ILLINOIS POLLUTION CONTROL BOARD
December 19, 1991

IN THE MATTER OF:	)	
	)	R91-13
RCRA UPDATE, USEPA REGULATIONS)	)	Identical in Substance
(1/1/91 - 6/30/91)	)	Rules)

PROPOSAL FOR PUBLIC COMMENT

PROPOSED ORDER OF THE BOARD (by J. Anderson):

By a separate Order, pursuant to Section 7.2 and 22.4(a) of the Environmental Protection Act (Act), the Board is proposing to amend the RCRA hazardous waste regulations. The amendments involve 35 Ill. Adm. Code 703, 720, 721, 722, 724, 725, 726 and 728. The Board will receive public comment for 45 days after the date of publication of the proposed rules in the Illinois Register.

The complete text of the Proposed rules is attached to this Order. Because of its length, the text will not appear in the Environmental Register, or the Opinions volumes. However, the text will be mailed to persons on the notice list, and will appear in the Illinois Register shortly.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Order was adopted on the 19th day of December, 1991, by a vote of 6-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

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

PART 703
RCRA PERMIT PROGRAM

SUBPART A: GENERAL PROVISIONS

SUBPART B: PROHIBITIONS

SUBPART C: AUTHORIZATION BY RULE AND INTERIM STATUS

SUBPART D: APPLICATIONS

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, 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, 1987; 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 October 1, 1991; amended in R91-13 at 16 Ill Reg. , effective

SUBPART C: AUTHORIZATION BY RULE AND INTERIM STATUS

Section 703.150 Application by Existing HWM Facilities and Interim Status Qualifications

a) The owner or operator of an existing HWM facility or of an HWM 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 submit Part A of the permit application to the Agency no later than the following times, whichever comes first:

1) Six months after the date of publication of regulations which first require the owner or operator to comply with standards in 35 Ill. Adm. Code 725 or 726; or

2) Thirty days after the date the owner or operator first becomes subject to the standards in 35 Ill. Adm. Code 725 or 726;

3) For generators which generate greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and treat,

store or dispose of these wastes on-site, by March 24, 1987.

BOARD NOTE: Derived from 40 CFR 270.10(e)(1) and 270.1(b) (1991), amended at 56 Fed. Reg. 32688, July 17, 1991.

b) ~~The owner or operator of an existing HWM facility may be required to submit Part B of the permit application at any time after the effective date of standards in 35 Ill. Adm. Code 724 applicable to any TSD unit at the facility. The Agency will notify the owner or operator that a Part B application is required, and set a date for receipt of the application, not less than six months after the date the notice is sent. The owner or operator my voluntarily submit a Part B application for all or part of the HWM facility at any time.~~ In granting a variance under subsection (c), the Board will consider whether there has been substantial confusion as to whether the owner or operator of such facilities were required to file a Part A application and whether such confusion was attributable to ambiguities in 35 Ill. Adm. Code 720, 721 or 725.

BOARD NOTE: Derived from 40 CFR 270.10(e)(2) (1990).

c) The time for filing Part A of the permit application may be extended only by a Board Order entered pursuant to a variance petition. ~~The Board will consider whether there has been substantial confusion as to whether the owner or operator of such facilities were required to file a Part A application and whether such confusion was attributable to ambiguities in 35 Ill. Adm. Code 720, 721 or 725.~~

BOARD NOTE: Derived from 40 CFR 270.10(e)(3) (1990).

d) The owner or operator of an existing HWM facility may be required to submit Part B of the permit application at any time after the effective date of standards in 35 Ill. Adm. Code 724 applicable to any TSD unit at the facility. The Agency will notify the owner or operator that a Part B application is required, and set a date for receipt of the application, not less than six months after the date the notice is sent. The owner or operator my voluntarily submit a Part B application for all or part of the HWM facility at any time. Notwithstanding the above, any owner or operator of an existing HWM facility must submit a Part B permit application in accordance with the dates specified in Section 703.157. Any owner or operator of a land disposal facility in existence on the effective date of

statutory or regulatory amendments which render the facility subject to the requirement to have a RCRA permit must submit a Part B application in accordance with the dates specified in Section 703.157.

BOARD NOTE: Derived from 40 CFR 270.10(e)(4) (1990).

e) Interim status may be terminated as provided in Section 703.157.

BOARD NOTE: Derived from 40 CFR 270.10(e)(5) (1990).

~~(Board Note: See 40 CFR 270.10(e).)~~

(Source: Amended at 16 Ill. Reg. , effective)

Section 703.155 Changes During Interim Status

a) Except as provided in subsection (b), 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:

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 may be added 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:

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 shall comply with the requirements of 35 Ill. Adm. Code 725.Subpart H (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 shall 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 shall notify the old owner or operator in writing that the old owner or operator no longer needs to comply with 35 Ill. Adm. Code 725.Subpart H 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 Resource Conservation and Recovery Act 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 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, changes listed under subsection (a) 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 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 purposes 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 owners or operators 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 Resource Conservation and Recovery Act 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 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 or containers, 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).

(Board Note: Derived from 40 CFR 270.72 ~~(1988), as amended at 54 Fed. Reg. 9607, March 7, 1989~~(1990, as amended 56 Fed. Reg. 7206, February 21, 1991.)

(Source: Amended at 16 Ill. Reg. , effective)

Section 703.157 Grounds for Termination of Interim Status

Interim status terminates when:

a) Final administrative disposition of a permit application is made; or

b) The owner or operator fails to furnish a requested Part B application on time, or to furnish the full information required by the Part B application, in which case the Agency shall notify the owner and operator of the termination of interim status following the procedures for a notice of intent to deny a permit pursuant to 35 Ill. Adm. Code 705.

c) For owners or operators of each land disposal facility which has been granted interim status prior to November 8, 1984, on November 8, 1985, unless:

1) The owner or operator submits a Part B application for a permit for such facility prior to that date; and

2) The owner or operator certifies that such facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

d) For owners or operators of each land disposal facility which is in existence on the effective date of statutory or regulatory amendments under the Resource Conservation and Recovery Act that render the facility subject to the requirement to have a RCRA permit and which is granted interim status, twelve months after the date on which the facility first becomes subject to such permit requirement unless the owner or operator of such facility:

1) Submits a Part B application for a RCRA permit for

such facility before the date 12 months after the date on which the facility first becomes subject to such permit requirement; and

2) Certifies that such facility is in compliance with all applicable groundwater monitoring and financial responsibility requirements.

e) For owners or operators of any land disposal unit that is granted authority to operate under Section 703.155(a)(1), (2) or (3), on the day 12 months after the effective date of such requirement, unless the owner or operator certifies that such unit is in compliance with all applicable groundwater monitoring and financial responsibility requirements. (35 Ill. Adm. Code 725.190 et seq. and 725.240 et seq.)

f) For owners and operators of each incinerator facility which achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1989, unless the owner or operator of the facility submits a Part B application for a RCRA permit for an incinerator facility by November 8, 1986.

g) For owners and operators of any facility (other than a land disposal or an incinerator facility) which achieved interim status prior to November 8, 1984, interim status terminates on November 8, 1992, unless the owner or operator of the facility submits a Part B application for a RCRA permit for the facility by November 8, 1988.

(Board Note: Derived from 40 CFR 270.10(e)(5) (~~1988~~1990) and 270.73 (~~1988), as amended at 54 Fed. Reg. 9607, March 7, 1989~~1990, as amended at 56 Fed. Reg. 7206, February 21, 1991.)

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART D: APPLICATIONS

Section 703.208 Specific Part B Information Requirements for Boilers and Industrial Furnaces

a) Trial burns.

1) General. Except as provided below, owners and operators that are 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 shall conduct a trial burn to demonstrate conformance with those standards and shall submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.232.

A) Under subsection (a)(2) - (5) and 35 Ill. Adm. Code 726.204 - 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 date in lieu of a trial burn, as prescribed in subsection (a)(6).

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 726.220 that automatically waive the DRE trial burn, the owner or operator of a boiler shall submit documentation that the boiler operates under the special operating requirements provided by 35 Ill. Adm. Code 726.220

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) that waive the DRE trial burn, the owner or operator shall submit:

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 35 Ill. Adm. Code 721.Appendix H, 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 analytical techniques specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods (incorporated by reference, see 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 subsection (a)(1)(B)(ii) 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) using modeling procedures prescribed by 35 Ill. Adm. Code 726.206(h). The Agency shall review the emission modeling conducted by the applicant to determine conformance with these procedures. The Agency shall 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) quantified in conformance with subsection (a)(2)(B)(iv) does not exceed the allowable ambient level established in 35 Ill. Adm. Code 726.Appendices D or E. The acceptable ambient concentration for emitted constituents for which a specific reference air concentration has not been established in 35 Ill. Adm. Code 726.Appendix D or risk-specific does has not been established in 35 Ill. Adm. Code 726.Appendix E is 0.1 micrograms per cubic meter, as noted in the footnote to 35 Ill. Adm. Code 726.Appendix D.

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 (c) that control metals emissions without requiring a trial burn, the owner or operator shall submit:

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 (e) 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) - (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 shall submit documentation supporting conformance with subsection (a)(2)(B) and (3).

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 by HCl and chlorine gas without requiring a trial burn, the owner or operator shall submit:

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 726.204-726.207 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 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 shall approve a permit application without a trial burn if he 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 shall be submitted:

A) For a waiver from any trial burn:

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.

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 which demonstrate compliance with the DRE performance standard in 35 Ill. Adm. Code 726.204 (a). This analysis should specify the constituents in

35 Ill. Adm. Code 721.Appendix H, 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. Owners and operators of industrial furnaces requesting an alternative HC limit under 35 Ill. Adm. Code 726.204(f) shall 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 fuel(s) and destruction of hydrocarbon emissions from nonfuel sources;

4) Trial burn plan to:

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

B) Identify, in conformance with Section 703.232(d), the types and concentrations of organic compounds listed in 35 Ill. Adm. Code 721.Appendix H 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.

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 shall 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 shall provide such other information that the Agency finds necessary to achieve the purposes of this subsection.

d) Automatic waste feed cutoff system. Owners and operators shall submit information describing the automatic waste feed cutoff system, including any pre-alarm systems that may be used.

e) Direct transfer. Owners and operators that use 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 shall submit information supporting conformance with the standards for direct transfer provided by 35 Ill. Adm. Code 726.211.

f) Residues. Owners and operators that claim that their residues are excluded from regulation under the provisions of 35 Ill. Adm. Code 726.212 shall submit information adequate to demonstrate conformance with those provisions.

(Source: Added at 16 Ill. Reg. , effective)

Section 703.211 Equipment

Except as otherwise provided in 35 Ill. Adm. Code 724.101, owners and operators of facilities which have equipment to which 35 Ill. Adm. Code 724.Subpart BB applies shall provide the following additional information:

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

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).

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

b) For facilities which cannot install a closed-vent system and control device to comply with 35 Ill. Adm. Code 724.Subpart BB on the effective date that facility becomes subject to this Subpart or 35 Ill. Adm. Code 724.Subpart BB, 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 which 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 shall 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, incorporated by reference in 35 Ill. Adm. Code 720.111, or other engineering texts

appproved by the Agency which 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 which 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.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART E: SHORT TERM AND PHASED PERMITS

Section 703.232 Permits for Boilers and Industrial Furnaces Burning Hazardous Waste

a) General. Owners and operators of new boilers and industrial furnaces (those not operating under the interim status standards of 35 Ill. Adm. Code 726.203) are subject to subsection (b) - (f). Boilers and industrial furnaces operating under the interim status standards of 35 Ill. Adm. Code 726.203 are subject to subsection (g).

b) Permit operating periods for new boilers and industrial furnaces. 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 shall establish in the Pretrial Burn Period of the permit conditions, including but not limited to allowable hazardous waste feed rates and operating conditions. The Agency shall 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 most be modified to reflect the extension according to Section 703.280 et seq.

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 726.204-726.207 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 shall 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 726.204-726.207 based on the Agency's engineering judgment.

2) Trial burn period. For the duration of the trial burn, the Agency shall establish conditions in the permit for the purposes of determining feasibility of compliance with the performance standards of 35 Ill. Adm. Code 726.204-726.207 and determining adequate operating conditions under 35 Ill. Adm. Code 726.202 (e). Applicants shall propose a trial burn plan, prepared under subsection (c), 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 shall establish the operating requirements most likely to ensure compliance with the performance standards of 35 Ill. Adm. Code 726.204-726.207 based on the Agency's engineering judgment.

B) Applicants shall 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 726.204-726.207. This statement should include, at a minimum, restrictions on the operating requirements provided by 35 Ill. Adm. Code 726.202 (e).

C) The Agency shall 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 726.204-726.207 based on the Agency's engineering judgment.

4) Final permit period. For the final period of operation the Agency shall 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 726.204-726.207. Based on the trial burn results, the Agency shall make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification must proceed according to Section 703.280 et seq.

c) Requirements for trial burn plans. The trial burn plan must include the following information. The Agency, in reviewing the trial burn plan, shall 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.

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

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

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

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

A) An identification of any hazardous organic

constituents listed in 35 Ill. Adm. Code 721.Appendix H that are present in the feed stream, except that the applicant need not analyze for constituents listed in App. H which would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis must be identified at the basis for this exclusion explained. The analysis ;must be conducted in accordance with analytical techniques specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods (incorporated by reference, see 35 Ill. Adm. Code 720.111 or their equivalent.)

B) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods or other equivalent.

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 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:

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 system(s); and

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 date(s), duration, quantity of hazardous waste to be burned, and other factors relevant to the Agency's decision under subsection (6)(2).

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 726.204-726.207.

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 and the criteria in subsection (b) (2).

d) Trial burn procedures.

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

2) The Agency shall approve a trial burn plan if the Agency finds that:

A) The trial burn is likely to determine whether the boiler or industrial furnace can meet the

performance standards of 35 Ill. Adm. Code 726.104-726.107.

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

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

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

3) The applicant shall 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). The Agency shall, 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.

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

5) All submissions required by this subsection 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 shall 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,m for hazardous waste containing or derived from wastes listed in 35 Ill. Adm. Code 721.Subpart D, the hazardous waste organic constituent(s) identified in 35 Ill. Adm. Code

721.Appendix G 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 shall 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):

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 (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-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/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/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/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 - 726.207 and to establish the operating conditions required by 35 Ill. Adm. Code 726.204 - 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 - 726.207 and of determining adequate operating conditions under 35 Ill. Adm. Code 726.203, applicants owning or operating existing boilers or industrial furnaces operated under the interim status standards of 35 Ill. Adm. Code 726.203 shall either prepare and submit a trial burn plan and perform a trial burn in accordance with the requirements of the Section or submit other information as specified in Section 703.208(a)(6). Applicants who submit a trial burn plan and receive approval before submission of the part B permit application shall complete the trial burn and submit the results specified in subsection (f) 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 shall 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.

(Source: Added at 16 Ill. Reg. , effective)

SUBPART G: CHANGES TO PERMITS

Section 703.280 Permit Modification at the Request of the Permittee

a) Class 1 modifications. See Section 703.281.

b) Class 2 modifications. See Section 703.282.

c) Class 3 modifications. See Section 703.283.

d), Other modifications.

1) In the case of modifications not explicitly listed in Appendix A, the permittee may submit a Class 3 modification request to the Agency, or the permittee may request a determination by the Agency that the modification be reviewed and approved as a Class 1 or Class 2 modification. If the permittee requests that the modification be classified as a Class 1 or 2 modification, the permittee shall provide the Agency with the necessary information to support the requested classification.

2) The Agency shall make the determination described in subsection (d)(1) a promptly as practicable. In determining the appropriate class for a specific modification, the Agency shall consider the similarity of the modification to other modifications codified in Appendix A and the following criteria:

A) Class 1 modification apply to minor changes that keep the permit current with routine changes to the facility or its operation. These changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment. In the case of Class 1 modifications, the Agency may require prior approval.

B) Class 2 modifications apply to changes that are necessary to enable a permittee to respond, in a timely manner, to

i) Common variations in the types and quantities of the wastes managed under the facility permit,

ii) Technological advances, and

iii) Changes necessary to comply with new

regulations, where these changes can be implemented without substantially changing design specifications or management practices in the permit.

C) Class 3 modifications substantially alter the facility or its operation.

e) Temporary authorizations.

1) Upon request of the permittee, the Agency shall, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection. Temporary authorizations have a term of not more than 180 days.

2) Procedures.

A) The permittee may request a temporary authorization for:

i) Any Class 2 modification meeting the criteria in subsection (e)(3)(B), and

ii) Any Class 3 modification that meets the criteria in subsection (e)(3)(B)(i); or that meets the criteria in subsection (e)(3)(B)(iii) through (v) and provides improved management or treatment of a hazardous waste already listed in the facility permit.

B) The temporary authorization request must include:

i) A description of the activities to be conducted under the temporary authorization;

ii) An explanation of why the temporary authorization is necessary; and

iii) Sufficient information to ensure compliance with 35 Ill. Adm. Code 724 standards.

C) The permittee shall send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the Agency and to appropriate units of State and local governments as specified in 35 Ill. Adm. Code 705.163(a)(5).

This notification must be made within seven days after submission of the authorization request.

3) The Agency shall approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the Agency shall find:

   A) The authorized activities are in compliance with the standards of 35 Ill. Adm. Code 724.

   B) The temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request:

      i) To facilitate timely implementation of closure or corrective action activities;

      ii) To allow treatment or storage in tanks or containers of restricted wastes in accordance with 35 Ill. Adm.Code 728;

      iii) To prevent disruption of ongoing waste management activities;

      iv) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or

      v) To facilitate other changes to protect human health and the environment.

4) A temporary authorization shall be reissued for one additional term of up to 180 days provided that the permittee has requested a Class 2 or 3 permit modification for the activity covered in the temporary authorization, and:

   A) The reissued temporary authorization constitutes the Agency's decision on a Class 2 permit modification in accordance with Section 703.282(f)(1)(D) or (f)(2)(D), or

   B) The Agency determines that the reissued temporary authorization involving a Class 3 permit modification request is warranted to allow the authorized activities to continue while the modification procedures of 35 Ill. Adm. Code 703.283 are conducted.

f) Public notice and appeals of permit modification decisions.

1) The Agency shall notify persons on the facility mailing list and appropriate units of State and local government within 10 days of any decision to grant or deny a Class 2 or 3 permit modification request. The Agency shall also notify such persons within 10 days after an automatic authorization for a Class 2 modification goes into effect under Section 703.282(f)(3) or (f)(5).

2) The Agency's decision to grant or deny a Class 2 or 3 permit modification request may be appealed under the permit appeal procedures of 35 Ill. Adm. Code 705.212.

3) An automatic authorization that goes into effect under Section 703.282(f)(3) or (f)(5) may be appealed under the permit appeal procedures of 35 Ill. Adm. Code 705.212; however, the permittee may continue to conduct the activities pursuant to the automatic authorization until the Board enters a final order on the appeal notwithstanding the provisions of 35 Ill. Adm. Code 705.204.

g) Newly ~~listed or identified wastes~~regulated wastes and units.

1) The permittee is authorized to continue to manage wastes listed or identified as hazardous under 35 Ill. Adm. Code 721 ~~if the permittee~~, or to continue to manage hazardous waste in units newly regulated as hazardous waste management units, if:

A) ~~Was~~The unit was in existence as a hazardous waste facility with respect to the newly listed or characterized waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the waste, or regulating the unit;

B) ~~Submits~~The permittee submits a Class 1 modification request on or before the date on which the waste becomes subject to the new requirements;

C) ~~Is~~The permittee is in compliance with the applicable standards of 35 Ill. Adm. Code 725 and 726;

D) ~~In the case of Classes 2 and 3 modifications, t~~The permittee also submits a complete ~~permit~~ class 2 or 3 modification request within 180 days after the effective date of the rule listing or identifying the waste, or subjecting the unit to management standards under 35 Ill. Adm. Code 724, 725 or 726; and

E) In the case of land disposal units, the permittee certifies that such unit is in compliance with all applicable requirements of 35 Ill. Adm. Code 725 for groundwater monitoring and financial responsibility requirements on the date 12 months after the effective date of the rule identifying or listing the waste as hazardous, or regulating the unit as a hazardous waste management unit. If the owner or operator fails to ~~clarify~~certify compliance with all these requirements, the owner or operator loses authority to operate under this Section.

