years.

2) For corrective action at MSWLF units~~:~~.

A) The owner or operator ~~shall~~ must make payments into the trust fund annually over one-half of the estimated length of the corrective action program in the case of corrective action for known releases. This period is referred to as the pay-in period.

B) The owner or operator ~~shall~~ must make the first payment into the trust fund equal to at least one-half of the current cost estimate for corrective action divided by the number of years in the corrective action pay-in period, as defined in subsection (d)(2)(A) of this ~~section~~ Section. The amount of subsequent payments must be determined by the following formula:

~~Next payment = (RB-CV)/Y~~

$$\text{Next payment} = \frac{RB - CV}{Y}$$

~~where~~Where the variables are defined as follows:

RB = Most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period)~~;~~

CV = Current value of the trust fund~~; and~~

Y = Number of years remaining in the pay-in period.

C) The owner or operator ~~shall~~ must make the initial payment into the

trust fund no later than 120 days after the remedy has been selected in accordance with the requirements of Section 811.325.

~~Board Note. Changes to subsection~~ BOARD NOTE: Subsection (d) of this Section ~~are~~ is partly derived from 40 CFR 258.74 (a)(2), (a)(4), and (a)(5) ~~(1992)~~ (2005).

e) The trustee ~~shall~~ must evaluate the trust fund annually, as of the day the trust was created or on such earlier date as may be provided in the agreement. The trustee ~~shall~~ must notify the owner or operator and the Agency of the value within 30 days after the evaluation date.

f) If the owner or operator of a MSWLF unit establishes a trust fund after having used one or more alternative mechanisms specified in this Subpart G, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to the specifications of this Section.

~~Board Note.~~ BOARD NOTE: Subsection (f) of this Section is derived from 40 CFR 258.74 (a)(6) ~~(1992)~~ (2005).

g) Release of excess funds~~:~~.

1) If the value of the financial assurance is greater than the total amount of the current cost estimate, the owner or operator may submit a written request to the Agency for a release of the amount in excess of the current cost estimate.

2) Within 60 days after receiving a request from the owner or operator for a release of funds, the Agency ~~shall~~ must instruct the trustee to the owner or operator to release such funds as the Agency specifies in writing to be in excess of the current cost estimate.

h) Reimbursement for closure, postclosure care, and corrective action expenses~~:~~.

1) After initiating closure or corrective action, an owner or operator, or any other person authorized to perform closure, ~~or~~ postclosure care, or corrective action, may request reimbursement for closure, ~~or~~ postclosure care, or corrective action expenditures, by submitting itemized bills to the Agency.

2) Within 60 days after receiving the itemized bills for closure, ~~or~~ postclosure care, ~~activities~~ or correction action activities, the Agency ~~shall~~ must determine whether the expenditures are in accordance with the closure, ~~or~~ postclosure care, or corrective action plan. The Agency ~~shall~~ must instruct the trustee to make reimbursement in such amounts as the

Agency specifies in writing as expenditures in accordance with the closure, ~~or~~ postclosure care, or corrective action plan.

3) If the Agency determines, based on such information as is available to it, that the cost of closure and postclosure care or corrective action will be greater than the value of the trust fund, it ~~shall~~ must withhold reimbursement of such amounts as it determines are necessary to preserve the fund in order to accomplish closure and postclosure care or corrective action until it determines that the owner or operator is no longer required to maintain financial assurance for closure and postclosure care or corrective action. In the event the fund is inadequate to pay all claims, the Agency ~~shall~~ must pay claims according to the following priorities:

A) Persons with whom the Agency has contracted to perform closure, ~~or~~ postclosure care, or corrective action activities (first priority);

B) Persons who have completed closure, ~~or~~ postclosure care, or corrective action authorized by the Agency (second priority);

C) Persons who have completed work ~~which~~ that furthered the closure, ~~or~~ postclosure care, or corrective action (third priority);

D) The owner or operator and related business entities (last priority).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

Section 811.716 Local Government Financial Test

A unit of local government owner or operator that satisfies the requirements of subsections (a) through (c) of this Section may demonstrate financial assurance up to the amount specified in subsection (d) of this Section.

a) Financial component.