2) New wastes or units added to a facility's permit under this subsection do not constitute expansions for the purpose of the 25 percent capacity expansion limit for Class 2 modifications.

h) Permit modification list. The Agency shall maintain a list of all approved permit modifications and shall publish a notice once a year in a State-wide newspaper that an updated list is available for review.

~~(~~Board Note: Derived from 40 CFR 270.42(d) through (h)~~, as amended at 53 Fed. Reg. 37934, September 28, 1988.)~~(1990), as amended at 56 Fed. Reg. 7206, February 21, 1991, and at 56 Fed. Reg. 32688, July 17, 1991.

(Source: Amended at 16 Ill. Reg. , effective)

Section 703.283 Class 3 Modifications

a) For Class 3 modifications, listed in Appendix A, the permittee shall submit a modification request to the Agency which:

1) Describes the exact change to be made to the permit conditions and supporting documents referenced by the permit;

2) Identifies that the modification is a Class 3 modification;

3) Explains why the modification is needed; and

4) Provides the applicable information required by Section 703.181 through ~~703.185~~703.187, 703.201 through ~~703.207~~703.209, 703.221 through 703.225, ~~and~~ 703.230 and 703.232.

b) The permittee shall send a notice of the modification request to all persons on the facility mailing list maintained by the Agency and to the appropriate units of State and local government as specified in 35 Ill. Adm. Code 705.163(a)(5) and shall publish this notice in a newspaper of general circulation in the county in which the facility is located. This notice must be mailed and published within 7 days before or after the date of submission of the modification request, and the permittee shall provide to the Agency evidence of the mailing and publication. The notice must include:

1) Announcement of a 60-day comment period, in accordance with subsection (e), and the name and address of an Agency contact to whom comments must be sent;

2) Announcement of the date, time and place for a public meeting held in accordance with subsection (d);

3) Name and telephone number of the permittee's contact person;

4) Name and telephone number of an Agency contact person;

5) Locations where copies of the modification request and any supporting documents can be viewed and copied; and

6) The following statement: "The permittee's compliance history during the life of the permit being modified is available from the Agency contact person."

c) The permittee shall place a copy of the permit modification request and supporting documents in a location accessible to the public in the vicinity of the permitted facility.

d) The permittee shall hold a public meeting no earlier than 15 days after the publication of the notice required in subsection (b) and no later than 15 days

before the close of the 60-day comment period. The meeting must be held to the extent practicable in the vicinity of the permitted facility.

e) the public shall be provided 60 days to comment on the modification request. The comment period will begin on the date the permittee publishes the notice in the local newspaper. Comments must be submitted to the Agency contact identified in the public notice.

f) After the conclusion of the 60-day comment period, the Agency shall grant or deny the permit modification request according to the permit modification procedures of 35 Ill. Adm. Code 705. In addition, the Agency shall consider and respond to all significant written comments received during the 60-day comment period.

(Source: Amended at 16 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. BOARD NOTE: "*" indicates that prior Agency approval is required.
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.

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.

2 c. Other changes.

2. Changes to analytical quality assurance/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.

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 below).

1* f. Tanks used for neutralization, dewatering, phase separation or component separation, with prior approval of the Agency.

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% 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% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a).

1 c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, 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.

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, or are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108. 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% 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% 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 or to treat wastes to satisfy (in whole or in part) the

standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, 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% 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, 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, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108. 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).

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 or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, and provided that the unit meets the minimum technological requirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105. 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), incorporated by reference in 35 Ill. Adm. Code 728.105, 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).

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% increase in the facility's waste pile storage or treatment capacity.

2 b. Resulting in up to 25% 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.

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, run-off control or final cover system.

2 4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off 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 or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, and provided that the landfill unit meets the minimum technological reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105. 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 reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105, 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).

K. Land Treatment

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

2 2. Modification of run-on control system.

3 3. Modify run-off 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 resulting in a change to the location, depth, number of sampling points or 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, number of sampling points, or that 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% any of the following limits authorized in the permit: A thermal feed rate limit, ~~a waste feed rate limit or an organic chlorine 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 shall 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% any of the following limits authorized in the permit: A thermal feed rate limit, ~~a waste feed limit or an organic chlorine 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 shall 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 particulates 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 shall 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, ~~or~~ 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 shall 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. ~~Incineration of~~Burning different wastes:

3 a. If the waste contains a POHC that is more difficult to ~~incinerate~~burn than authorized by the permit or if ~~incineration~~burning of the waste requires compliance with different regulatory performance standards than specified in the permit, the Agency shall 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 ~~incinerate~~burn than authorized by the permit and if ~~incineration~~burning of the waste does not require compliance with different regulatory performance standards than specified in the permit.

BOARD 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 ~~incineration~~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 alternate type of nonhazardous waste fuel that is not specified in the permit.

BOARD NOTE: Derived from 40 CFR 270.42, Appendix I (1990), as amended at 56 Fed. Reg. 7206, February 21, 1991.

(Source: Amended at 16 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

SUBPART B: DEFINITIONS

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-19 at 7 Ill. Reg. 14015, effective Oct. 12, 1983; amended in R84-9, 53 PCB 131 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 October 1, 1991; amended in R91-13 at 16 Ill. Reg. , effective

SUBPART B: DEFINITIONS

Section 720.110 Definitions

When used in 35 Ill. Adm. Code 720 through ~~725~~726 and 728 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.

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

"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 U.S. 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 tank(s), 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.

"Board" means the Illinois Pollution Control Board.

"Boiler" means an enclosed device using controlled flame combustion and having the following 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 section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (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 section(s) 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 shall 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

The unit is one which 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 which 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.

"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 which 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".

"Designated facility" means a hazardous waste treatment, storage or disposal facility,

Which:

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

Has received a RCRA permit from USEPA pursuant to 40 CFR 124 and 270 (1989);

Has received a RCRA permit from a state authorized by USEPA pursuant to 40 CFR 271 (1989); or

Is regulated under 35 Ill. Adm. Code 721.106(c)(2) or 266.Subpart F; and

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

If a waste is destined to a facility in a state, other than Illinois, which 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.

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

"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.

"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 run-on to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device which:

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

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

"EPA" or "USEPA " means United States Environmental Protection Agency.

"EPA hazardous waste number" or "USEPA hazardous waste number" means the number assigned by EPA 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.

"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" 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 which 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

A continuous on-site, physical construction program had begun or the owner or operator had entered into contractual obligations -- which could not be cancelled 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 that is in

operation, or for which installation has 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

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

The owner or operator has entered into contractual obligations -- which 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.

"Facility" means 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).

"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.

"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.

"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 which readily separate from the solid portion of a waste under ambient temperature and pressure.

"Generator" means any person, by site, whose act or process produce 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 which caused the hazardous waste to be listed in 35 Ill. Adm. Code 721.Subpart D, or a constituent listed in of 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 which is not operated after November 19, 1980. (See also "active portion" and "closed portion".)

"Incinerator" means any enclosed device ~~using controlled flame combustion which is neither a "boiler" nor an "industrial furnace".~~that:

Uses controlled flame combustion and neither:

Meets the criteria for classification as a boiler, sludge dryer or carbon regeneration unit, nor

Is listed as an industrial furnace; or

Meets the definition of infrared incinerator or plasma arc incinerator.

"Incompatible waste" means a hazardous waste which is suitable for:

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 35 Ill. Adm. Code 725.Appendix E for examples.)

"Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use ~~controlled flame devices~~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 3%, 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%, as generated.

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 which uses electric powered resistance heaters as a source of radiant heat 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 which 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 which 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.

"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, an underground mine or a cave.

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

"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, which 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 originated and signed by the generator which contains the information required by 35 Ill. Adm. Code 722.Subpart B.

"Manifest document number" means 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.

"Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which 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 which is not a container, tank, tank system, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 35 Ill. Adm. Code 730, or a unit eligible for a research, development and demonstration permit under 35 Ill. Adm. Code 703.231.

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

"New hazardous waste management facility" or "new facility" means a facility which 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 commences 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 which 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 which he 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 who 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 which 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.

"Pile" means any noncontainerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage.

"Plasma arc incinerator" means any enclosed device which uses a high intensity electrical discharge or arc as a source of heat 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.

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

"Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) which 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" means Standard Industrial Code as defined in Standard Industrial Classification Manual, incorporated by reference in Section 720.111.

"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 which is used to dehydrate sludge and which has a total thermal input, excluding the heating value of the sludge itself, of 2500 Btu/lb or less of sludge treated on a wet weight basis.

"Small Quantity Generator" means a generator which generates less than 1000 kg of hazardous waste in a calendar month.

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

"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.

"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.

"Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, manmade excavation or diked area formed primarily of earthen materials (although it may be lined with manmade materials) which 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 which is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

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

"Thermal treatment" means the treatment of hazardous waste in a device which 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".)

"Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which 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:

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

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. Or,

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 such waste, or so as to recover energy or material resources from the waste or so as to render such 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.

"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.

"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.

"Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

"USEPA" means 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 which:

Is part of a wastewater treatment facility which 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

Receives and treats or stores an influent wastewater which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103; and

Meets the definition of tank or tank system in this Section.

"Water (bulk shipment)" means the bulk transportation of hazardous waste which 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 Ill. Reg. , effective)

Section 720.111 References

a) The following publications are incorporated by reference:

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

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.

API. Available from the American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005, (202) 682-8000:

"Guide for Inspection of Refinery Equipment, Chapter XIII, Atmospheric and Low Pressure Storage Tanks," 4th Edition, 1981, reaffirmed December, 1987.

"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, Second Edition, December, 1987.

"Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, Fourth Edition, November, 1987.

APTI. Available from the Air and Waste Management Association, Box 2861, Pittsburgh, PA 15230, (412) 232-3444:

APTI Course 415: Control of Gaseous Emissions, EPA Publication EPA-450/2-81-005,

December, 1981.

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. 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. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, (215) 299-5400:

ASTM C94-90, Standard Specification for Ready-Mixed Concrete, approved March 30, 1990.

ASTM D93-85, Standard Test Methods for Flash Point by Pensky-Martens Closed Testerapproved October 25, 1985.

ASTM D1946-90, Standard Practice for Analysis of Reformed Gas by Gas Chromatography, Approved March 30, 1990.

ASTM D2267-88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, approved November 17, 1988.

ASTM D2382-88, Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method), approved October 31, 1988.

ASTM D2879-86, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved October 31, 1986.

ASTM D3828-87, Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, approved December 14, 1988.

ASTM E168-88, Standard Practices for General Techniques of Infrared Quantitative Analysis, approved May 27, 1988.

ASTM E169-87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, approved February 1, 1987.

ASTM E260-85, Standard Practice for Packed Column Gas Chromatography, approved June 28, 1985.

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783-3238:

Standard Industrial Classification Manual (1972), and 1977 Supplement, republished in 1983

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 RP0285-85, approved March, 1985.

NFPA. Available from the National Fire Protection Association, Batterymarch Park, Boston, MA 02269, (617) 770-3000 or (800) 344-3555:

"Flammable and Combustible Liquids Code" NFPA 30, issued July 17, 1987. Also available from ANSI.

NTIS. Available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4600:

"Generic Quality Assurance Project Plan for Land Disposal Restrictions Program", EPA/530-SW-87-011, March 15, 1987. (Document number PB 88-170766.)

"Guidance on Air Quality Models", Revised 1986. (Document number PB86-245-248 (Guideline) and PB88-150-958 (Supplement)).

"Methods for Chemical Analysis of Water and

Wastes", Third Edition, March, 1983. (Document number PB 84-128677)

"Methods Manual for Compliance with BIF Regulations", December, 1990. (Document number PB91-120-006)

"Petitions to Delist Hazardous Wastes -- A Guidance Manual", EPA/530-SW-85-003, April, 1985. (Document Number PB 85-194488

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities", EPA-530/SW-611, 1977. (Document number PB 84-174820)

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources", August, 1988 (Document number PB89-159396).

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication number SW-846 (Second Edition, 1982 as amended by Update I (April, 1984) and Update II (April, 1985)) (Document number PB 87-120291)

STI. Available from the Steel Tank Institute, 728 Anthony Trail, Northbrook, IL 60062, (312) 498-1980:

"Standard for Dual Wall Underground Steel Storage Tanks" (1986).

USEPA. 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, August, 1987.

USEPA. Available from USEPA, Number F-90-WPWF-FFFFF, Room M2427, 401 M Street SW, Washington, D.C. 20460, (202) 475-9327:

"Test Method 8290: Procedures for the Detection and Measurement of PCDDs and PCDFs", EPA/530-SW-91-019 (January, 1991)

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, Appendix B (~~1990~~1991)

40 CFR 51.100(ii) (1991)

40 CFR 60 (~~1990~~1991)

40 CFR 61, Subpart V (~~1990~~1991)

40 CFR 136 (~~1990~~1991)

40 CFR 142 (~~1990~~1991)

40 CFR 220 (~~1990~~1991)

40 CFR 260.20 (~~1990~~1991)

40 CFR 264 (~~1990~~1991)

40 CFR 302.4, 302.5 and 302.6 (~~1990~~1991)

40 CFR 761 (~~1990~~1991)

c) Federal Statutes

Section 3004 of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as amended through December 31, 1987.

d) This Section incorporates no later editions or amendments.

(Source: Amended at 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

SUBPART A: GENERAL PROVISIONS

SUBPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

SUBPART D: LISTS OF HAZARDOUS WASTE

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB 31, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 PCB 247, 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 October 1, 1991; amended in R91-13 at 16 Ill. Reg. , effective

SUBPART A: GENERAL PROVISIONS

Section 721.102 Definition of Solid Waste

a) Solid waste.

1) A solid waste is any discarded material that is not excluded by Section 721.104(a) or that is not excluded pursuant to 35 Ill. Adm. Code 720.130 and 720.131.

2) A discarded material is any material which is:

A) Abandoned, as explained in subsection (b); or

B) Recycled, as explained in subsection (c); or

C) Considered inherently waste-like, as explained in subsection (d).

b) Materials are solid waste if they are abandoned by being:

1) Disposed of; or

2) Burned or incinerated; or

3) Accumulated, stored or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned or incinerated.

c) Materials are solid wastes if they are recycled -- or accumulated, stored or treated before recycling -- as specified in subsections (c)(1) through (c)(4) if they are:

1) Used in a manner constituting disposal.

A) Materials noted with a "yes" in column 1 of table in Appendix Z are solid wastes when they are:

i) Applied to or placed on the land in a manner that constitutes disposal; or

ii) Used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).

B) However, commercial chemical products listed in Section 721.133 are not solid wastes if they are applied to the land and that is

their ordinary manner of use.

2) Burned for energy recovery.

B) Materials noted with a "yes" in column 2 of table in Appendix Z are solid wastes when they are:

i) burned to recover energy;

ii) Used to produce a fuel or are otherwise contained in fuels (in which case the fuel itself remains a solid waste);

iii) Contained in fuels (in which case the fuel itself remains a solid waste).

B) However, commercial chemical products listed in Section 721.133 are not solid wastes if they are themselves fuels.

3) Reclaimed. Materials noted with a "yes" in column 3 of table in Appendix Z are solid wastes when reclaimed.

4) Accumulated speculatively. Materials noted with "yes" in column 4 of table in Appendix Z are solid wastes when accumulated speculatively.

d) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:

1) Hazardous waste numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026 and F028.

2) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in Subparts C or D, except for brominated material which meets the following criteria:

A) The material must contain a bromine concentration of at least 45%; and

B) The material must contain less than a total of 1% of toxic organic compounds listed in Appendix H; and

C) The material is processed continually on-site in the halogen acid furnace via direct

conveyance (hard piping).

~~2~~3) The following criteria are used to add wastes to the list:

a) Disposal method or toxicity.

i) The materials are ordinarily disposed of, burned or incinerated; or

ii) The materials contain toxic constituents listed in Appendix H and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

B) The material may pose a substantial hazard to human health and the environment when recycled.

e) Materials that are not solid waste when recycled.

1) Materials are not solid wastes when they can be shown to be recycled by being:

A) Used or reused as ingredients in an industrial process to make a product, provided the materials are not being reclaimed; or

B) Used or reused as effective substitutes for commercial products; or

C) Returned to the original process from which they are generated, without first being reclaimed. The materials must be returned as a substitute for raw materials feedstock, and the process must use raw materials as principal feedstocks.

2) The following materials are solid wastes, even if the recycling involves use, reuse or return to the original process (described in subsections (e)(1)(A)-(C):

A) Materials used in a manner constituting disposal, or used to produce products that are applied to the land; or

B) Materials burned for energy recovery, used to produce a fuel or contained in fuels; or

C) Materials accumulated speculatively; or

D) Materials listed in subsection (d)(1).

f) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing Subtitle C of the Resource Conservation Recovery Act or Section 21 of the Environmental Protection Act who raise a claim that a certain material is not a solid waste, or is conditionally exempt from regulation must demonstrate that there is a known market or disposition for the material, and that they meet the terms of the exclusion or exemption. In doing so, they must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste, or is exempt from regulation. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(Source: Amended at 16 Ill. Reg. , effective)

Section 721.103 Definition of Hazardous Waste

a) A solid waste, as defined in Section 721.102, is a hazardous waste if:

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. Except that any mixture of a waste from the extraction, beneficiation or processing of ores or minerals excluded under Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under Subpart C 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 it continues to exhibit any of the characteristics exhibited by the non-excluded

wastes prior to mixture. Further, for the purposes of applying the EP toxicity (extraction procedure 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 and has not been excluded from the lists in Subpart D under 35 Ill. Adm. Code 720.120 and 720.122.

C) It is a mixture of a solid waste and a hazardous waste that is listed in Subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C, or unless the solid waste: is excluded from regulation under Section 721.104(b)(7); and, the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C for which the hazardous waste listed in Subpart D was listed.

D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under 35 Ill. Adm. Code 720.120 and 720.122; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D are not hazardous wastes (except by application of subsection (a)(2)(A) or (B)) if the generator can demonstrate 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 which have eliminated the discharge of wastewater) and;

i) One or more of the following spent solvents listed in Section 721.131 - carbon tetrachloride, tetrachloro ethylene, 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 pre-treatment system does not exceed 1 part per million; or

ii) One or more of the following spent solvents listed in Section 721.131 - methylene chloride, 1,1,1 - trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chloro fluorocarbon 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 pre-treatment system does not exceed 25 parts per million; or

iii) One of the following wastes listed in Section 721.132 - heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or

iv) A discharged 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 rawmaterials 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; or

v) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D, 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 pre-treatment 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 pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.

b) A solid waste which is not excluded from regulation under subsection (a)(1) becomes a hazardous waste when any of the following events occur:

1) In the case of a waste listed in Subpart D, when the waste first meets the listing description set forth in Subpart D.

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 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.

c) Unless and until it meets the criteria of subsection (d):

1) A hazardous waste will remain a hazardous waste.

2) Specific inclusions and exclusions

A) Except as otherwise provided in subsection (c)(2)(B), 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.)

B) 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;

i) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332) (Standard Industrial Codes, as defined and incorporated by reference in 35 Ill. Adm. Code 720.110 and 720.111).

ii) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(E), (F), (G)~~,~~ or (H)~~ or (I)~~.

d) Any solid waste described in subsection (c) 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. (However, wastes which 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 which is a listed waste under Subpart D, contains a waste listed under Subpart D or is derived from a waste listed in Subpart D, it also has been excluded from subsection (c) under 35 Ill. Adm. Code 720.120 and 720.122.

(Source: Amended at 16 Ill. Reg. , effective)

Section 721.104 Exclusions

a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this Part:

1) Sewage:

A) Domestic sewage; and

B) Any mixture of domestic sewage and other waste that passes through a sewer system to publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

2) Industrial wastewater discharges that are point source discharges with 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, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)

5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless 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:

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 twelve 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 are reclaimed and reused for their original intended purpose; and

B) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.

10) When used as a fuel, coke and coal tar from the iron and steel industry that contains or is produced from decanter tank tar sludge, USEPA hazardous waste K087. The process of producing coke and coal tar from such decanter tank tar sludge in a coke oven is likewise excluded from regulation.

b) Solid wastes which 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 shall not be deemed to be treating, storing, disposing of or otherwise

managing hazardous wastes for the purposes of regulation under this Part, if such facility:

A) Receives and burns only:

i) Household waste (from single and multiple dwellings, hotels, motels and other residential sources) and

ii) Solid waste from commercial or industrial sources that does not contain hazardous waste; and

B) Such 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.

2) Solid wastes generated by any of the following and which are returned to the soil as fertilizers:

A) The growing and harvesting of agricultural crops.

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 which fail the test for the toxicity characteristic (Section 721.124 and Appendix B) because chromium is present or are listed in Subpart D due to the presence of chromium, which do not fail the test for the toxicity characteristic for any other constituent or

are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and

ii) The waste is generated from an industrial process which 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) Specific wastes which meet the standard in subsections (b)(6)(A)(i), (ii) and (iii) (so long as they do not fail the test for the characteristic of EP toxicity, and do not fail the test for any other characteristic) are

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.

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~~,~~)~~,~~ ~~including~~ 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. For purposes of this subsection, 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)/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. For the purposes of this subsection,

solid waste from the processing of ores and minerals ~~will~~ includes only the following wastes:

A) Slag from primary copper processing;

B) Slag from primary lead processing;

C) Red and brown muds from bauxite refining;

D) Phosphogypsum from phosphoric acid production;

E) Slag from elemental phosphorus production;

F) Gasifier ash from coal gasification;

G) Process wastewater from coal gasification;

H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;

I) Slag tailings from primary copper processing;

J) Fluorogypsum from hydrofluoric acid production;

K) Process wastewater from hydrofluoric acid production;

L) Air pollution control dust/sludge from iron blast furnaces;

M) Iron blast furnace slag;

N) Treated residue from roasting/leaching of chrome ore;

O) Process wastewater from primary magnesium processing by the anhydrous process;

P) Process wastewater from phosphoric acid production;

Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;

R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;

S) Chloride processing waste solids from titanium tetrachloride production; and,

T) Slag from primary zinc smelting.

8) Cement kiln dust waste, except as provided by 35 Ill. Adm. Code 266.212 for facilities that burn or process hazardous waste.

9) Solid waste which consists of discarded wood or wood products which fails the test for the toxicity characteristic solely for arsenic and which is not a hazardous waste for any other reason or reasons if the waste is generated by persons who 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 are subject to corrective action regulations under 35 Ill. Adm. Code 731.

11) ~~G~~Injected groundwater that that is hazardous only because it exhibits the toxicity characteristic (USEPA hazardous waste codes D018 through D024 only) in Section 721.124 that is reinjected ~~or reinfiltrated~~through an underground injection well pursuant to ~~existing~~free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals ~~or~~, petroleum bulk plants ~~handling crude petroleum or intermediate products of petroleum refining until March 25, 1991.~~, petroleum pipelines and petroleum spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such at petroleum refineries, marketing terminals and bulk plants, until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if:

A) Operations are performed pursuant to a written State agreement that includes a provision to assess the groundwater and the need for further remediation once the free phase recovery is completed; and

B) A copy of the written agreement has been

submitted to:

Characteristics Section (OS-333)
USEPA
401 M Street, SW
Washington, D.C. 20460

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, which use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

c) Hazardous wastes which are exempted from certain regulations. A hazardous waste which 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, 705 and 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), a sample of solid waste or a sample of water, soil or air, which 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, 705 and 722 through 728. The sample qualifies when:

A) The sample is being transported to a laboratory for the purpose of testing; or

B) The sample is being transported back to the sample collector after testing; or

C) The sample is being stored by the sample collector before transport to a laboratory for testing; or

D) The sample is being stored in a laboratory before testing; or

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) and (B), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:

A) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS) or any other applicable shipping requirements; or

B) Comply with the following requirements if the sample collector determines that DOT, 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.

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).

e) Treatability study samples.

1) Except as is provided in subsection (e)(2), persons who generate or collect 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; or,

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) is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

A) The generator or sample collector uses (in "treatability studies") no more than 1000 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste or 250 kg of soils, water or debris contaminated with acute hazardous waste for each process being evaluated for each generated wastestream; and

B) The mass of each shipment does not exceed 1000 kg of non-acute hazardous waste, 1 kg of acute hazardous waste or 250 kg of soils, water or debris contaminated with acute hazardous waste; and

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 (i) or (ii) are met.

i) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS) or any other applicable shipping requirements; or

ii) If the DOT, 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 which is exempt under subsection (f) or has an appropriate RCRA permit or interim status.

E) The generator or sample collector maintains the following records for a period ending 3 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;

iii) Documentation showing: 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.

F) The generator reports the information required in subsection (e)(2)(E)(iii) in its report under 35 Ill. Adm. Code 722.141.

3) The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsection (e)(2)(A), for up to an additional 500 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste and 250 kg of soils, water or debris contaminated with acute hazardous waste, to conduct further treatability study evaluation when: 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. The additional quantities allowed are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (F). The generator or sample collector must apply to the Agency and provide in writing the following information:

A) The reason why the generator or sample collector requires additional quantity of sample for the treatability study evaluation and the additional quantity needed;

B) Documentation accounting for all samples of hazardous waste from the wastestream which have been sent for or undergone treatability studies, including the date each previous sample 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;

C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;

D) 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 have been made to protect against further breakdowns; and,

E) Such other information as the Agency determines is necessary.

4) Final Agency determinations pursuant to this subsection 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, 705, 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) are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11). Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11) 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.

2) The laboratory or testing facility conducting the treatability study has a USEPA identification number.

3) No more than a total of 250 kg of "as received" hazardous waste is subjected to initiation of 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 1000 kg, the total of which can include 500 kg of soils, water or debris contaminated with acute hazardous waste or 1 kg of acute hazardous waste. This quantity limitation does not include:

   A) Treatability study residues; and,

   B) Treatment materials (including nonhazardous 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 has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs.

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 3 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 3 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;

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 subsection (e) exemption.

11) The facility notifies the Agency by letter when the facility is no longer planning to conduct any treatability studies at the site.

(Source: Amended at 16 Ill. Reg. , effective)

Section 721.106 Requirements for Recyclable Materials

a) Recyclable materials:

1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters and storage facilities of subsections (b) and (c), except for the materials listed in subsections (a)(2) and (a)(3). Hazardous wastes that are recycled will be known as "recyclable materials".

2) The following recyclable materials are not subject to the requirements of this Section but are regulated under 35 Ill. Adm. Code 726.Subparts C through GH and all applicable provisions in 35 Ill. Adm. Code 702, 703 and 705.

A) Recyclable materials used in a manner constituting disposal (35 Ill. Adm. Code

726.Subpart C);

B) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under 35 Ill. Adm. Code 724 or 725.Subpart O (35 Ill. Adm. Code 726.Subpart ~~D~~H.)

C) Used oil that exhibits one or more of the characteristics of hazardous waste and is burned for energy recovery in boilers or industrial furnaces that are not regulated under 35 Ill. Adm. Code 724 or 725.Subpart O. (35 Ill. Adm. Code 726.Subpart E);

D) Recyclable materials from which precious metals are reclaimed (35 Ill. Adm. Code 726.Subpart F);

E) Spent lead-acid batteries that are being reclaimed (35 Ill. Adm. Code 726.Subpart G).

3) The following recyclable materials are not subject to regulation under 35 Ill. Adm. Code 722 through 726, 728, or 702, 703 or 705 and are not subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act:

A) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in 35 Ill. Adm. Code 722.158:

i) A person initiating a shipment for reclamation in a foreign country, and any intermediary arranging for the shipment, shall comply with the requirements applicable to a primary exporter in 35 Ill. Adm. Code 722.153, 722.156(a)(1) through (a)(4), (a)(6) and (b), and 722.157, shall export such materials only upon consent of the receiving country and in conformance with the USEPA Acknowledgement of Consent as defined in 35 Ill. Adm. Code 722.Subpart E, and shall provide a copy of the USEPA Acknowledgement of Consent to the shipment to the transporter transporting the shipment for export;

ii) Transporters transporting a shipment for export shall not accept a shipment if

the transporter knows the shipment does not conform to the USEPA Acknowledgement of Consent, shall ensure that a copy of the USEPA Acknowledgement of Consent accompanies the shipment and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

B) Used batteries (or used battery cells) returned to a battery manufacturer for regeneration;

C) Used oil that exhibits one or more of the characteristics of hazardous waste but is recycled in some other manner than being burned for energy recovery;

D) Scrap metal;

E) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production and transportation practices;

F) Oil reclaimed from hazardous waste resulting from normal petroluem refining, production and transportation practices, which oil is to be refined along with normal process streams at a petroleum refining facility;

G) ~~Coke and coal tar from the iron and steel industry that contains USEPA hazardous waste number K087 (decanter tank tar sludge from coking operations) (Section 721.132) from the iron and steel production process;~~

~~H)~~ Petroleum refining wastes.

i) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under 35 Ill. Adm. Code

726.140(e) and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

ii) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under 35 Ill. Adm. Code 726.140(e); and

iii) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under 35 Ill. Adm. Code 726.140(e); and

~~I~~H) Petroleum coke produced from petroleum refinery hazardous wastes containing oil at the same facility at which such wastes were generated, unless the resulting coke product exceeds one or more of the characteristics of hazardous waste in Subpart C.

b) Generators and transporters of recyclable materials are subject to the applicable requirements of 35 Ill. Adm. Code 722 and 723 and the notification requirements under Section 3010 of the Resource Conservation and Recovery Act, except as provided in subsection (a).

c) Storage and recycling:

1) Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of 35 Ill. Adm. Code 724.Subparts A through L, AA and BB and 725.Subparts A through L, AA and BB, 726, 728, 702, 703 and 705 and the nctification requirement under Section 3010 of the Resource Conservation and Recovery Act, except as provided in subsection (a). (The recycling process itself is exempt from regulation, except as provided in subsection (d).)

2) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following

requirements, except as provided in subsection (a).

A) Notification requirements under Section 3010 of the Resource Conservation and Recovery Act.

B) 35 Ill. Adm. Code 725.171 and 725.172 (dealing with the use of the manifest and manifest discrepancies)

C) Subsection (d).

d) Owners or operators of facilities required to have a RCRA permit pursuant to 35 Ill. Adm. Code 703 with hazardous waste management units which recycle hazardous wastes are subject to 35 Ill. Adm. Code 724.Subpart AA and BB and 725.Subpart AA and BB.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

Section 721.120 General

a) A solid waste, as defined in Section 721.102, which is not excluded from regulation as a hazardous waste under Section 721.104(b), is a hazardous waste if it exhibits any of the characteristics identified in this Subpart.

BOARD NOTE: 35 Ill. Adm. Code 722.111 sets forth the generator's responsibility to determine whether the generator's waste exhibits one or more characteristics identified in this Subpart.

b) A hazardous waste which is identified by a characteristic in this Subpart is assigned every USEPA Hazardous Waste Number which is applicable as set forth in this Subpart. This number must be used in complying with the notification requirements of Section 3010 of the Resource Conservation and Recovery Act and all applicable recordkeeping and reporting requirements under 35 Ill. Adm. Code 702, 703, 722 through ~~725~~726 and 728.

c) For purposes of this Subpart, a sample obtained using any of the applicable sampling methods specified in Appendix A is a representative sample within the meaning of 35 Ill. Adm. Code 720.

BOARD NOTE: Since the Appendix A sampling methods are

not being formally adopted, a person who desires to employ an alternative sampling method is not required to demonstrate the equivalency of the person's method under the procedures set forth in 35 Ill. Adm. Code 720.121.

(Source: Amended at 16 Ill. Reg. , effective)

Section 721.131 Hazardous Wastes From Nonspecific Sources

a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under 35 Ill. Adm. Code 720.120 and 720.122 and listed in Appendix I.

EPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)

F003	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone and methanol; all spent solvent mixtures and blends containing, before use, only the above spent non-halogenated solvents; and all spent solvent mixtures and blends containing, before use, one or more of the above non-halogenated solvents and a total of ten percent or more (by volume) of one or more of those solvents listed in F001, F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I)
F004	The following spent non-halogenated solvents: cresols and cresylic acid and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(T)
F005	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol and 2-nitropropane; all spent solvent mixtures and blends, containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.	(I, T)
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)	(T)

	cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	
F019	See Below	
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
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.	(T)
F020	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 tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)

F021	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 pentachlorophenol, or of intermediates used to produce its derivatives.	(H)
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions.	(H)
F023	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 tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5- trichlorophenol.	(H)
F024	Process wastes including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout 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 this Section or Section 721.132.)	(T)
F025	Condensed light ends, spent filters and filter aids, and spent desicant wastes from the production of certain chlorinated aliphatic hydrocarbons by	(T)

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.

F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzene under alkaline conditions.	(H)
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).	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026 and F027.	(T)
F032	Wastewaters, 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 Section 721.135 and 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 pentachlorophenol. BOARD NOTE: The listing of wastewaters that have not come into contact with	(T)

process contaminants is stayed administratively. The listing for plants that have previously used chlorophenolic formulations is administratively stayed whenever these wastes are covered by the F034 or F035 listings. These stays will remain in effect until further administrative action is taken. Furthermore, the F032 listing is administratively stayed with respect to the process area receiving drippage of these wastes provided persons desiring to continue operating notify USEPA by August 6, 1991, of their intent to upgrade or install drip pads, and by November 6, 1991, provide evidence to USEPA that they have adequate financing to pay for drip pad upgrades or installation, as provided in the administrative stay. The stay of listings will remain in effect until February 6, 1992, for existing drip pads, and until May 6, 1992, for new drip pads.

F034 Wastewaters, 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. (T)

BOARD NOTE: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. These stays will remain in effect until further administrative action is taken. Furthermore, the F034 and F035 listings are administratively stayed with respect to the process area receiving drippage of these wastes provided that, by November 6, 1991, persons desiring to continue operating notify the Agency of their intent to upgrade or install drip pads, and provide evidence to the Agency that they have adequate financing to pay for drip pad upgrades or installation, as provided in the

administrative stay. The stay of listings will remain in effect until February 6, 1992, for existing drip pads, and until May 6, 1992, for new drip pads.

F035 Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes 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. (T)

BOARD NOTE: The listing of wastewaters that have not come into contact with process contaminants is stayed administratively. These stays will remain in effect until further administrative action is taken. Furthermore, the F034 and F035 listings are administratively stayed with respect to the process area receiving drippage of these wastes provided that, by November 6, 1991, persons desiring to continue operating notify the Agency of their intent to upgrade or install drip pads, and provide evidence to the Agency that they have adequate financing to pay for drip pad upgrades or installation, as provided in the administrative stay. The stay of listings will remain in effect until February 6, 1992, for existing drip pads, and until May 6, 1992, for new drip pads.

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. (T)

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 generated in aggressive biological treatment units as defined in subsection (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.

F038 Petroleum refinery secondary (emulsified) oil/water/solids separation sludge -- Any 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 subsection (b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), F037, K048 and K051 wastes are not included in this listing. (T)

F039 Leachate (liquids which have percolated through land disposed wastes) resulting from the ~~treatment, storage or~~ disposal of more than one restricted wastes ~~classified by more than one waste code~~ classified as hazardous under Subpart D~~, or from a mixture of wastes classified under Subparts C and D~~. (Leachate resulting from the (T)

~~management~~disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste ~~code(s)~~number(s): F020, F021, F022, ~~F023,~~ F026, F027 or F028.)

BOARD NOTE: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). The letter H indicates Acute Hazardous Waste.

b) Listing specific definitions.

1) For the purpose of the F037 and F038 listings, oil/water/solids is defined as oil or water or solids.

2) For the purposes of the F037 and F038 listings:

A) Aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or, high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and:

i) The units employ a minimum of 6 horsepower per million gallons of treatment volume; and either

ii) The hydraulic retention time of the unit is no longer than 5 days; or

iii) The hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

B) Generators and treatment, storage or disposal (TSD) facilities have the burden of proving that their sludges are exempt from listing as F037 or F038 wastes under this definition. Generators and TSD facilities shall maintain, in their operating or other on site records,

documents and data sufficient to prove that:

i) The unit is an aggressive biological treatment unit as defined in this subsection; and

ii) The sludges sought to be exempted from F037 or F038 were actually generated in the aggressive biological treatment unit.

3) Time of generation. For the purposes of:

A) The F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

B) The F038 listing:

i) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

ii) Floats are considered to be generated at the moment they are formed in the top of the unit.

(Source: Amended at 16 Ill. Reg. , effective)

Section 721.132 Hazardous Waste from Specific Sources

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.

EPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
	Wood Preservation:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)

Inorganic Pigments:

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:

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 acetronitrile column in the production of acrylonitrile.	(T)
K014	Bottoms from the acetontrile 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 diisocyanate 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-trichloroethane.	(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 dinitroluene.	(T)

K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotolune.	(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 dibromide 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)

Inorganic Chemicals:

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)

Pesticides:

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 ethylenebisdithiocarbamic 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:

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:

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)

Iron and Steel:

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 Copper:

K064	Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production.	(T)

Primary Lead:

K065	Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities.	(T)

Primary Zinc:

K066	Sludge from treatment of process wastewater or acid plant blowdown from primary zinc production.	(T)

BOARD NOTE: This waste listing is the subject of a judicial remand in American Mining Congress v. EPA, 907 F.2d 1179 (D.D.C. 1990). The Board intends that this listing not become enforceable in Illinois until the first date upon which the Board RCRA program becomes "not equivalent to the Federal program," within the meaning of Section 3006(b) of the RCRA Act, 42 U.S.C. 6926(b), the Board RCRA rules become "less stringent" than the USEPA rules, as this phrase is used in Section 3009, 42 U.S.C. 6929, or the Board RCRA rules are not "identical in substance" with the federal rules as that term is intended by Ill. Rev. Stat. 1989 ch. 111 1/2, pars. 1007.2 and 1022.4 as a result of some action by USEPA with regard to this listing in response to the American Mining Congress remand.

Primary Aluminum:

K088	Spent potliners from primary aluminum reduction.	(T)

Ferroalloys:

K090	Emission control dust or sludge from ferrochromiumsilicon production.	(T)
K091	Emission control dust or sludge from ferrochromium production.	(T)

Secondary Lead:

K069	Emission control dust/sludge from secondary lead smelting. 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.	(T)
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)

Veterinary Pharmaceuticals:

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 organoarsenic 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:

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, driers, soaps and stabilizers containing chromium and lead.	(T)

Coking:

K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)

(Source: Amended at 16 Ill. Reg. , effective)

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

PART 722
STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

SUBPART A: GENERAL

SUBPART B: THE MANIFEST

SUBPART C: PRE-TRANSPORT REQUIREMENTS

SUBPART D: RECORDKEEPING AND REPORTING

SUBPART E: EXPORTS OF HAZARDOUS WASTE

SUBPART F: IMPORTS OF HAZARDOUS WASTE

Section
722.160 Imports of Hazardous Waste

SUBPART G: FARMERS

Section
722.170 Farmers

Appendix A Hazardous Waste Manifest

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB 31, 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. , effective

SUBPART A: GENERAL

Section 722.110 Purpose, Scope and Applicability

a) These regulations establish standards for generators of hazardous waste.

b) A generator who treats, stores or disposes of hazardous waste on-site must only comply with the following Sections of this Part with respect to that waste: Section 722.111 for determining whether or not the generator has a hazardous waste, Section 722.112 for obtaining an EPA identification number, Section 722.140(c) and (d) for recordkeeping, Section 722.143 for additional reporting and, if applicable, Section 722.170 for farmers.

c) Any person who imports hazardous waste into the United

States must comply with the standards applicable to generators established in this Part.

d) A farmer who generates waste pesticides which are hazardous waste and who complies with all of the requirements of Section 722.151 is not required to comply with other standards in this Part, or 35 Ill. Adm. Code 702, 703, 724 725 or 728 with respect to such pesticides.

e) A person who generates a hazardous waste as defined by 35 Ill. Adm. Code 721 is subject to the compliance requirements and penalties prescribed in Title VIII and XII of the Environmental Protection Act if he does not comply with the requirements of this Part.

~~(Board Note: A generator who treats, stores or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in 35 Ill. Adm. Code 702, 703, 724, 725 and 726.)~~

f) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage or disposal facility must comply with the generator standards established in this Part.