1) The unit of local government owner or operator ~~shall~~ must satisfy subsection (a)(1)(A) or (a)(1)(B) of this Section, as applicable:

A) If the owner or operator has outstanding, rated, general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or guarantee, it must have a current rating of Aaa, Aa, A, or Baa, as issued by Moody's, or AAA, AA, A, or BBB, as issued by Standard and Poor's, on all such general obligation bonds; or

B) The owner or operator ~~shall~~ must satisfy each of the following financial ratios based on the owner or operator's most recent audited annual financial statement:

i) A ratio of cash plus marketable securities to total expenditures greater than or equal to 0.05; and

ii) A ratio of annual debt service to total expenditures less than or equal to 0.20.

2) The unit of local government owner or operator ~~shall~~ must prepare its financial statements in conformity with Generally Accepted Accounting Principles for governments and have its financial statements audited by an independent certified public accountant or the Comptroller of the State of Illinois pursuant to the Governmental Account Audit Act [50 ILCS 310].

3) A unit of local government is not eligible to assure its obligations under this Section if any of the following is true:

A) It is currently in default on any outstanding general obligation bonds;

B) It has any outstanding general obligation bonds rated lower than Baa as issued by Moody's or BBB as issued by Standard and Poor's;

C) It operated at a deficit equal to five percent or more of total annual revenue in each of the past two fiscal years; or

D) It receives an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent certified public accountant or the Comptroller of the State of Illinois pursuant to the Governmental Account Audit Act [50 ILCS 310] auditing its financial statement as required under subsection (a)(2) of this Section. However, the Agency ~~shall~~ must evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Agency deems the qualification insufficient to warrant disallowance of use of the test.

4) ~~The following terms~~ Terms used in this Section are defined as follows:

"Cash plus marketable securities" is all the cash plus marketable securities held by the unit of local government on the last day of a fiscal year, excluding cash and marketable securities designated to satisfy past obligations such as pensions.

"Debt service" is the amount of principal and interest due on a loan in a given time period, typically the current year.

"Deficit" equals total annual revenues minus total annual expenditures.

"Total revenues" include revenues from all taxes and fees but does not include the proceeds from borrowing or asset sales, excluding revenue from funds managed by a unit of local government on behalf of a specific third party.

"Total expenditures" include all expenditures excluding capital outlays and debt repayment.

b) Public notice component.

1) The unit of local government owner or operator ~~shall~~ must place a reference to the closure and post-closure care costs assured through the financial test into its next comprehensive annual financial report (CAFR) ~~after November 27, 1997~~, or prior to the initial receipt of waste at the facility, whichever is later.

2) Disclosure must include the nature and source of closure and post-closure care requirements, the reported liability at the balance sheet date, the estimated total closure and post-closure care cost remaining to be recognized, the percentage of landfill capacity used to date, and the estimated landfill life in years.

3) A reference to corrective action costs must be placed in the CAFR not later than 120 days after the corrective action remedy has been selected in accordance with the requirements of Sections 811.319(d) and 811.325.

4) For the first year the financial test is used to assure costs at a particular facility, the reference may instead be placed in the operating record until issuance of the next available CAFR if timing does not permit the reference to be incorporated into the most recently issued CAFR or budget.

5) For closure and post-closure costs, conformance with Government Accounting Standards Board Statement 18, incorporated by reference in 35 Ill. Adm. Code 810.104, assures compliance with this public notice component.

c) Recordkeeping and reporting requirements.

1) The unit of local government owner or operator must place the following items in the facility's operating record:

A) A letter signed by the unit of local government's chief financial

officer that provides the following information:

i) ~~Lists~~ It lists all the current cost estimates covered by a financial test, as described in subsection (d) of this Section;

ii) ~~Provides~~ It provides evidence and certifies that the unit of local government meets the conditions of subsections (a)(1), (a)(2), and (a)(3) of this Section; and

iii) ~~Certifies~~ It certifies that the unit of local government meets the conditions of subsections (b) and ~~(f)(4)~~ (d) of this Section.