~~(Board Note~~BOARD NOTE: The provisions of Section 722.134 are applicable to the on-site accumulation of hazardous waste by generators. Therefore, the provisions of Section 722.134 only apply to owners or operators who are shipping hazardous waste which they generated at that facility. A generator who treats, stores or disposes of hazardous waste on-site must comply with the applicable standards and permit requirements set forth in 35 Ill. Adm. Code 702, 703, 724, 725, 726 and 728.~~)~~

g) 35 Ill. Adm. Code 700 contains rules on application of other Board regulations.

(Source: Amended at 16 Ill. Reg. , effective)

Section 722.134 Accumulation Time

a) Except as provided in subsections (d), (e) or (f), a generator is exempt from all the requirements in 35 Ill. Adm. Code 725.Subparts G and H, 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:

1) The waste is placed:

A) In containers and the generator complies with 35 Ill. Adm. Code 725.Subpart I; or

B) In tanks and the generator complies with 35 Ill. Adm. Code 725.Subpart J except 35 Ill. Adm. Code 725.297(c) and 725.300; or

C) On drip pads and the generator complies with 35 Ill. Adm. Code 725.Subpart W 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.

BOARD NOTE: The "in addition" hanging paragraph is in the introduction to subsection (a).

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 35 Ill. Adm. Code 725.Subparts C and D, with 35 Ill. Adm. Code 725.116 and 728.107(a)(4).

b) A generator who accumulates hazardous waste for more than 90 days 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 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 Section 37 of the Environmental Protection Act.

c) Accumulation near 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, which is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with paragraph (a) provided the generator:

A) Complies with 35 Ill. Adm. Code 725.271, 725.272 and 725.273(a); and

B) marks the generator's containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

2) A generator who 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) at or near any point of generation must, with respect to that amount of excess waste, comply within three days with subsection (a) or other applicable provisions of this chapter. During the three day period the generator must continue to comply with subsection (c)(1). The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

d) A generator who generates greater than 100 kilograms but less than 1000 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:

1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;

2) The generator complies with the requirements of 35 Ill. Adm. Code 725.Subpart I, except the generator need not comply with 35 Ill. Adm. Code 725.276;

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)~~,~~ ~~and the requirements~~ of 35 Ill. Adm. Code 725.Subpart C and of 35 Ill. Adm. Code 728.107(a)(4); 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)(4)(D). The employee is the emergency coordinator.

B) The generator shall 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 shall 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 shall respond to any emergencies that arise. The applicable responses are as follows:

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:

iii) In the event of a fire, explosion or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator shall immediately notify the National Response Center (using its 24-hour toll free number 800/424-8802). The report must include the following information: the name, address and USEPA identification number (35 Ill. Adm. Code 722.112) of the generator; date, time and type of incident (e.g., spill or fire); quantity and type of hazardous waste involved in the incident; extent of injuries, if any; and, estimated quantity and disposition of recoverable materials, if any.

e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who 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).

f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 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 Section 37 of the Environmental Protection Act.

(Source: Amended at 16 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

SUBPART A: GENERAL PROVISIONS

SUBPART B: GENERAL FACILITY STANDARDS

SUBPART C: PREPAREDNESS AND PREVENTION

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

SUBPART G: CLOSURE AND POST-CLOSURE

SUBPART H: FINANCIAL REQUIREMENTS

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

SUBPART J: TANK SYSTEMS

SUBPART K: SURFACE IMPOUNDMENTS

SUBPART L: WASTE PILES

SUBPART M: LAND TREATMENT

SUBPART N: LANDFILLS

SUBPART O: INCINERATORS

SUBPART W: DRIP PADS

SUBPART X: MISCELLANEOUS UNITS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Appendix E Examples of Potentially Incompatible Waste
Appendix I Groundwater Monitoring List

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, 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. , effective

SUBPART G: CLOSURE AND POST-CLOSURE

Section 724.212 Closure Plan; Amendment of Plan

a) Written Plan.

1) The owner or operator of a hazardous waste management facility shall have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by Sections 724.328(c)(1)(A) and 724.358(c)(1)(A) to have contingent closure plans. The plan must be submitted with the permit application, in accordance with 35 Ill. Adm. Code 703.183, and approved by the Agency as part of the permit issuance proceeding under 35 Ill. Adm. Code 705. In accordance with 35 Ill. Adm. Code 703.241, the approved closure plan will become a condition of any RCRA permit.

2) The Agency's approval of the plan must ensure that the approved closure plan is consistent with Sections 724.211 through 724.215 and the applicable requirements of Sections 724.190 et

seq., 724.278, 724.297, 724.328, 724.358, 724.380, 724.410, 724.451 and 724.701. Until final closure is completed and certified in accordance with Section 724.515, a copy of the approved plan and approved revisions must be furnished to the Agency upon request, including requests by mail.

b) Content of plan. The plan must identify steps necessary to perform partial or final closure of the facility at any point during its active life. The closure plan must include, at least:

1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 724.211;

2) A description of how final closure of the facility will be conducted in accordance with Section 724.211. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing or disposing of all hazardous wastes, and identification of the type(s) of off-site hazardous waste management units to be used, if applicable; and

4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination required to satisfy the closure performance standard; and

5) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and

6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat and dispose of all hazardous waste inventory and of the time required to place a final cover must be included.)

7) For facilities that use trust funds to establish financial assurance under Section 724.243 or 724.245 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.

c) Amendment of the plan. The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design or the approved closure plan in accordance with the applicable procedures in 35 Ill. Adm. Code 702, 703 and 705. The written notification or request must include a copy of the amended closure plan for review or approval by the Agency.

1) The owner or operator may submit a written notification or request to the Agency for a permit modification to amend the closure plan at any time prior to notification of partial or final closure of the facility.

2) The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:

A) Changes in operating plans or facility design affect the closure plan; or

B) There is a change in the expected year of closure, if applicable, or

C) In conducting partial or final closure activities, unexpected events require modification of the approved closure plan.

3) The owner or operator shall submit a written request for a permit modification including a copy of the amended closure plan for approval at least

60 days prior to the proposed change in the facility design or operation, or no later thar days after an unexpected event has occurred wh has affected the closure plan. If an unexpect event occurs during the partial or final closu period, the owner or operator shall request a permit modification no later than 30 days afte the unexpected event. An owner or operator of surface impoundment or waste pile that intends remove all hazardous waste at closure and is r otherwise required to prepare a contingent clo plan under Sections 724.328(c)(1)(A) or 724.358(c)(1)(A), shall submit an amended clos plan to the Agency no later than 60 days after date the owner or operator or Agency determine that the hazardous waste management unit must closed as a landfill, subject to the requireme of Section 724.410, or no later than 30 days a that date if the determination is made during partial or final closure. The Agency shall approve, disapprove or modify this amended pla accordance with the procedures in 35 Ill. Adm. Code 702, 703 and 705. In accordance with 35 Adm. Code 702.160 and 703.241, the approved closure plan will become a condition of any RC permit issued.

4) The Agency may request modifications to the pl under the conditions described in Section 724.212(c)(2). The owner or operator shall su the modified plan within 60 days after the Agency's request, or within 30 days if the cha in facility conditions occurs during partial c final closure. Any modifications requested by Agency must be approved in accordance with the procedures in 35 Ill. Adm. Code 702, 703 and 7

d) Notification of partial closure and final closure.

1) The owner or operator shall notify the Agency writing at least 60 days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, treatment or landfill unit, or final closure c facility with such a unit. The owner or opera shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only treatment or storage tanks, container storage or incinerator units to be closed. The owner or operator shall notify th Agency in writing at least 45 days prior to th

date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace, whichever is earlier.

2) The date when the owner or operator "expects to begin closure" must be either:

a) No later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit demonstrates to the Agency that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and that the owner or operator have taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Agency shall approve an extension to this one-year limit. Or,

B) For units meeting the requirements of Section 724.213(d), no later than 30 days after the date on which the hazardous waste management unit receives the final known volume of non-hazardous wastes, or, if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the onwer or operator demonstrates to the Agency that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and that the owner and operator have taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Agency shall approve an extension to this one-year limit.

3) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or Board order to cease receiving hazardous wastes

or to close, then the requirements of this subsection do not apply. However, the owner or operator shall close the facility in accordance with the deadlines established in Section 724.213.

e) Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART O: INCINERATORS

Section 724.440 Applicability

a) The regulations in this Subpart apply to owners and operators of ~~facilities that incinerate~~ hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as Section 724.101 provides otherwise. ~~The following facility owners and operators are considered to incinerate hazardous waste:~~

~~1) Owners or operators of hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110); and~~

~~2) Owners or operators who burn hazardous waste in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this Subpart.~~

b) 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 except Section 724.441 (Waste analysis) and Section 724.451 (Closure):

1) If the Agency finds that the waste to be burned is:

A) Listed as a hazardous waste in 35 Ill. Adm. Code 721, Subpart D solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both; or

B) Listed as a hazardous waste in 35 Ill. Adm. Code 721, Subpart D 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; or

C) A hazardous waste solely because it possesses the characteristic of ignitability, corrosivity, or both, as determined by the test for characteristics of hazardous wastes under 35 Ill. Adm. Code 721, Subpart C; or

D) A hazardous waste solely because it possesses any of the reactivity characteristics described by 35 Ill. Adm. Code 721.123(a)(1), (2), (3), (6), (7) and (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 35 Ill. Adm. Code 721, Appendix H, which would reasonably be expected to be in the waste.

c) If the waste to be burned is one which is described by subsections (b)(1)(A), (b)(1)(B), (b)(1)(C) or (b)(1)(D) and contains insignificant concentrations of the hazardous constituents listed in 35 Ill. Adm. Code 721, Appendix H, then the Agency may, in establishing permit conditions, exempt the applicant from all requirements of this Subpart, 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.

d) 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 16 Ill. Reg. , effective)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 724.930 Applicability

a) This Subpart applies to owners and operators of facilities that treat, store or dispose of hazardous wastes (except as provided in Section 724.101).

b) Except for Sections 724.934(d) and ~~724.935~~(e), this Subpart applies to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 ppmw (parts per million by weight), if these operations are conducted in:

1) Units that are subject to the permitting requirements of 35 Ill. Adm. Code 703; or

2) Hazardous waste recycling units that are located on hazardous waste management facilities otherwise subject to the permitting requirements of 35 Ill. Adm. Code 703.

c) If the owner or operator of process vents subject to the requirements of Sections 724.932 through 724.936 has received a RCRA permit prior to December 21, 1990, the requirements of Sections 724.932 through 724.936 must be incorporated when the permit is reissued under 35 Ill. Adm. Code 705.201 or reviewed under 35 Ill. Adm. Code 702.161.

BOARD NOTE: The requirements of Sections 724.932 through 724.936 apply to process vents on hazardous waste recycling units previously exempt under 35 Ill. Adm. Code 721.106(c)(1). Other exemptions under 35 Ill. Adm. Code 721.104, 722.134 and 724.101(g) are not affected by these requirements.

(Source: Amended at 16 Ill. Reg. , effective)

Section 724.935 Recordkeeping requirements

a) Compliance Required.

1) Each owner or operator subject to the provisions of this Subpart shall 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 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 shall 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.

2) Up-to-date documentation of compliance with the process vent standards in Section 724.932, including:

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:

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:

i) Manufacturer's name and model number of control device.

ii) Type of control device.

iii) Dimensions of the control device.

iv) Capacity.

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 (incorporated by reference in 35 Ill. Adm. Code 720.111) 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 (vii) 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:

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 (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).

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); 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).

D) For a boiler or process heater, any period when:

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); 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).

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).

G) For a condenser that complies with Section 724.933(f)(2)(F)(ii), any period when:

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).

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).

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).

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).

5) Explanation for each period recorded under subsection (c)(4) 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:

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.

d) Records of the monitoring, operating and inspection information required by subsections (c)(3) through (8) need be kept only 3 years.

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 shall 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 16 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

SUBPART B: GENERAL FACILITY STANDARDS

SUBPART C: PREPAREDNESS AND PREVENTION

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

SUBPART F: GROUNDWATER MONITORING

SUBPART G: CLOSURE AND POST-CLOSURE

SUBPART H: FINANCIAL REQUIREMENTS

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

SUBPART J: TANK SYSTEMS

SUBPART K: SURFACE IMPOUNDMENTS

SUBPART L: WASTE PILES

SUBPART M: LAND TREATMENT

SUBPART N: LANDFILLS

SUBPART O: INCINERATORS

SUBPART P: THERMAL TREATMENT

SUBPART Q: CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT

SUBPART R: UNDERGROUND INJECTION

SUBPART W: DRIP PADS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111-1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB

831, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, 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. , effective

SUBPART B: GENERAL FACILITY STANDARDS

Section 725.113 General Waste Analysis

a) Waste analysis:

1) Before an owner or operator treats, stores or disposes of any hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store or dispose of the waste in accordance with the requirements of this Part and 35 Ill. Adm. Code 728.

2) The analysis may include data developed under 35 Ill. Adm. Code 721 and existing published or documented data on the hazardous waste or on waste generated from similar processes.

BOARD NOTE: For example, the facility's record of analyses performed on the waste before the effective date of these regulations or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility may be included in the data base required to comply with subsection (a)(1), except as otherwise specified in 35 Ill. Adm. Code 728.107(b) and (c). The owner or operator of an off-site facility may arrange for the generator of the hazardous waste

to supply part or all of the information required by subsection (a)(1). If the generator does not supply the information and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.

3) The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

A) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), has changed; and

B) For off-site facilities, when the results of the inspection required in subsection (a)(4) indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

4) The owner or operator of an off-site facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.

b) The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which the owner or operator will carry out to comply with subsection (a). The owner or operator shall keep this plan at the facility. At a minimum, the plan must specify:

1) The parameters for which each hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (a).

2) The test methods which will be used to test for these parameters.

3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using

either:

A) One of the sampling methods described in 35 Ill. Adm. Code 721.Appendix A or

B) An equivalent sampling method.

BOARD NOTE: See 35 Ill. Adm. Code 720.120(c) for related discussion.

4) 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.

5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.

6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections ~~725.293~~725.300, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475, 725.502, 725.934(d) and 725.963(d), and 35 Ill. Adm. Code 728.107. And,

7) For surface impoundments exempted from land disposal restrictions under 35 Ill. Adm. Code 728.104(a), the procedures and schedules for:

A) The sampling of impoundment contents;

B) The analysis of test data; and,

C) The annual removal of residues which are not delisted under 35 Ill. Adm. Code 720.122 or which exhibit a characteristic of hazardous waste, and either:

i) Do not meet applicable treatment standards of 35 Ill. Adm. Code 728.Subpart D; or

ii) Where no treatment standards have been established: Such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.132 or 728.139; or such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.133(f).

c) For off-site facilities, the waste analysis plan required in subsection (b) must also specify the

procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and

2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

(Source: Amended at 16 Ill. Reg. , effective)

Section 725.173 Operating Record

a) The owner or operator shall keep a written operating record at the facility.

b) The following information must be recorded as it becomes available and maintained in the operating record until closure of the facility.

1) A description and the quantity of each hazardous waste received and the method or methods and date or dates of its treatment, storage or disposal at the facility as required by Appendix A;

2) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities the location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. For all facilities this information must include cross-references to specific manifest document numbers if the waste was accompanied by a manifest;

BOARD NOTE: See Sections 725.219, 725.379 and 725.409 for related requirements.

3) Records and results of waste analysis and trial tests performed as specified in Sections 725.113, ~~725.293~~725.300, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475, 725.502, 725.934 and 725.963 and 35 Ill. Adm. Code 728.104(a) and 728.107;

4) Summary reports and details of all incidents that require implementing the contingency plan as specified in Section 725.156(j);

5) Records and results of inspections as required by Sections 725.115(d) (except these data need be kept only three years);

6) Monitoring, testing or analytical data where required by Sections 725.190, 725.194, 725.291, 725.293, 725.295, 725.376, 725.378, 725.380(d)(1), 725.447, 725.477, 725.934(c) through (f), 725.935, 725.963(d) through (i) and 725.964;

BOARD NOTE: As required by Section 725.194, monitoring data at disposal facilities must be kept throughout the post-closure period.

7) All closure cost estimates under Section 725.242 and, for disposal facilities, all post-closure cost estimates under Section 725.244;

8) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension of the effective date of any land disposal restriction granted pursuant to 35 Ill. Adm. Code 728.105, a petition pursuant to 35 Ill. Adm. Code 728.106 or a certification under 35 Ill. Adm. Code 728.108, and the applicable notice required of a generator under 35 Ill. Adm. Code 728.107(a);

9) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108;

10) For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108;

11) For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under 35 Ill. Adm. Code 728.107 or 728.108, whichever is applicable; and

12) For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under 35 Ill. Adm. Code 728.107, except for the manifest number, and the certification and demonstration, if applicable, required under 35 Ill. Adm. Code 728.108, whichever is applicable.

13) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108; and,

14) For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108.

(Source: Amended at 16 Ill. Reg. , effective)

Section 725.212 Closure Plan; Amendment of Plan

a) Written Plan. Within six months after the effective date of the rule that first subjects a facility to provisions of this Section, tThe owner or operator of a hazardous waste management facility shall have a written closure plan. Until final closure is completed and certified in accordance with Section 725.215, a copy of the most current plan must be furnished to the Agency upon request including request by mail. In addition, for facilities without approved plans, it must also be provided during site inspections on the day of inspection to any officer, employee or representative of the Agency.

b) Content of plan. The plan must identify the steps necessary to perform partial or final closure of the facility at any point during its active life. The closure plan must include, at least:

1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 725.211; and

2) A description of how final closure of the facility will be conducted in accordance with Section 725.211. The description must identify the maximum extent of the operation which will be unclosed

during the active life of the facility and

3) An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial and final closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all hazardous waste, and identification of and the type(s) of off-site hazardous waste management unit(s) to be used, if applicable; and

4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination necessary to satisfy the closure performance standard; and

5) A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and

6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.); and

7) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under Sections 725.243 or 725.245 and whose remaining operating life is less than twenty years, and for facilities without approved closure plans.

c) Amendment of plan. The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan shall submit a written request to the Agency to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approval by the Agency.

1) The owner or operator shall amend the closure plan, whenever:

A) Changes in the operating plans or facility design affect the closure plan, or

B) Whenever there is a change in the expected year of closure, if applicable, or

C) In conducting partial or final closure activities, unexpected events require a modification of the closure plan.

2) The owner or operator shall amend the closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with Section 725.410.

3) An owner or operator with an approved closure plan shall submit the modified plan to the Agency at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator shall submit the modified plan no more than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with Section 725.410. If the amendment to the plan is a Class 2 or 3

modification according to the criteria in 35 Ill. Adm. Code 702.280, the modification to the plan shall be approved according to the procedures in subsection (d)(4).

4) The Agency may request modifications to the plan under the conditions described in subsection (c)(1). An owner or operator with an approved closure plan shall submit the modified plan within 60 days of the request from the Agency, or within 30 days if the unexpected event occurs during partial or final closure. If the amendment is considered a Class 2 or 3 modification according to the criteria in 35 Ill. Adm. Code 702.280, the modification to the plan must be approved in accordance with the procedures in subsection (d)(4).

d) Notification of partial closure and final closure.

1) When notice is required.

A) The owner or operator shall submit the closure plan to the Agency at least 180 days prior to the date on which the owner or operator expects to begin closure of the first surface impoundment, waste pile, land treatment or landfill unit, or final closure ~~of a facility with~~if it involves such a unit, whichever is earlier.

B) The owner or operator shall submit the closure plan to the Agency at least 45 days prior to the date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace.

C) The owner or operator shall submit the closure plan to the Agency at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only tanks, container storage or incinerator units.

D) Owners or operators with approved closure plans shall notify the Agency in writing at least 60 days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, landfill or land treatment unit, or final closure of a facility involving such a unit.

E) Owners or operators with approved closure plans shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin partial or final closure of a boiler or industrial furnace.

F) Owners and operators with approved closure plans shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only tanks, container storage or incinerator units.

2) The date when the owner or operator "expects to begin closure" must be either:

A) ~~w~~Within 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit demonstrates to the Agency that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and that the owner or operator has taken and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the Agency shall approve an extension to this one-year limit; or

B) For units meeting the requirements of Section 725.213(d), no later than 30 days after the date on which the hazardous waste management unit receives the ~~final~~ known final volume of non-hazardous wastes, or, if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator demonstrates to the Agency that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and that the owner and operator have taken, and will continue to

take, all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the Agency shall approve an extension to this one-year limit.

3) The owner or operator shall submit the closure plan to the Agency no later than 15 days after:

A) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or

B) Issuance of a judicial decree or Board order to cease receiving hazardous wastes or close.

4) The Agency shall provide the owner or operator and the public, through a newspaper notice, the opportunity to submit written comments on the plan and request modifications of the plan no later than 30 days from the date of the notice. The Agency shall also, in response to a request or at its own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The Agency shall give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments and the two notices may be combined.) The Agency shall approve, modify or disapprove the plan within 90 days of its receipt. If the Agency does not approve the plan, the Agency shall provide the owner or operator with a detailed written statement of reasons for the refusal, and the owner or operator shall modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The Agency shall approve or modify this plan in writing within 60 days. If the Agency modifies the plan, this modified plan becomes the approved closure plan. The Agency shall assure that the approved plan is consistent with Sections 725.211 through 725.215 and the applicable requirements of Sections 725.190 et seq., 725.297, 725.328, 725.358, 725.380, 725.410, 725.451, 725.481 and 725.504. A copy of this modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.

e) Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section precludes the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(Source: Amended at 16 Ill. Reg. , effective)

Section 725.213 Closure; Time Allowed for Closure

a) Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e), at a hazardous waste management unit or facility, or 90 days after approval of the closure plan, whichever is later, the owner or operator shall treat, remove from the unit or facility or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Agency shall approve a longer period if the owner or operator demonstrates that:

1) Either:

A) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or

B) All of the following:

i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes, if the owner or operator complies with subsections (d) and (e);

ii) There is a reasonable likelihood that the owner or operator, or another person will recommence operation of the hazardous waste management unit or facility within one year; and

iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

2) The owner or operator have taken and will continue

to take all steps to prevent threats to human health and the environment including compliance with all applicable interim status requirements.

b) The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all ~~the~~ applicable requirements of subsections (d) and (e), at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The Agency shall approve an extension to the closure period if the owner or operator demonstrates that:

1) Either:

A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or

B) All of the following:

i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e); and

ii) There is a reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or facility within one year; and

iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and

2) The owner and operator have taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable interim status requirements.

c) The demonstration referred to in subsections (a)(1) and (b)(1) must be made as follows:

1) The demonstration in subsection (a)(1) must be made at least 30 days prior to the expiration of the 90-day period in subsection (a); and

2) The demonstrations in subsection (b)(1) must be made at least 30 days prior to the expiration of the 180-day period in subsection (b), unless the owner or opertaor is otherwise subject to deadlines in subsection (d).

d) Continued receipt of non-hazardous waste. The Agency shall permit an owner or operator to receive non-hazardous wastes in a landfill, land treatment unit or surface impoundment unit after the final receipt of hazardous wastes at that unit if:

1) The owner or operator submits an amended Part B application, or a new Part B application if none was previously submitted, and demonstrates that:

A) The unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes; and

B) There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous waste in the unit within one year after the final receipt of hazardous wastes; and

C) The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this Part; and

D) Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and

E) The owner or operator is operating and will continue to operate in compliance with all applicable interim status requirements; and

2) The Part B application includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under 35 Ill. Adm. Code 703.186 and closure and post-closure plans and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and

appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Section 725.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes; and

3) The Part B application is amended, as necessary and appropriate, to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and

4) The Part B application and the demonstrations referred to in subsections (d)(1) and (2) are submitted to the Agency no later than 180 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes, or no later than 90 days after the effective date of this Section, whichever is later.

e) Surface impoundments. In addition to the requirements in subsection (d), an owner or operator of a hazardous waste surface impoundment which is not in compliance with the liner and leachate collection system requirements in Section 725.321(a) shall receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection.

1) The petition for adjusted standard must include:

A) A plan for removing hazardous wastes; and

B) A contingent corrective measures plan.

2) The removal plan must provide for:

A) Removing all hazardous liquids; and

B) Removing all hazardous sludges to the extent practicable without impairing the integrity of the liner or liners, if any; and

C) Removal of hazardous wastes no later than 90 days after the final receipt of hazardous wastes. The Board will allow a longer time, if the owner or operator demonstrates:

i) That the removal of hazardous wastes will, of necessity, take longer than the

alloted period to complete; and

ii) That an extension will not pose a threat to human health and the environment.

3) The contingent corrective measures plan:

A) Must meet the requirements of a corrective action plan under Section 724.199, based upon the assumption that a release has been detected from the unit.

B) May be a portion of a corrective action plan previously submitted under Section 724.199.

C) May provide for continued receipt of non-hazardous wastes at the unit following a release only if the owner or operator demonstrates that continued receipt of wastes will not impede corrective action.

D) Must provide for implementation within one year after a release, or within one year after the grant of the adjusted standard, whichever is later.

4) Release. A release is a statistically significant increase (or decrease in the case of pH) in hazardous constituents over background levels, detected in accordance with the requirements in Subpart F.

5) In the event of a release, the owner or operator of the unit:

A) Within 35 days, file with the Board a petition for adjusted standard. If the Board finds that it is necessary to do so in order to protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to:

i) Begin to implement the corrective measures plan in less than one year; or,

ii) Cease the receipt of wastes until the plan has been implemented.

iii) The Board will retain jurisdiction or condition the adjusted standard so as to require the filing of a new petition to address any required closure pursuant to

subsection (e)(7).

B) Shall implement the contingent corrective measures plan.

C) May continue to receive wastes at the unit if authorized by the approved contingent measures plan.

6) Semi-annual report. During the period of corrective action, the owner or operator shall provide semi-annual reports to the Agency which:

A) Describe the progress of the corrective action program;

B) Compile all groundwater monitoring data; and

C) Evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.

7) Required closure. The owner or operator shall commence closure of the unit in accordance with the closure plan and the requirements of this Part if the Board terminates the adjusted standard, or if the adjusted standard terminates pursuant to its terms.

A) The Board will terminate the adjusted standard if the owner or operator failed to implement corrective action measures in accordance with the approved contingent corrective measures plan; or

B) The Board will terminate the adjusted standard if the owner or operator fails to make substantial progress in implementing the corrective measures plan and achieving the facility's groundwater protection standard, or background levels if the facility has not yet established a groundwater protection standard; or

C) The adjusted standard will automatically terminate if the owner or operator fails to implement the removal plan.

D) The adjusted standard will automatically terminate if the owner or operator fails to timely file a required petition for adjusted standard.

8) Adjusted standard procedures. The following procedures must be used in granting, modifying c terminating an adjusted standard pursuant to thi subsection.

A) Except as otherwise provided, the owner or operator shall follow the procedures of 35 Ill. Adm. Code 106.Subpart G to petition th Board for an adjusted standard.

B) Initial justification. The Board will gran an adjusted standard pursuant to subsection (e)(1) if the owner or operator demonstrate that the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (3).

C) The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1):

i) A plan for removing hazardous wastes.

ii) A requirement that the owner or operato remove hazardous wastes in accordance with the plan.

iii) A contingent corrective measures plan.

iv) A requirement that, in the event of a release, the owner or operator shall: within 35 days, file with the Board a petition for adjusted standard; implement the corrective measures plan; and, file semi-annual reports with the Agency.

v) A condition that the adjusted standard will terminate if the owner or operator fails to: implement the removal plan; or, timely file a required petition for adjusted standard.

vi) A requirement that, in the event the adjusted standard is terminated, the owner or operator shall commence closure of the unit in accordance with the requirements of the closure plan and this Part.

D) Justification in the event of a release. The

Board will modify or terminate the adjusted standard pursuant to a petition filed under subsection (e)(5)(A) as provided in that subsection or in subsection (e)(7).

9) The owner or operator may file a revised closure plan within 15 days after an adjusted standard is terminated.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART O: INCINERATORS

Section 725.440 Applicability

a) The regulations in this Subpart apply to owners or operators of ~~facilities that incinerate~~ hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as 35 Ill. Adm. Code 724.101 provides otherwise.~~The following facility owners and operators are considered to incinerate hazardous waste:~~

~~1) Owners or operators of hazardous waste incinerators (as defined in 35 Ill. Adm. Code 720.110); and~~

~~2) Owners or operators who burn hazardous wastes in boilers or in industrial furnaces in order to destroy them, or who burn hazardous waste in boilers or in industrial furnaces for any recycling purpose and elect to be regulated under this Subpart.~~

b) Owners and operators of incinerators burning hazardous waste are exempt from all of the requirements of this Subpart, 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 35 Ill. Adm. Code 721.Appendix H, and such documentation is retained at the facility, if the waste to be burned is:

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

2) Listed as a hazardous waste in 35 Ill. Adm. Code 721.Subpart D, solely because it is reactive (Hazard Code R) for characteristics other than

those listed in 35 Ill. Adm. Code 721.123(a)(4) and (5), and will not be burned when other hazardous wastes are present in the combustion zone; or

3) 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 35 Ill. Adm. Code 721.Subpart C; or

4) A hazardous waste solely because it possesses the reactivity characteristics described by 35 Ill. Adm. Code 721.123 (a)(1), (2), (3), (6), (7) or (8) and will not be burned when other hazardous wastes are present in the combustion zone.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART P: THERMAL TREATMENT

Section 725.470 Other Thermal Treatment

The regulations in this Subpart apply to owners and operators of facilities that thermally treat hazardous waste in devices other than enclosed devices using controlled flame combustion except, as Section 725.101 provides otherwise. Thermal treatment in enclosed devices using controlled flame combustion is subject to the requirements of Subpart O if the unit is an incinerator, and 35 Ill. Adm. Code 726.Subpart H, if the unit is a boiler or industrial furnace as defined in 35 Ill. Adm. Code 720.110.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 725.935 Recordkeeping Requirements

a) Compliance Required.

1) Each owner or operator subject to the provisions of this Subpart shall 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 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 shall 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.

2) Up-to-date documentation of compliance with the process vent standards in Section 725.932, including:

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:

   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:

      i) Manufacturer's name and model number of control device.

      ii) Type of control device.

      iii) Dimensions of the control device.

      iv) Capacity.

      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 (incorporated by reference in 35 Ill. Adm. Code 720.111) 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 (vii) 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.

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:

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 (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).

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); 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).

D) For a boiler or process heater, any period when:

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); 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).

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).

G) For a condenser that complies with Section 725.933(f)(2)(F)(ii), any period when:

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).

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).

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).

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).

5) Explanation for each period recorded under subsection (c)(4) 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.

d) Records of the monitoring, operating and inspection information required by subsections (c)(3) through (8) need be kept only 3 years.

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 16 Ill. Reg. , effective)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 725.952 Standards: Pumps in Light Liquid Service

a) Monitoring

1) Each pump in light liquid service must be monitored monthly to detect leaks by the methods specified in Section 725.963(b), except as provided in subsections (d), (e) and (f).

2) Each pump in light liquid service must be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

b) Leaks

1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

2) If there are indications of liquids dripping from the pump seal, a leak is detected.

c) Repairs

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 725.959.

2) A first attempt at repair (e.g., tightening the packing gland) must be made no later than 5 calendar days after each leak is detected.

d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of subsection (a), provided the following requirements are met:

1) Each dual mechanical seal system must be:

A) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressures; or

B) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section 725.960; or

C) Equipped with a system that purges the barrier fluid into a hazardous wastestream with no detectable emissions to the atmosphere.

2) The barrier fluid system must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

3) Each barrier fluid system must be equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

4) Each pump must be checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

5) Alarms

A) Each sensor as described in subsection (d)(3) must be checked daily or be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly.

B) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

6) Leaks

A) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in subsection (d)(5)(B), a leak is detected.

B) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 725.959.

C) A first attempt at repair (e.g., relapping the seal) must be made no later than 5 calendar days after each leak is detected.

e) Any pump that is designated, as described in Section 725.964(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsections (a), (c) and (d), if the pump meets the following requirements:

1) Must have no externally actuated shaft penetrating the pump housing.

2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Section 725.963(c).

3) Must be tested for compliance with subsection ~~(a)(2)~~(e)(2) initially upon designation, annually and at other times as specified by the Agency pursuant to Section 725.950(e).

f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section 725.960, it is exempt from the requirements of subsections (a) through (e).

(Source: Amended at 16 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
726.141 Prohibitions
726.142 Standards applicable to generators of used oil burned for energy recovery
726.143 Standards applicable to marketers of used oil burned for energy recovery
726.144 Standards applicable to burners of used oil burned for energy recovery

SUBPART F: RECYCLABLE MATERIALS UTILIZED FOR PRECIOUS METAL RECOVERY

SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

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. , effective

SUBPART D: HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY

Section 726.130 Applicability (Repealed)

~~a) The regulations of this Subpart apply to hazardous wastes that are burned for energy recovery in any boiler or industrial furnace that is not regulated under 35 Ill.Adm. Code 724 or 725.Subpart O except as provided by subsection (b). Such hazardous wastes burned for energy recovery are termed "hazardous waste fuel". Fuel produced from hazardous waste processing, by blending or other treatment is also hazardous waste fuel. (The regulations do not apply, however, to gas recovered from hazardous waste management activities when such gas is burned for energy recovery).~~

~~b) The following hazardous wastes are not regulated under this Subpart:~~

~~1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in 35 Ill.Adm. Code 721.Subpart C. Such used oil is subject to regulation under Subpart E rather than this Subpart; and~~

~~2) Hazardous wastes that are exempt from regulation under the provisions of 35 Ill.Adm. Code 721.104 and 721.106(a)(3)(E) through (I) and hazardous wastes that are subject to the special requirements for small quantity generators under the provisions of 35 Ill.Adm. Code 721.105.~~

(Source: Repealed at 16 Ill. Reg. , effective)

Section 726.131 Prohibitions (Repealed)

~~a) A person may market hazardous waste fuel only:~~

~~1) To persons who have notified USEPA of their hazardous waste fuel activities and have a USEPA identification number (35 Ill.Adm. Code 722.112); and~~

~~2) If the fuel is burned, to persons who burn the fuel in boilers or industrial furnaces identified in subsection (b).~~

~~b) Hazardous waste fuel may be burned for energy recovery in only the following devices:~~

~~1) Industrial furnaces identified in 35 Ill.Adm. Code 720.110;~~

~~2) Boiler, as defined in 35 Ill.Adm. Code 720.110 that are identified as follows:~~

~~A) 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~~

~~B) Utility boilers used to produce electric power, steam or heated or cooled air or other gases or fluids for sale.~~

~~c) No fuel which contains any hazardous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than 500,000 (based on the most recent census statistics) unless such kiln fully complies with regulations under 35 Ill.Adm. Code 702, 703, 724 and 725 that are applicable in incinerators.~~

(Source: Repealed at 16 Ill. Reg. , effective)

Section 726.132 Standards applicable to generators of hazardous waste fuel (Repealed)

~~a) Generators of hazardous waste that is used as a fuel or used to produce a fuel are subject to 35 Ill.Adm Code 722;~~

~~b) Generators who market hazardous waste fuel to a burner also are subject to Section 726.134;~~

~~c) Generators who are burners also are subject to Sec~~
~~726.135.~~

(Source: Repealed at 16 Ill. Reg. , effective
)

Section 726.133 Standards applicable to transporters of hazardous waste fuel (Repealed)

~~Transporters of hazardous waste fuel (and hazardous waste th~~
~~used to produce a fuel) are subject to the 35 Ill.Adm. Code 7~~

(Source: Repealed at 16 Ill. Reg. , effective
)

Section 726.134 Standards applicable to marketers of hazardc waste fuel (Repealed)

~~Persons who market hazardous waste fuel are called "marketers~~
~~and are subject to the following requirements. Marketers inc~~
~~generators who market hazardous waste fuel directly to a burn~~
~~persons who receive hazardous waste from generators and produ~~
~~process or blend hazardous waste fuel from these hazardous wa~~
~~and persons who distribute but do not process or blend hazard~~
~~waste fuel.~~

~~a) Prohibitions. The prohibitions under Section 726.131(a);~~

~~b) Notification. Notification of hazardous waste fuel activities. Even if a marketer has previously noti~~
~~USEPA of the marketer's hazardous waste management activities and obtained a USEPA identification numb~~
~~the marketer shall renotify to identify the marketer~~
~~hazardous waste fuel activities.~~

~~c) Storage. The applicable provisions of 35 Ill.Adm. C~~
~~702, 703, 722.134, 724.Subparts A through L and 725.Subparts A through L;~~

~~d) Off-site shipment. The standards for generators in~~
~~Ill.Adm. Code 722 when a marketer initiates a shipme~~
~~of hazardous waste fuel;~~

~~e) Required notices.~~

~~1) Before a marketer initiates the first shipment~~
~~hazardous waste fuel to a burner or another marketer, the marketer shall obtain a one-time written and signed notice from the burner or marketer certifying that:~~

~~A) The burner or marketer has notified USEPA and identified the burner or marketer's waste-as-fuel activities; and~~

~~B) If the recipient is a burner, the burner will burn the hazardous waste fuel only in an industrial furnace or boiler identified in 35 Ill.Adm. Code 726.131(b).~~

~~2) Before a marketer accepts the first shipment of hazardous waste fuel from another marketer, the marketer shall provide the other marketer with a one-time written and signed certification that the marketer has notified USEPA under Section 3010 of the Resource Conservation and Recovery Act and identified the marketer's hazardous waste fuel activities; and~~

~~f) Recordkeeping. In addition to the applicable recordkeeping requirements of 35 Ill.Adm. Code 722, 724 and 725, a marketer shall keep a copy of each certification notice the marketer receives or sends for three years from the date the marketer last engages in a hazardous waste fuel marketing transaction with the person who sends or receives the certification notice.~~

(Source: Repealed at 16 Ill. Reg. , effective)

Section 726.135 Standards applicable to burners or hazardous waste fuel (Repealed)

~~Owners and operators of industrial furnaces and boilers identified in Section 726.131 (b) that burn hazardous waste fuel are "burners" and are subject to the following requirements:~~

~~a) Prohibitions. The prohibitions under section 726.131(b);~~

~~b) Notification. Notification of hazardous waste fuel activities. Even if a burner has previously notified USEPA of the burner's hazardous waste management activities and obtained a USEPA identification number, the burner shall renotify to identify the burner's hazardous waste fuel activities.~~

~~c) Storage.~~

~~1) For short term accumulation by generators who burn their hazardous waste fuel on site, the applicable provisions of 35 Ill.Adm. Code 722.134;~~

~~2) For existing storage facilities, the applicable provisions of 35 Ill.Adm. Code 702, 703 and 725.Subparts A through L; and~~

~~3) For new storage facilities, the applicable provisions of 35 Ill.Adm. Code 702, 703 and 724.Subparts A through L;~~

~~d) Required notices. Before a burner accepts the first shipment of hazardous waste fuel from marketer, the burner shall provide the marketer a one-time written and signed notice certifying that:~~

~~1) The burner has notified USEPA and identified the burner's waste-as-fuel activities; and~~

~~2) The burner will burn the fuel only in a boiler or furnace identified in Section 726.131(b).~~

~~e) Recordkeeping. In addition to the applicable recordkeeping requirements of 35 Ill.Adm. Code 724 and 725 a burner shall keep a copy of each certification notice that the burner sends to a marketer for three years from the date the burner last receives hazardous waste fuel from that marketer.~~

(Source: Repealed at 16 Ill. Reg. , effective)

SUBPART E: USED OIL BURNED FOR ENERGY RECOVERY

Section 726.140 Applicability

a) The regulations of this Subpart apply to used oil that is burned for energy recovery in any boiler or industrial furnace that is not regulated under 35 Ill. Adm. Code 724. or 725.Subpart O, except as provided by subsection (c) and (e). Such used oil is termed "used oil fuel". Used oil fuel includes any fuel produced from used oil by processing, blending or other treatment.

b) "Used oil" means any oil that has been refined from crude oil, used and, as a result of such use, is contaminated by physical or chemical impurities.

c) Except as provided by subsection (d), used oil that is mixed with hazardous waste and burned for energy recovery is subject to regulation as hazardous waste fuel under Subpart ~~D~~H. Used oil containing more than 1000 ppm of total halogens is presumed to be a hazardous waste because it has been mixed with

halogenated hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 35 Ill. Adm. Code 721.Subpart H).

d) Used oil burned for energy recovery is subject to regulation under this Subpart rather than as hazardous waste fuel under Subpart ~~D~~H if it is a hazardous waste solely because it:

1) Exhibits a characteristic of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C, provided that it is not mixed with a hazardous waste; or

2) Contains hazardous waste generated only by a person subject to the special requirements for small quantity generators under 35 Ill. Adm. Code 721.105.

e) Except as provided by subsection (c), used oil burned for energy recovery, and any fuel produced from used oil by processing, blending or other treatment, is subject to regulation under this Subpart unless it is shown not to exceed any of the allowable level of the constituents and properties in the specification shown in the following table. Used oil fuel that meets the specification is subject only to the analysis and recordkeeping requirements under Section 726.143(b)(1) and (b) (6). Used oil fuel that exceeds any specification level is termed "off-specification used oil fuel".