B) The unit of local government's independently audited year-end financial statements for the latest fiscal year (except for a unit of local government where audits are required every two years, where unaudited statements may be used in years when audits are not required), including the unqualified opinion of the auditor who must be an independent certified public accountant (CPA) or the Comptroller of the State of Illinois pursuant to the Governmental Account Audit Act [50 ILCS 310].

C) A report to the unit of local government from the unit of local government's independent CPA or the Comptroller of the State of Illinois pursuant to the Governmental Account Audit Act [50 ILCS 310] based on performing an agreed upon procedures engagement relative to the financial ratios required by subsection (a)(1)(B) of this Section, if applicable, and the requirements of subsections (a)(2), (a)(3)(C), and (a)(3)(D) of this Section. The CPA or Comptroller's report should state the procedures performed and the CPA or Comptroller's findings; and

D) A copy of the comprehensive annual financial report (CAFR) used to comply with subsection (b) of this Section or certification that the requirements of General Accounting Standards Board Statement 18, incorporated by reference in Section 810.104, have been met.

2) The items required in subsection (c)(1) of this Section must be placed in the facility operating record as follows:

A) In the case of closure and post-closure care, ~~either~~ before November 27, 1997~~,~~ or prior to the initial receipt of waste at the facility, whichever is later; or

B) In the case of corrective action, not later than 120 days after the

corrective action remedy is selected in accordance with the requirements of Sections 811.319(d) and 811.325.

3) After the initial placement of the items in the facility operating record, the unit of local government owner or operator ~~shall~~ must update the information and place the updated information in the operating record within 180 days following the close of the owner or operator's fiscal year.

4) The unit of local government owner or operator is no longer required to meet the requirements of subsection (c) of this Section when either of the following occurs:

A) The owner or operator substitutes alternative financial assurance as specified in this Section; or

B) The owner or operator is released from the requirements of this Section in accordance with Section 811.326(g), 811.702(b), or 811.704(j) or (k)(6).

5) A unit of local government must satisfy the requirements of the financial test at the close of each fiscal year. If the unit of local government owner or operator no longer meets the requirements of the local government financial test it ~~shall~~ must, within 210 days following the close of the owner or operator's fiscal year, obtain alternative financial assurance that meets the requirements of this Subpart, place the required submissions for that assurance in the operating record, and notify the Agency that the owner or operator no longer meets the criteria of the financial test and that alternative assurance has been obtained.

6) The Agency, based on a reasonable belief that the unit of local government owner or operator may no longer meet the requirements of the local government financial test, may require additional reports of financial condition from the unit of local government at any time. If the Agency determines, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of the local government financial test, the unit of local government must provide alternative financial assurance in accordance with this Subpart.

d) Calculation of Costs to ~~be~~ Be Assured. The portion of the closure, post-closure, and corrective action costs that an owner or operator may assure under this Section is determined as follows:

1) If the unit of local government owner or operator does not assure other environmental obligations through a financial test, it may assure closure, post-closure, and corrective action costs that equal up to 43 percent of the unit of local government's total annual revenue.

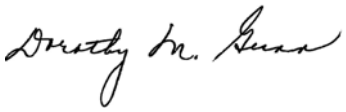
2) If the unit of local government assures other environmental obligations through a financial test, including those associated with UIC facilities under 35 Ill. Adm. Code 704.213, petroleum underground storage tank facilities under 40 CFR 280, PCB storage facilities under 40 CFR 761, and hazardous waste treatment, storage, and disposal facilities under 35 Ill. Adm. Code 724 and 725, it must add those costs to the closure, post-closure, and corrective action costs it seeks to assure under this Section. The total that may be assured must not exceed 43 percent of the unit of local government's total annual revenue.

3) The owner or operator must obtain an alternative financial assurance instrument for those costs that exceed the limits set in subsections (d)(1) and (d)(2) of this Section.

BOARD NOTE: Derived from 40 CFR 258.74(f)~~, added at 61 Fed. Reg. 60327 (Nov. 27, 1996)~~ (2005).

(Source: Amended at 30 Ill. Reg. _____, effective _____)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above Order on January 5, 2006, by a vote of 4-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board