USED OIL EXCEEDING ANY SPECIFICATION LEVEL IS SUBJECT TO THIS SUBPART WHEN BURNED FOR ENERGY RECOVERY

Constituent/Property	Allowable Level
Arsenic	5 ppm max
Cadmium	2 ppm max
Chromium	10 ppm max
Lead	100 ppm max
Flash Point	100 degree F min
Total Halogens	4000 ppm max

1) The specification does not apply to used oil or fuel mixed with a hazardous waste other than small quantity generated hazardous waste.

2) Used oil containing more than 1000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under subsection (c). Such used oil is subject to Subpart D rather than this Subpart when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

Section 726.200 Applicability

a) The regulations of this Subpart 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) and (f). In this Subpart, 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.

BOARD NOTE: This provision does not apply to coke ovens processing coke by-products wastes exhibiting the toxicity characteristic identified in 35 Ill. Adm. Code 721.124 pending completion of a rulemaking proposed by USEPA on July 26, 1991 (56 Fed. Reg. 35787). When that rulemaking is complete, this note will be removed.

b) The following hazardous wastes and facilities are not subject to regulation under this Subpart:

1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C. Such used oil is subject to regulation under Subpart E 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)(E) - (H), 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.

c) 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, 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 shall 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, shall comply with the requirements of subsection (c)(3):

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 (c)(2);

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;

B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection 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 shall use the best available method; and

C) Maintain at the facility for at least three years records to document compliance with the provisions of this subsection 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 nonhazardous 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 35 Ill. Adm. Code 721.Appendix H, 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 (c)(1)(C); 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 (c)(1)(C).

3) To be exempt from Sections 726.202 - 726.211, an owner or operator of a lead or nickel-chromium recovery furnace, or a metal recovery furnace that burns a baghouse gas 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 or subsection (c)(1). The owner or operator shall comply with the requirements of subsection (c)(1) for those wastes claimed to be exempt under that subsection and shall comply with the requirements below for those wastes claimed to be exempt under this subsection.

A) The hazardous wastes listed in Appendices K and L and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (c)(1), provided that:

i) A waste listed in Appendix K must contain recoverable levels of lead. A waste listed in Appendix L must contain recoverable levels of nickel or chromium and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal; and

ii) The waste does not exhibit the Toxicity Characteristic of 35 Ill. Adm. Code 721.124 for an organic constituent; and

iii) The waste is not a hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D because it is listed for an organic constituent as identified in 35 Ill. Adm. Code 721.Appendix G; and

iv) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of subsection (c)(3) 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 (C)(1)(B) and records to document compliance with Subsection (c)(3) 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 or L that contains a total concentration of more than 500 ppm toxic organic compounds listed in 35 Ill. Adm. Code 721.Appendix H may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart. In that situation, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart when burning that material. In making the hazard determination, the Agency shall consider the following factors:

i) The concentration and toxicity of organic constituents in the material; and

ii) The level of destruction of toxic organic constituents provided by the furnace; and

iii) Whether the acceptable ambient levels established in Appendices D or E 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.

d) 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.

e) The management standards for residues under Section 726.212 apply to any BIF burning hazardous waste.

f) 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 or ruthenium, or any combination of these, are conditionally exempt from regulation under this Subpart except for Section 726.212. To be exempt from Sections 726.202 - 726.211 an owner or operator shall:

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 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 shall 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.

g) Abbreviations and definitions. The following definitions and abbreviations are used in this Subpart:

"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 which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each 15 seconds, and computes and records the average value at least every 60 seconds.

"DRE" means destruction or removal efficiency.

"cu m" means cubic meters.

"E" means "ten to the". 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 40 CFR 51.100(ii), incorporated by reference in 35 Ill. Adm. Code 720.111.

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"Hourly rolling average" means the arithmetic mean of the 60 most recent 1-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 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.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E.

"SSU" is a unit of viscosity.

"TCLP test" means the toxicity characteristic leaching procedure of 35 Ill. Adm. Code 721.124.

"Tier I". See Section 726.206(b).

"Tier II". See Section 726.206(c).

"Tier III". See Section 726.206(d).

"TESH" means terrain-adjusted effective stack height (in meters).

"Toxicity equivalence" is estimated, pursuant to Section 726.204(e), using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in Appendix I ("eye").

"ug" means microgram.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.201 Management prior to Burning

a) Generators. Generators of hazardous waste that is burned in a BIF are subject to 35 Ill. Adm. Code 722.

b) Transporters. Transporters of hazardous waste that is burned in a BIF are subject to 35 Ill. Adm. Code 723.

c) Storage facilities.

1) Owners and operators of facilities that store hazardous waste that is burned in a BIF are subject to the applicable provisions of 35 Ill.

Adm. Code 724.Subparts A through L, 35 Ill. Adm. Code 725.Subparts A through L and 35 Ill. Adm. Code 702 and 703, except as provided by subsection (c)(2). These standards apply to storage by the burner as well as to storage facilities operated by intermediaries (processors, blenders, distributors, etc.) between the generator and the burner.

2) Owners and operators of facilities that burn, in an on-site BIF exempt from regulation under the small quantity burner provisions of Section 726.208, hazardous waste that they generate are exempt from regulation under 35 Ill. Adm. Code 724.Subparts A through L, 35 Ill. Adm. Code 725.Subparts A through L and 35 Ill. Adm. Code 702 and 703 with respect to the storage of mixtures of hazardous waste and the primary fuel to the BIF in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation as prescribed in subsection (c)(1).

(Source: Added at 16 Ill. Reg. , effective)

Section 726.202 Permit standards for Burners

a) Applicability.

1) General. Owners and operators of BIFs burning hazardous waste and not operating under interim status shall 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. Owners and operators of BIFs that burn hazardous waste are subject to the following provisions of 35 Ill. Adm. Code 724, except as provided otherwise by this Subpart:

A) In Subpart A (General), 724.104;

B) In Subpart B (General facility standards), 35 Ill. Adm. Code 724.111 - 724.118;

C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 724.131 - 724.137;

D) In Subpart D (Contingency plan and emergen procedures), 35 Ill. Adm. Code 724.151 - 724.156;

E) In Subpart E (Manifest system, recordkeeping and reporting), the applicable provisions of 35 Ill. Adm. Code 724.171 - 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 - 724.215;

H) In Subpart H (Financial requirements), 35 Ill. Adm. Code 724.241, 724.242, 724.243 and 724.247 - 724.251, except that the State of Illinois and the Federal government are exempt from the requirements of 35 Ill. Adm. Code 724.Subpart H; 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 shall provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in 35 Ill. Adm. Code 721.Appendix H that is reasonably be expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by 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 shall use the best available method. The 35 Ill. Adm. Code 721.Appendix H constituents excluded from this analysis must be identified and the basis for their exclusion explained. This analysis must provide all information required by this Subpart and 35 Ill. Adm. Code 703.208 and 703.232 and must enable the Agency to prescribe such permit conditions as 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, 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 of BIFs not operating under the interim status standards shall 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 shall 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 shall comply with emissions standards provided by Sections 726.204 through 726.207.

d) Permits.

1) The owner or operator shall burn only hazardous wastes specified in the facility permit and only under the operating conditions specified under subsection (e), 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), 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 shall 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 either: on a case-by-case basis for each hazardous waste burned as those 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 those 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 which 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);

ii) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6);

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);

vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6), 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).

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 (C), 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);

ii) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in subsection (e)(6);

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 subsections (b) or (e) of Section 726.206, 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);

ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6);

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);

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6): 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);

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6);

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6);

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6);

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);

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsection (e)(6): 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);

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6);

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6);

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6);

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);

ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6);

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);

iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6);

iv) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6);

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), 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(g). 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(g)) and lead must be established either on an hourly rolling average basis as prescribed by subsection (e)(6)(A) 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:

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(g); 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 (B).

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 pollutant(s) (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (e).

7) General requirements.

A) Fugitive emissions. Fugitive emissions must be controlled by:

i) Keeping the combustion zone totally sealed against fugitive emissions; or

ii) Maintaining the combustion zone pressure lower than atmospheric pressure; or

iii) An alternate 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:

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 shall 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 shall 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). CO, HC and oxygen monitors must be installed, operated and maintained in accordance with methods specified in Appendix I ("eye").

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 7 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 shall comply with Section 726.211.

10) Recordkeeping. The owner or operator shall 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 shall remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.203 Interim status standards for Burners

a) Purpose, scope, 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 that on or before August 21, 1991 is either in operation burning or processing hazardous waste or for which construction (including the ancillary facilities to burn or to process the hazardous waste) has commenced. A facility has commenced construction if the owner or operator has obtained the federal, State and local approvals or permits necessary to begin physical construction; and either:

i) A continuous on-site, physical construction program has begun; or

ii) The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for physical construction of the facility to be completed within a reasonable time.

C) If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator shall 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 Sections 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. Owners and operators of BIFs that burn hazardous waste and are operating under interim status are subject to the following provisions of 35 Ill. Adm. Code 725, except as provided otherwise by this Section:

A) In Subpart A (General), 35 Ill. Adm. Code 725.104;

B) In Subpart B (General facility standards), 35 Ill. Adm. Code 725.111 - 725.117;

C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 725.131 - 725.137;

D) In Subpart D (Contingency plan and emergency procedures), 35 Ill. Adm. Code 725.151 - 725.156;

E) In Subpart E (Manifest system, recordkeeping and reporting), 35 Ill. Adm. Code 725.171 - 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 (Closure and post-closure), 35 Ill. Adm. Code 725.211 - 725.215;

G) In Subpart H (Financial requirements), 35 Ill. Adm. Code 725.241, 725.242, 725.243 and 725.247 - 725.251, except that the State of Illinois and the Federal government are exempt from the requirements of 35 Ill. Adm. Code 725.Subpart H; and

H) Subpart BB (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)) 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 temperatures are at least 1800 °F;

ii) The owner or operator shall 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) apply upon certification of compliance under subsection (c) 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 these criteria:

i) The hazardous waste has a total concentration of nonmetal compounds listed in 35 Ill. Adm. Code 721.Appendix H, 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), owners and operators shall 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:

A) Hazardous waste may be burned solely as an ingredient; or

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; or

C) Such waste may be burned if the Agency has documentation to show that, prior to August 21, 1991:

i) The BIF was operating under the interim status standards for incinerators or thermal treatment units, 35 Ill. Adm. Code 725.Subparts O or P; and

ii) The BIF met the interim status eligibility requirements under 35 Ill. Adm. Code 703.153 for 35 Ill. Adm. Code 725.Subparts O or P; 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 and operator shall comply with Section 726.211.

b) Certification of precompliance.

1) The Board incorporates by reference 40 CFR 266.103(b), adopted at 56 Fed. Reg. 7206, February 21, 1991; 56 Fed. Reg. 32688, July 17, 1991; and 56 Fed. Reg. 42511, August 27, 1991. This Section incorporates no later editions or amendments.

2) Certain owners and operators were required to file a certification of precompliance with USEPA by August 21, 1991, pursuant to 40 CFR 266.103(b). No separate filing is required with the Agency.

c) Certification of compliance. The owner or operator shall conduct emissions testing to document compliance with the emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, 726.207, and subsection (a)(5)(A)(iv), under the procedures prescribed by this subsection, except under extensions of time provided by subsection (c)(7). Based on the compliance test, the owner or operator shall submit to the Agency, on or before August 21, 1992, a complete and accurate "certification of compliance" (under subsection (c)(4)) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1).

1) Limits on operating conditions. The owner or operator shall establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in subsection (c)(4)(D)) 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 Section 726.204(b) - (e), 726.205, 726.206, 726.207 and subsection (a)(5)(A)(iv) 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 that must comply

with the alternative metals implementation approach under subsection (c)(3)(B) must specify limits on the concentration of each metal in collected PM in lieu of feed rate limits for total feedstreams;

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.

C) Total feed rate of total chlorine and chloride in total feed streams;

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;

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), the owner or operator shall 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:

i) 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: 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)) 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;

vi) Other information useful to an understanding of the system design or operation.

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).

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) and under conditions established in the notification of compliance testing required by subsection (c)(2). 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 shall 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 shall 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 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 shall 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 ("eye"); or

ii) Stack emissions testing for a minimum of 6 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)) must be established during compliance testing under 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; 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) 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 subsections (c)(3)(B)(i) or (ii), 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 pollutant(s) (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (c)(1).

4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator shall 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). The certification of compliance must include the following information:

A) General facility and testing information including:

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) Date(s) 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), 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), 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:

i) Purpose(s) 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(g)); 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).

D) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in subsection (c)(1) using either 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; or

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(g). 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 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) or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from 2 to 24 hours: 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 continuous monitor is as defined in Section 726.200(g). And 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.

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 (iii).

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 manages 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 Sections 726.204(c) or subsection (a)(5)(A)(iv), a conditioned gas monitoring system may be used in conformance with specifications provided in Appendix I ("eye") provided that the owner or operator submits a certification of compliance without using extensions of time provided by subsection (c)(7).

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:

A) When complying with the requirements of subsection (c)(3)(B)(i), comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in Appendix I ("eye"); and

B) When complying with the requirements of subsection (c)(3)(B)(ii), 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 shall either:

i) Stop burning hazardous waste and begin closure activities under subsection (l) for the hazardous waste portion of the facility; or

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).

B) Case-by-case extensions of time. See Section 726.219.

3) 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 shall 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 shall submit the applicable information required under subsection (b)(2); 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 shall include a schedule of pre-testing and compliance testing. If the owner and operator revises the scheduled date for the compliance test, the owner or operator shall 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).

d) Periodic Recertifications. The owner or operator shall conduct compliance testing and submit to the Agency a recertification of compliance under provisions of subsection (c) 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 shall comply with the requirements of subsection (c)(8).

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), hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l), 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) 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), and upon certification of compliance under subsection (c), 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 (E) - (M) deviate from those established in the certification of compliance. In addition:

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:

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 by:

1) Keeping the combustion zone totally sealed against fugitive emissions; or

2) Maintaining the combustion zone pressure lower than atmospheric pressure; or

3) An alternate 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 shall 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 ("eye").

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 7 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 shall 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 shall remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF and shall comply with 35 Ill. Adm. Code 725.211 - 725.215.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.204 Standards to control Organic Emissions

a) DRE standard.

1) General. Except as provided in subsection (a)(3), a BIF burning hazardous waste must achieve a DRE of 99.99% for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99% DRE must be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated (under subsection (a)(2)) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

DRE = 100(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 35 Ill. Adm. Code 721.Appendix H that are also present in the normal waste feed. However, if the applicant demonstrates to the Agency that a compound not listed in 35 Ill. Adm. Code 721.Appendix H 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% for each POHC designated (under subsection (a)(2)) 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). In addition, the owner or operator of the BIF shall notify the Agency of intent to burn USEPA Hazardous Waste Nos. 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) 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) and are exempt from the DRE trial burn.

b) CO standard.

1) Except as provided in subsection (c), 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 7 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 ("eye").

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) 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 7 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 ("eye"). CO and oxygen must be continuously monitored in conformance with subsection (b)(2).

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 7 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 subsections (c) or (f) irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of subsection (b).

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 450-750 °F, and industrial furnaces operating under an alternative HC limit established under subsection (f) shall 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 1E-05 (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 (PCDDs) and dibenzofurans (CDDs/CDFs) using Method 23, "Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans (PCDFs) from Stationary Sources", in Appendix I ("eye");

2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in Appendix I ("eye"). 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 "Guideline on Air Quality Models (Revised)" or the "Hazardous Waste Combustion Air Quality Screening Procedure", which are provided in Appendices I and J, respectively, or "EPA SCREEN Screening Procedure" as described in Screening Procedures for Estimating Air Quality Impact of Stationary Sources (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). 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 (2.2E-07) must not exceed 1.0.

f) Alternative HC limit for furnaces with organic matter in raw material. For industrial furnaces that cannot meet the 20 ppmv HC limit because of organic matter in normal raw material, the Agency shall establish an alternative HC limit on a case-by-case basis (under a Part B permit proceeding) at a level that ensures that flue gas HC (and CO) concentrations when burning

hazardous waste are not greater than when not burning hazardous waste (the baseline HC level) provided that the owner or operator complies with the following requirements. However, cement kilns equipped with a by-pass duct meeting the requirements of subsection (q), are not eligible for an alternative HC limit.

1) The owner or operator shall demonstrate that the facility is designed and operated to minimize HC emissions from fuels and raw materials when the baseline HC (and CO) level is determined. The baseline HC (and CO) level is defined as the average over all valid test runs of the highest hourly rolling average value for each run when the facility does not burn hazardous waste, and produces normal products under normal operating conditions feeding normal feedstocks and fuels. More than one baseline level must be determined if the facility operates under different modes that generate significantly different HC (and CO) levels;

2) The owner or operator shall develop an approach to monitor over time changes in the operation of the facility that could reduce the baseline HC level;

3) The owner or operator shall conduct emissions testing during the trial burn to:

   A) Determine the baseline HC (and CO) level;

   B) Demonstrate that, when hazardous waste is burned, HC (and CO) levels do not exceed the baseline level; and

   C) Identify the types and concentrations of organic compounds listed in 35 Ill. Adm. Code 721.Appendix H, that are emitted and conduct dispersion modeling to predict the maximum annual average ground level concentration of each organic compound. On-site ground level concentrations must be considered for this evaluation if a person resides on site.

      i) Sampling and analysis of organic emissions must be conducted using procedures prescribed by the Agency pursuant to 35 Ill. Adm. Code 703.208(a).

ii) Dispersion modeling must be conducted according to procedures provided by subsection (e)(2); and

D) Demonstrate that maximum annual average ground level concentrations of the organic compounds identified in subsection (f)(3)(C) do not exceed the following levels:

i) For the noncarcinogenic compounds listed in Appendix D, the levels established in Appendix D;

ii) For the carcinogenic compounds listed in Appendix E, the sum for all compounds of the ratios of the actual ground level concentration to the level established in Appendix E cannot exceed 1.0. To estimate the health risk from chlorinated dibenzo-p-dioxins and dibenzofuran congeners, use the procedures prescribed by subsection (e)(3) to estimate the 2,3,7,8-TCDD toxicity equivalence of the congeners.

iii) For compounds not listed in Appendix D or E, 0.1 ug/cu m.

4) All HC levels specified under this subsection are to be monitored and reported as specified in subsections (c)(1) and (2).

g) 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) by monitoring in the by-pass duct provided that:

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% of kiln off-gas into the duct.

h) 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) and comprehensive organic emissions testing under subsection (f) is conducted.

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 et seq.

(Source: Added at 16 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 cu m (0.08 grains/dry standard cubic foot) after correction to a stack gas concentration of 7% oxygen, using procedures prescribed in 40 CFR 60, Appendix A, methods 1 through 5 (incorporated by reference in 35 Ill. Adm. Code 720.111), and Appendix I ("eye").

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) 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: Added at 16 Ill. Reg. , effective
)

Section 726.206 Standards to control Metals Emissions

a) General. The owner or operator shall comply with the metals standards provided by subsections (b), (c), (d), (e) or (f) for each metal listed in subsection (b) that is present in the hazardous waste at detectable levels using 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 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).

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.

A) The feed rate screening limits for antimony, barium, mercury, thallium and silver are based on either:

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. 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 must not exceed 1.0, as provided by the following equation:

SUM(Ai/Fi) ≤ 1.0

where:

SUM(Xi) means the sum of the values of X for each metal "i", from i = 1 to n.

n = number of carcinogenic metals

Ai = actual feed rate to the device for metal "i"

Fi = feed rate screening limit provided by Appendix A 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 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.

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 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(g).

C) If the TESH calculated pursuant to subsection (b)(3)(A) is not listed in Appendices A - C, 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 5 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 Appendices I ("eye") or J shall be used.

6) 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 of metals emissions under a RCRA permit or interim status controls shall 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*V*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 (cu m/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 shall comply with the Tier III standards provided by subsection (d).

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;

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; or

E) The Agency determines that standards based on site-specific dispersion modeling are required.

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 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).

1) Noncarcinogenic metals. The emission rates of noncarcinogenic metals must not exceed the screening limits specified in Appendix A.

2) Carcinogenic metals. The emission rates of carcinogenic metals must not exceed values derived from the screening limits specified in Appendix A. 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 must not exceed 1.0, as provided by the following equation:

SUM(Ai/Ei) ≤ 1.0

where:

SUM(Xi) means the sum of the values of X for each metal i, from 1 = 1 to n.

n = number of carcinogenic metals

Ai = actual emission rate for metal "i"

Ei = emission rate screening limit provided by Appendix A 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) and (B) and (b)(2)(B). 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) and 726.200(g) for the following terms also apply to the Tier II emission rate screening limits provided by 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) 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

shall 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).

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.

1) General. Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal, 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. Appendices D and E list the acceptable ambient levels for purposes of this Subpart. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 1E-05 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).

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:

$$SUM(Pi/Ri) \leq 1.0$$

where:

SUM(Xi) means the sum of the values of X for each metal i, from i = 1 to n.

n = number of carcinogenic metals

Pi = Predicted ambient concentration for metal i.

Ri = 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 shall conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance 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) and (B) and (b)(2)(B). 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 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 Appendices D and E 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).

f) Alternative implementation approaches.

1) Pursuant to subsection (f)(2), the Agency shall approve on a case-by-case basis approaches to

implement the Tier II or Tier III metals emission limits provided by subsections (c) or (d) alternative to monitoring the feed rate of metals in each feedstream.

2) The emission limits provided by subsection (d) must be determined as follows:

A) For each noncarcinogenic metal, by back-calculating from the RAC provided in Appendix D 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); and

B) For each carcinogenic metal by:

i) Back-calculating from the RSD provided in Appendix E 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); and

ii) If more than one carcinogenic metal is emitted, selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by subsection (f)(2)(B)(i) 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 the Multiple Metals Train as described in Appendix I ("eye").

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 Appendix I ("eye").

h) Dispersion modeling. Dispersion modeling required under this Section must be conducted according to methods recommended in Appendix J, the "Hazardous Waste Combustion Air Quality Screening Procedure" described in Appendix I ("eye"), or "EPA SCREEN Screening Procedure" as described in Screening Procedures for Estimating Air Quality Impact of Stationary Sources (the latter document is incorporated by reference, see 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 et seq.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.207 Standards to Control HCl and Chlorine Gas Emissions

a) General. The owner or operator shall comply with the HCl and chlorine gas controls provided by subsections (b) or (c).

b) Screening limits.

1) Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in Appendix B 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 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 Section 726.200(g) 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 shall 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 lists the RACs for HCl (7 ug/cu m) and chlorine gas (0.4 ug/cu m).

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 shall conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedance 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:

1) An hourly rolling average as defined in Section 726.200(g) 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 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 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 must be conducted using the procedures described in Appendix I ("eye").

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 et seq.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.208 Small quantity On-site Burner Exemption

a) Exempt quantities. Owners and operators of facilities that burn hazardous waste in an on-site BIF are exempt from the requirements of this Subpart provided that:

1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the Table A based on the TESH as defined in Section 726.200(g) and 726.206(b)(3).

2) The maximum hazardous waste firing rate does not exceed at any time 1 percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste;

3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and

4) The hazardous waste fuel does not contain (and is not derived from) USEPA Hazardous Waste Nos. F020, F021, F022, F023, F026 or F027.

b) Mixing with nonhazardous fuels. If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with subsection (a).

c) Multiple stacks. If an owner or operator burns hazardous waste in more than one on-site BIF exempt under this Section, the quantity limits provided by subsection (a)(1) are implemented according to the following equation:

$SUM(Ci/Li) \leq 1.0$

where:

SUM(Xi) means the sum of the values of X for each stack i, from i = 1 to n.

n means the number of stacks;

Ci = Actual Quantity Burned means the waste quantity burned per month in device "i".

Li = Allowable Quantity Burned means the maximum allowable exempt quantity for stack "i" from Table A.

BOARD NOTE: Hazardous wastes that are subject to the special requirements for small quantity generators under 35 Ill. Adm. Code 721.105 may be burned in an off-site device under the exemption provided by Section 726.208, but must be included in the quantity determination for the exemption.

d) Notification requirements. The owner or operator of facilities qualifying for the small quantity burner exemption under this Section shall provide a one-time signed, written notice to the Agency indicating the following:

1) The combustion unit is operating as a small quantity burner of hazardous waste;

2) The owner and operator are in compliance with the requirements of this Section; and

3) The maximum quantity of hazardous waste that the facility is allowed to burn per month as provided by Section 726.208(a)(1).

e) Recordkeeping requirements. The owner or operator shall maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate and heating value limits of this Section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month and the heating value of the hazardous waste.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.209 Low risk waste Exemption

a) Waiver of DRE standard. The DRE standard of Section 726.204(a) does not apply if the BIF is operated in conformance with subsection (a)(1) and the owner or operator demonstrates by procedures prescribed in subsection (a)(2) that the burning will not result in unacceptable adverse health effects.

1) The device must be operated as follows:

A) A minimum of 50 percent of fuel fired to the device must be fossil fuel, fuels derived from fossil fuel, tall oil or, if approved by the Agency on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate must be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

B) Primary fuels and hazardous waste fuels must have a minimum as-fired heating value of 8,000 Btu/lb;

C) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

D) The device operates in conformance with the CO controls provided by Section 726.204(b)(1). Devices subject to the exemption provided by this Section are not eligible for the alternative CO controls provided by Section 726.204(c).

2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

A) Identify and quantify those nonmetal compounds listed in 35 Ill. Adm. Code 721.Appendix H, that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained;

B) Calculate reasonable, worst case emission rates for each constituent identified in subsection (a)(2)(A) by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted.

C) For each constituent identified in subsection (a)(2)(A), use emissions dispersion modeling

to predict the maximum annual average ground level concentration of the constituent.

i) Dispersion modeling must be conducted using methods specified in Section 726.206(h).

ii) Owners and operators of facilities with more than one on-site stack from a BIF that is exempt under this Section shall conduct dispersion modeling of emissions from all stacks exempt under this Section to predict ambient levels prescribed by this subsection.

D) Ground level concentrations of constituents predicted under subsection (a)(2)(C) must not exceed the following levels:

i) For the noncarcinogenic compounds listed in Appendix D, the levels established in Appendix D;

ii) For the carcinogenic compounds listed in Appendix E, the sum for all constituents of the ratios of the actual ground level concentration to the level established in Appendix E cannot exceed 1.0; and

iii) For constituents not listed in Appendix D or E, 0.1 ug/cu m.

b) Waiver of particular matter standard. The PM standard of Section 726.205 does not apply if:

1) The DRE standard is waived under subsection (a); and

2) The owner or operator complies with the Tier I, or adjusted Tier I, metals feed rate screening limits provided by Section 726.206(b) or (e).

(Source: Added at 16 Ill. Reg. , effective)

Section 726.210 Waiver of DRE trial burn for Boilers

Boilers that operate under the special requirements of this Section, and that do not burn hazardous waste containing (or derived from) USEPA Hazardous Waste Nos. F020, F021, F022, F023, F026 or F027, are considered to be in conformance with the DRE

standard of Section 726.204(a), and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

a) A minimum of 50 percent of fuel fired to the devices must be fossil fuel, fuels derived from fossil fuel, tall oil or, if approved by the Agency on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate must be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

b) Boiler load must not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;

c) Primary fuels and hazardous waste fuels must have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired must have a heating value of at least 8,000 Btu/lb, as-fired;

d) The device must operate in conformance with the CO standard provided by Section 726.204(b)(1). Boilers subject to the waiver of the DRE trial burn provided by this Section are not eligible for the alternative CO standard provided by Section 726.204(c);

e) The boiler must be a water tube type boiler that does not feed fuel using a stoker or stoker type mechanism; and

f) The hazardous waste must be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system or a rotary cup atomization system under the following conditions:

1) Viscosity. The viscosity of the hazardous waste fuel as-fired must not exceed 300 SSU;

2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer or mechanical atomizer is used, 70% of the hazardous waste fuel must pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70% of the hazardous waste must pass through a 100 mesh (150 micron) screen;

3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate must be maintained within the design range taking into account the viscosity and volatility of the fuel;

4) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.

(Source: Added at 16 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 Sections 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, the following terms have the meanings given below:

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 35 Ill. Adm. Code 724 and 725.Subparts I and J. For purposes of this Section, the term "tank systems" in those referenced requirements means direct transfer equipment as defined in subsection (b)(1).

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:

   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 shall use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include at a minimum:

   A) Spill prevention controls (e.g., check valves, dry discount couplings); 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 shall comply with the following requirements:

1) The containment requirements of 35 Ill. Adm. Code 724.275;

2) The use and management requirements of 35 Ill. Adm. Code 725.Subpart I, 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 NFPA 30 (incorporated by reference in 35 Ill. Adm. Code 720.111). The owner or operator shall 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 shall comply with the secondary containment requirements of 35 Ill. Adm. Code 725.293 , except for subsections 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 shall determine whether the equipment is leaking or is unfit for use. The owner or operator shall 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 waste(s) to be transferred to ensure that it will not collapse, rupture or fail. At a minimum, this assessment must consider the following:

i) Design standard(s), if available, according to which the direct transfer equipment was constructed;

ii) Hazardous characteristics of the waste(s) 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 shall comply with the requirements of 35 Ill. Adm. Code 725.296(a) and (b).

3) Inspections and recordkeeping.

A) The owner or operator shall 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); 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 shall 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 3 years from the date of the inspection.

4) Design and installation of new ancillary equipment. Owners and operators shall comply with the requirements of 35 Ill. Adm. Code 725.292.

5) Response to leaks or spills. Owners and operators shall comply with the requirements of 35 Ill. Adm. Code 725.296.

6) Closure. Owners and operators shall 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: Added at 16 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), (7) or (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% 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% by weight normal, nonhazardous raw materials;

3) Cement kilns. Cement kilns must process at least 50% by weight 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 35 Ill. Adm. Code 721.Appendix H 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 35 Ill. Adm. Code 721.Appendix H that may be PICs. Sampling and analyses must be in conformance with procedures prescribed in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

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% confidence with a 95% proportion of the sample distribution) of the concentration in the normal residue shall 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 shall use statistical procedures prescribed in "Statistical Methodology for Bevill Residue Determinations" in Appendix I ("eye").

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). 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 concentrations of nonmetal toxic constituents of concern (specified in subsection (b)(1)) in the waste-derived residue must not exceed the health-based levels specified in Appendix G. If a health-based limit for a constituent of concern is not listed in Appendix G, then a limit of 0.002 ug/kg or the level of detection (using analytical procedures prescribed in SW-846, incorporated by

reference in 35 Ill. Adm. Code 720.111), whichever is higher, must be used; and

B) Metal constituents. The concentration of metals in an extract obtained using the TCLP test must not exceed the levels specified in Appendix G; and

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 which 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 35 Ill. Adm. Code 721.Appendix H that are present in waste-derived residues;

2) If the waste-derived residue is compared with normal residue under subsection (b)(1):

A) The levels of constituents in 35 Ill. Adm. Code 721.Appendix H 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: Added at 16 Ill. Reg. , effective)

Section 726.219 Extensions of Time

The owner or operator may request a case-by-case extension of time to extend any time limit provided by Section 726.203(c). The operator shall file a petition for a RCRA variance pursuant to 35 Ill. Adm. Code 104. The Board will grant the variance if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

a) In granting an extension, the Board will apply conditions as the facts warrant to ensure timely compliance with the requirements of Section 726.203 and that the facility operates in a manner that does not pose a hazard to human health and the environment;

b) When an owner and operator request an extension of time to enable them to obtain a RCRA permit because the facility cannot meet the HC limit of Section 726.204(c):

1) The Board will, in considering whether to grant the extension:

A) Determine whether the owner and operator have submitted in a timely manner a complete Part B permit application that includes information required under 35 Ill. Adm. Code 703.208(b); and

B) Consider whether the owner and operator have made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of Section 726.204(e) and the controls on PM, metals and HCl/chlorine gas.

2) If an extension is granted, the Board will, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the Part B permit application, are baseline CO and HC levels as defined by Section 726.204(f)(1).

BOARD NOTE: Derived from 40 CFR 266.103(c)(7)(ii), adopted at 56 Fed. Reg. 7206, February 21, 1991; and 56 Fed. Reg. 32688, July 17, 1991.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix A Tier I and Tier II Feed Rate and Emissions Screening Limits for Metals

I-A
Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic Metals for Facilities in Noncomplex Terrain
[Values for urban areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	6.0E+01	1.0E+04	1.8E+01	6.0E+01	6.0E+02	6.0E+01
6	6.8E+01	1.1E+04	2.0E+01	6.8E+01	6.8E+02	6.8E+01
8	7.6E+01	1.3E+04	2.3E+01	7.6E+01	7.6E+02	7.6E+01
10	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
12	9.6E+01	1.7E+04	3.0E+01	9.6E+01	9.6E+02	9.6E+01
14	1.1E+02	1.8E+04	3.4E+01	1.1E+02	1.1E+03	1.1E+02
16	1.3E+02	2.1E+04	3.6E+01	1.3E+02	1.3E+03	1.3E+02
18	1.4E+02	2.4E+04	4.3E+01	1.4E+02	1.4E+03	1.4E+02
20	1.6E+02	2.7E+04	4.6E+01	1.6E+02	1.6E+03	1.6E+02
22	1.8E+02	3.0E+04	5.4E+01	1.8E+02	1.8E+03	1.8E+02
24	2.0E+02	3.4E+04	6.0E+01	2.0E+02	2.0E+03	2.0E+02
26	2.3E+02	3.9E+04	6.8E+01	2.3E+02	2.3E+03	2.3E+02
28	2.6E+02	4.3E+04	7.8E+01	2.6E+02	2.6E+03	2.6E+02
30	3.0E+02	5.0E+04	9.0E+01	3.0E+02	3.0E+03	3.0E+02
35	4.0E+02	6.6E+04	1.1E+02	4.0E+02	4.0E+03	4.0E+02
40	4.6E+02	7.8E+04	1.4E+02	4.6E+02	4.6E+03	4.6E+02
45	6.0E+02	1.0E+05	1.8E+02	6.0E+02	6.0E+03	6.0E+02
50	7.8E+02	1.3E+05	2.3E+02	7.8E+02	7.8E+03	7.8E+02
55	9.6E+02	1.7E+05	3.0E+02	9.6E+02	9.6E+03	9.6E+02
60	1.2E+03	2.0E+05	3.6E+02	1.2E+03	1.2E+04	1.2E+03
65	1.5E+03	2.5E+05	4.3E+02	1.5E+03	1.5E+04	1.5E+03
70	1.7E+03	2.8E+05	5.0E+02	1.7E+03	1.7E+04	1.7E+03
75	1.9E+03	3.2E+05	5.8E+02	1.9E+03	1.9E+04	1.9E+03
80	2.2E+03	3.6E+05	6.4E+02	2.2E+03	2.2E+04	2.2E+03
85	2.5E+03	4.0E+05	7.6E+02	2.5E+03	2.5E+04	2.5E+03
90	2.8E+03	4.6E+05	8.2E+02	2.8E+03	2.8E+04	2.8E+03
95	3.2E+03	5.4E+05	9.6E+02	3.2E+03	3.2E+04	3.2E+03
100	3.6E+03	6.0E+05	1.1E+03	3.6E+03	3.6E+04	3.6E+03
105	4.0E+03	6.8E+05	1.2E+03	4.0E+03	4.0E+04	4.0E+03
110	4.6E+03	7.8E+05	1.4E+03	4.6E+03	4.6E+04	4.6E+03
115	5.4E+03	8.6E+05	1.6E+03	5.4E+03	5.4E+04	5.4E+03
120	6.0E+03	1.0E+06	1.8E+03	6.0E+03	6.0E+04	6.0E+03

I-B
Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic Metals for Facilities in Noncomplex Terrain
[Values for rural areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	3.1E+01	5.2E+03	9.4E+00	3.1E+01	3.1E+02	3.1E+01
6	3.6E+01	6.0E+03	1.1E+01	3.6E+01	3.6E+02	3.6E+01
8	4.0E+01	6.8E+03	1.2E+01	4.0E+01	4.0E+02	4.0E+01
10	4.6E+01	7.8E+03	1.4E+01	4.6E+01	4.6E+02	4.6E+01
12	5.8E+01	9.6E+03	1.7E+01	5.8E+01	5.8E+02	5.8E+01
14	6.8E+01	1.1E+04	2.1E+01	6.8E+01	6.8E+02	6.8E+01
16	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
18	1.1E+02	1.8E+04	3.2E+01	1.1E+02	1.1E+03	1.1E+02

20	1.3E+02	2.2E+04	4.0E+01	1.3E+02	1.3E+03	1.3E+02
22	1.7E+02	2.8E+04	5.0E+01	1.7E+02	1.7E+03	1.7E+02
24	2.2E+02	3.6E+04	6.4E+01	2.2E+02	2.2E+03	2.2E+02
26	2.8E+02	4.6E+04	8.2E+01	2.8E+02	2.8E+03	2.8E+02
28	3.5E+02	5.8E+04	1.0E+02	3.5E+02	3.5E+03	3.5E+02
30	4.3E+02	7.6E+04	1.3E+02	4.3E+02	4.3E+03	4.3E+02
35	7.2E+02	1.2E+05	2.1E+02	7.2E+02	7.2E+03	7.2E+02
40	1.1E+03	1.8E+05	3.2E+02	1.1E+03	1.1E+04	1.1E+03
45	1.5E+03	2.5E+05	4.6E+02	1.5E+03	1.5E+04	1.5E+03
50	2.0E+03	3.3E+05	6.0E+02	2.0E+03	2.0E+04	2.0E+03
55	2.6E+03	4.4E+05	7.8E+02	2.6E+03	2.6E+04	2.6E+03
60	3.4E+03	5.8E+05	1.0E+03	3.4E+03	3.4E+04	3.4E+03
65	4.6E+03	7.6E+05	1.4E+03	4.6E+03	4.6E+04	4.6E+03
70	5.4E+03	9.0E+05	1.6E+03	5.4E+03	5.4E+04	5.4E+03
75	6.4E+03	1.1E+06	1.9E+03	6.4E+03	6.4E+04	6.4E+03
80	7.6E+03	1.3E+06	2.3E+03	7.6E+03	7.6E+04	7.6E+03
85	9.4E+03	1.5E+06	2.8E+03	9.4E+03	9.4E+04	9.4E+03
90	1.1E+04	1.8E+06	3.3E+03	1.1E+04	1.1E+05	1.1E+04
95	1.3E+04	2.2E+06	3.9E+03	1.3E+04	1.3E+05	1.3E+04
100	1.5E+04	2.6E+06	4.6E+03	1.5E+04	1.5E+05	1.5E+04
105	1.8E+04	3.0E+06	5.4E+03	1.8E+04	1.8E+05	1.8E+04
110	2.2E+04	3.6E+06	6.6E+03	2.2E+04	2.2E+05	2.2E+04
115	2.6E+04	4.4E+06	7.8E+03	2.6E+04	2.6E+05	2.6E+04
120	3.1E+04	5.0E+06	9.2E+03	3.1E+04	3.1E+05	3.1E+04

I-C

Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic Metals for Facilities in Complex Terrain

Values for urban and rural areas

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	1.4E+01	2.4E+03	4.3E+00	1.4E+01	1.4E+02	1.4E+01
6	2.1E+01	3.5E+03	6.2E+00	2.1E+01	2.1E+02	2.1E+01
8	3.0E+01	5.0E+03	9.2E+00	3.0E+01	3.0E+02	3.0E+01
10	4.3E+01	7.6E+03	1.3E+01	4.3E+01	4.3E+02	4.3E+01
12	5.4E+01	9.0E+03	1.7E+01	5.4E+01	5.4E+02	5.4E+01
14	6.8E+01	1.1E+04	2.0E+01	6.8E+01	6.8E+02	6.8E+01
16	7.8E+01	1.3E+04	2.4E+01	7.8E+01	7.8E+02	7.8E+01
18	8.6E+01	1.4E+04	2.6E+01	8.6E+01	8.6E+02	8.6E+01
20	9.6E+01	1.6E+04	2.9E+01	9.6E+01	9.6E+02	9.6E+01
22	1.0E+02	1.8E+04	3.2E+01	1.0E+02	1.0E+03	1.0E+02
24	1.2E+02	1.9E+04	3.5E+01	1.2E+02	1.2E+03	1.2E+02
26	1.3E+02	2.2E+04	3.6E+01	1.3E+02	1.3E+03	1.3E+02
28	1.4E+02	2.4E+04	4.3E+01	1.4E+02	1.4E+03	1.4E+02
30	1.6E+02	2.7E+04	4.6E+01	1.6E+02	1.6E+03	1.6E+02
35	2.0E+02	3.3E+04	5.8E+01	2.0E+02	2.0E+03	2.0E+02
40	2.4E+02	4.0E+04	7.2E+01	2.4E+02	2.4E+03	2.4E+02
45	3.0E+02	5.0E+04	9.0E+01	3.0E+02	3.0E+03	3.0E+02
50	3.6E+02	6.0E+04	1.1E+02	3.6E+02	3.6E+03	3.6E+02
55	4.6E+02	7.6E+04	1.4E+02	4.6E+02	4.6E+03	4.6E+02
60	5.8E+02	9.4E+04	1.7E+02	5.8E+02	5.8E+03	5.8E+02
65	6.8E+02	1.1E+05	2.1E+02	6.8E+02	6.8E+03	6.8E+02
70	7.8E+02	1.3E+05	2.4E+02	7.8E+02	7.8E+03	7.8E+02
75	8.6E+02	1.4E+05	2.6E+02	8.6E+02	8.6E+03	8.6E+02
80	9.6E+02	1.6E+05	2.9E+02	9.6E+02	9.6E+03	9.6E+02
85	1.1E+03	1.8E+05	3.3E+02	1.1E+03	1.1E+04	1.1E+03
90	1.2E+03	2.0E+05	3.6E+02	1.2E+03	1.2E+04	1.2E+03
95	1.4E+03	2.3E+05	4.0E+02	1.4E+03	1.4E+04	1.4E+03
100	1.5E+03	2.6E+05	4.6E+02	1.5E+03	1.5E+04	1.5E+03
105	1.7E+03	2.8E+05	5.0E+02	1.7E+03	1.7E+04	1.7E+03
110	1.9E+03	3.2E+05	5.8E+02	1.9E+03	1.9E+04	1.9E+03
115	2.1E+03	3.6E+05	6.4E+02	2.1E+03	2.1E+04	2.1E+03

120	2.4E+03	4.0E+05	7.2E+02	2.4E+03	2.4E+04	2.4E+03

I-D
Tier I and Tier II Feed Rate and Emissions Screening Limits for Carcinogenic Metals for Facilities in Noncomplex Terrain

	Values for use in urban areas				Values for use in rural areas			
TESH (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	4.6E-01	1.1E+00	1.7E-01	8.2E-01	2.4E-01	5.8E-01	8.6E-02	4.3E-01
6	5.4E-01	1.3E+00	1.9E-01	9.4E-01	2.8E-01	6.6E-01	1.0E-01	5.0E-01
8	6.0E-01	1.4E+00	2.2E-01	1.1E+00	3.2E-01	7.6E-01	1.1E-01	5.6E-01
10	6.8E-01	1.6E+00	2.4E-01	1.2E+00	3.6E-01	8.6E-01	1.3E-01	6.4E-01
12	7.6E-01	1.8E+00	2.7E-01	1.4E+00	4.3E-01	1.1E+00	1.6E-01	7.8E-01
14	8.6E-01	2.1E+00	3.1E-01	1.5E+00	5.4E-01	1.3E+00	2.0E-01	9.6E-01
16	9.6E-01	2.3E+00	3.5E-01	1.7E+00	6.8E-01	1.6E+00	2.4E-01	1.2E+00
18	1.1E+00	2.6E+00	4.0E-01	2.0E+00	8.2E-01	2.0E+00	3.0E-01	1.5E+00
20	1.2E+00	3.0E+00	4.4E-01	2.2E+00	1.0E+00	2.5E+00	3.7E-01	1.9E+00
22	1.4E+00	3.4E+00	5.0E-01	2.5E+00	1.3E+00	3.2E+00	4.8E-01	2.4E+00
24	1.6E+00	3.9E+00	5.8E-01	2.8E+00	1.7E+00	4.0E+00	6.0E-01	3.0E+00
26	1.8E+00	4.3E+00	6.4E-01	3.2E+00	2.1E+00	5.0E+00	7.6E-01	3.9E+00
28	2.0E+00	4.8E+00	7.2E-01	3.6E+00	2.7E+00	6.4E+00	9.8E-01	5.0E+00
30	2.3E+00	5.4E+00	8.2E-01	4.0E+00	3.5E+00	8.2E+00	1.2E+00	6.2E+00
35	3.0E+00	6.8E+00	1.0E+00	5.4E+00	5.4E+00	1.3E+01	1.9E+00	9.6E+00
40	3.6E+00	9.0E+00	1.3E+00	6.8E+00	8.2E+00	2.0E+01	3.0E+00	1.5E+01
45	4.6E+00	1.1E+01	1.7E+00	8.6E+00	1.1E+01	2.8E+01	4.2E+00	2.1E+01
50	6.0E+00	1.4E+01	2.2E+00	1.1E+01	1.5E+01	3.7E+01	5.4E+00	2.8E+01
55	7.6E+00	1.8E+01	2.7E+00	1.4E+01	2.0E+01	5.0E+01	7.2E+00	3.6E+01
60	9.4E+00	2.2E+01	3.4E+00	1.7E+01	2.7E+01	6.4E+01	9.6E+00	4.8E+01
65	1.1E+01	2.8E+01	4.2E+00	2.1E+01	3.6E+01	8.6E+01	1.3E+01	6.4E+01
70	1.3E+01	3.1E+01	4.6E+00	2.4E+01	4.3E+01	1.0E+02	1.5E+01	7.6E+01
75	1.5E+01	3.6E+01	5.4E+00	2.7E+01	5.0E+01	1.2E+02	1.8E+01	9.0E+01
80	1.7E+01	4.0E+01	6.0E+00	3.0E+01	6.0E+01	1.4E+02	2.2E+01	1.1E+02
85	1.9E+01	4.6E+01	6.8E+00	3.4E+01	7.2E+01	1.7E+02	2.6E+01	1.3E+02
90	2.2E+01	5.0E+01	7.8E+00	3.9E+01	8.6E+01	2.0E+02	3.0E+01	1.5E+02
95	2.5E+01	5.8E+01	9.0E+00	4.4E+01	1.0E+02	2.4E+02	3.6E+01	1.8E+02
100	2.8E+01	6.8E+01	1.0E+01	5.0E+01	1.2E+02	2.9E+02	4.3E+01	2.2E+02
105	3.2E+01	7.6E+01	1.1E+01	5.6E+01	1.4E+02	3.4E+02	5.0E+01	2.6E+02
110	3.6E+01	8.6E+01	1.3E+01	6.4E+01	1.7E+02	4.0E+02	6.0E+01	3.0E+02
115	4.0E+01	9.6E+01	1.5E+01	7.2E+01	2.0E+02	4.8E+02	7.2E+01	3.6E+02
120	4.6E+01	1.1E+02	1.7E+01	8.2E+01	2.4E+02	5.8E+02	8.6E+01	4.3E+02

I-E
Tier I and Tier II Feed Rate and Emissions Screening Limits for Carcinogenic Metals for Facilities in Complex Terrain
Values for use in urban and rural areas

TESH (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	1.1E-01	2.6E-01	4.0E-02	2.0E-01
6	1.6E-01	3.9E-01	5.8E-02	2.9E-01
8	2.4E-01	5.8E-01	8.6E-02	4.3E-01
10	3.5E-01	8.2E-01	1.3E-01	6.2E-01
12	4.3E-01	1.0E+00	1.5E-01	7.6E-01
14	5.0E-01	1.3E+00	1.9E-01	9.4E-01
16	6.0E-01	1.4E+00	2.2E-01	1.1E+00
18	6.8E-01	1.6E+00	2.4E-01	1.2E+00
20	7.6E-01	1.8E+00	2.7E-01	1.3E+00
22	8.2E-01	1.9E+00	3.0E-01	1.5E+00
24	9.0E-01	2.1E+00	3.3E-01	1.6E+00
26	1.0E+00	2.4E+00	3.6E-01	1.8E+00
28	1.1E+00	2.7E+00	4.0E-01	2.0E+00

30	1.2E+00	3.0E+00	4.4E-01	2.2E+00
35	1.5E+00	3.7E+00	5.4E-01	2.7E+00
40	1.9E+00	4.6E+00	6.8E-01	3.4E+00
45	2.4E+00	5.4E+00	8.4E-01	4.2E+00
50	2.9E+00	6.8E+00	1.0E+00	5.0E+00
55	3.5E+00	8.4E+00	1.3E+00	6.4E+00
60	4.3E+00	1.0E+01	1.5E+00	7.8E+00
65	5.4E+00	1.3E+01	1.9E+00	9.6E+00
70	6.0E+00	1.4E+01	2.2E+00	1.1E+01
75	6.8E+00	1.6E+01	2.4E+00	1.2E+01
80	7.6E+00	1.8E+01	2.7E+00	1.3E+01
85	8.2E+00	2.0E+01	3.0E+00	1.5E+01
90	9.4E+00	2.3E+01	3.4E+00	1.7E+01
95	1.0E+01	2.5E+01	4.0E+00	1.9E+01
100	1.2E+01	2.8E+01	4.3E+00	2.1E+01
105	1.3E+01	3.2E+01	4.8E+00	2.4E+01
110	1.5E+01	3.5E+01	5.4E+00	2.7E+01
115	1.7E+01	4.0E+01	6.0E+00	3.0E+01
120	1.9E+01	4.4E+01	6.4E+00	3.3E+01

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix B Tier I Feed Rate Screening Limits for Total Chlorine

Tier I Feed Rate Screening Limits for Total Chlorine

TESH (m)	Noncomplex Terrain Urban (g/hr)	Noncomplex Terrain Rural (g/hr)	Complex Terrain (g/hr)
4	8.2E+01	4.2E+01	1.9E+01
6	9.1E+01	4.8E+01	2.8E+01
8	1.0E+02	5.3E+01	4.1E+01
10	1.2E+02	6.2E+01	5.8E+01
12	1.3E+02	7.7E+01	7.2E+01
14	1.5E+02	9.1E+01	9.1E+01
16	1.7E+02	1.2E+02	1.1E+02
18	1.9E+02	1.4E+02	1.2E+02
20	2.1E+02	1.8E+02	1.3E+02
22	2.4E+02	2.3E+02	1.4E+02
24	2.7E+02	2.9E+02	1.6E+02
26	3.1E+02	3.7E+02	1.7E+02
28	3.5E+02	4.7E+02	1.9E+02
30	3.9E+02	5.8E+02	2.1E+02
35	5.3E+02	9.6E+02	2.6E+02
40	6.2E+02	1.4E+03	3.3E+02
45	8.2E+02	2.0E+03	4.0E+02
50	1.1E+03	2.6E+03	4.8E+02
55	1.3E+03	3.5E+03	6.2E+02
60	1.6E+03	4.6E+03	7.7E+02
65	2.0E+03	6.2E+03	9.1E+02
70	2.3E+03	7.2E+03	1.1E+03
75	2.5E+03	8.6E+03	1.2E+03
80	2.9E+03	1.0E+04	1.3E+03
85	3.3E+03	1.2E+04	1.4E+03
90	3.7E+03	1.4E+04	1.6E+03
95	4.2E+03	1.7E+04	1.8E+03
100	4.8E+03	2.1E+04	2.0E+03
105	5.3E+03	2.4E+04	2.3E+03
110	6.2E+03	2.9E+04	2.5E+03
115	7.2E+03	3.5E+04	2.8E+03
120	8.2E+03	4.1E+04	3.2E+03

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride

TESH (m)	Noncomplex Terrain Urban areas Chlorine Gas (g/hr)	Noncomplex Terrain Urban areas HCl (g/hr)	Noncomplex Terrain Rural areas Chlorine Gas (g/hr)	Noncomplex Terrain Rural areas HCl (g/hr)	Complex Terrain Urban and rural areas Chlorine gas (g/hr)	Complex Terrain Urban and rural areas HCl (g/hr)
4	8.2E+01	1.4E+03	4.2E+01	7.3E+02	1.9E+01	3.3E+02
6	9.1E+01	1.6E+03	4.8E+01	8.3E+02	2.8E+01	4.9E+02
8	1.0E+02	1.8E+03	5.3E+01	9.2E+02	4.1E+01	7.1E+02
10	1.2E+02	2.0E+03	6.2E+01	1.1E+03	5.8E+01	1.0E+03
12	1.3E+02	2.3E+03	7.7E+01	1.3E+03	7.2E+01	1.3E+03
14	1.5E+02	2.6E+03	9.1E+01	1.6E+03	9.1E+01	1.6E+03
16	1.7E+02	2.9E+03	1.2E+02	2.0E+03	1.1E+02	1.8E+03
18	1.9E+02	3.3E+03	1.4E+02	2.5E+03	1.2E+02	2.0E+03
20	2.1E+02	3.7E+03	1.8E+02	3.1E+03	1.3E+02	2.3E+03
22	2.4E+02	4.2E+03	2.3E+02	3.9E+03	1.4E+02	2.4E+03
24	2.7E+02	4.8E+03	2.9E+02	5.0E+03	1.6E+02	2.8E+03
26	3.1E+02	5.4E+03	3.7E+02	6.5E+03	1.7E+02	3.0E+03
28	3.5E+02	6.0E+03	4.7E+02	8.1E+03	1.9E+02	3.4E+03
30	3.9E+02	6.9E+03	5.8E+02	1.0E+04	2.1E+02	3.7E+03
35	5.3E+02	9.2E+03	9.6E+02	1.7E+04	2.6E+02	4.6E+03
40	6.2E+02	1.1E+04	1.4E+03	2.5E+04	3.3E+02	5.7E+03
45	8.2E+02	1.4E+04	2.0E+03	3.5E+04	4.0E+02	7.0E+03
50	1.1E+03	1.8E+04	2.6E+03	4.6E+04	4.8E+02	8.4E+03
55	1.3E+03	2.3E+04	3.5E.03	6.1E+04	6.2E+02	1.1E+04
60	1.6E+03	2.9E+04	4.6E+03	8.1E+04	7.7E+02	1.3E+04
65	2.0E+03	3.4E+04	6.2E+03	1.1E+05	9.1E+02	1.6E+04
70	2.3E+03	3.9E+04	7.2E+03	1.3E+05	1.1E+03	1.8E+04
75	2.5E+03	4.5E+04	8.6E+03	1.5E+05	1.2E+03	2.0E+04
80	2.9E+03	5.0E+04	1.0E+04	1.8E+05	1.3E+03	2.3E+04
85	3.3E+03	5.8E+04	1.2E+04	2.2E+05	1.4E+03	2.5E+04
90	3.7E+03	6.6E+04	1.4E+04	2.5E+05	1.6E+03	2.9E+04
95	4.2E+03	7.4E+04	1.7E+04	3.0E+05	1.8E+03	3.2E+04
100	4.8E+03	8.4E+04	2.1E+04	3.6E+05	2.0E+03	3.5E+04
105	5.3E+03	9.2E+04	2.4E+04	4.3E+05	2.3E+03	3.9E+04
110	6.2E+03	1.1E+05	2.9E+04	5.1E+05	2.5E+03	4.5E+04
115	7.2E+03	1.3E+05	3.5E+04	6.1E+05	2.8E+03	5.0E+04
120	8.2E+03	1.4E+05	4.1E+04	7.2E+05	3.2E+03	5.6E+04

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix D Reference Air Concentrations

BOARD NOTE: The RAC for other 35 Ill. Adm. Code 721.Appendix H constituents not listed below or in Appendix E is 0.1 ug/cu m.

Constituent	CAS No.	RAC (ug/cu m)
Acetaldehyde	75-07-0	10
Acetonitrile	75-05-8	10
Acetophenone	98-86-2	100
Acrolein	107-02-8	20
Aldicarb	116-06-3	1
Aluminum Phosphide	20859-73-8	0.3

Allyl Alcohol	107-18-6	5
Antimony	7440-36-0	0.3
Barium	7440-39-3	50
Barium Cyanide	542-62-1	50
Bromomethane	74-83-9	0.8
Calcium Cyanide	592-01-8	30
Carbon Disulfide	75-15-0	200
Chloral	75-87-6	2
Chlorine (free)		0.4
2-Chloro-1,3-butadiene	126-99-8	3
Chromium III	16065-83-1	1000
Copper Cyanide	544-92-3	5
Cresols	1319-77-3	50
Cumene	98-82-8	1
Cyanide (free)	57-12-15	20
Cyanogen	460-19-5	30
Cyanogen Bromide	506-68-3	80
Di-n-butyl Phthalate	84-74-2	100
o-Dichlorobenzene	95-50-1	10
p-Dichlorobenzene	106-46-7	10
Dichlorodifluoromethane	75-71-8	200
2,4-Dichlorophenol	120-83-2	3
Diethyl Phthalate	84-66-2	800
Dimethoate	60-51-5	0.8
2,4-Dinitrophenol	51-28-5	2
Dinoseb	88-85-7	0.9
Diphenylamine	122-39-4	20
Endosulfan	115-29-1	0.05
Endrin	72-20-8	0.3
Fluorine	7782-41-4	50
Formic Acid	64-18-6	2000
Glycidylaldehyde	765-34-4	0.3
Hexachlorocyclopentadiene	77-47-4	5
Hexachlorophene	70-30-4	0.3
Hydrocyanic Acid	74-90-8	20
Hydrogen Chloride	7647-01-1	7
Hydrogen Sulfide	7783-06-4	3
Isobutyl Alcohol	78-83-1	300
Lead	7439-92-1	0.09
Maleic Anhydride	108-31-6	100
Mercury	7439-97-6	0.3
Methacrylonitrile	126-98-7	0.1
Methomyl	16752-77-5	20
Methoxychlor	72-43-5	50
Methyl Chlorocarbonate	79-22-1	1000
Methyl Ethyl Ketone	78-93-3	80
Methyl Parathion	298-00-0	0.3
Nickel Cyanide	557-19-7	20
Nitric Oxide	10102-43-9	100
Nitrobenzene	98-95-3	0.8
Pentachlorobenzene	608-93-5	0.8
Pentachlorophenol	87-86-5	30
Phenol	108-95-2	30
M-Phenylenediamine	108-45-2	5
Phenylmercuric Acetate	62-38-4	0.075
Phosphine	7803-51-2	0.3
Phthalic Anhydride	85-44-9	2000
Potassium Cyanide	151-50-8	50
Potassium Silver Cyanide	506-61-6	200
Pyridine	110-86-1	1
Selenious Acid	7783-60-8	3
Selenourea	630-10-4	5
Silver	7440-22-4	3
Silver Cyanide	506-64-9	100
Sodium Cyanide	143-33-9	30

Strychnine	57-24-9	0.3
1,2,4,5-Tetrachlorobenzene	95-94-3	0.3
2,3,4,6-Tetrachlorophenol	58-90-2	30
Tetraethyl Lead	78-00-2	0.0001
Tetrahydrofuran	109-99-9	10
Thallic Oxide	1314-32-5	0.3
Thallium	7440-28-0	0.5
Thallium (I) Acetate	563-68-8	0.5
Thallium (I) Carbonate	6533-73-9	0.3
Thallium (I) Chloride	7791-12-0	0.3
Thallium (I) Nitrate	10102-45-1	0.5
Thallium Selenite	12039-52-0	0.5
Thallium (I) Sulfate	7446-18-6	0.075
Thiram	137-26-8	5
Toluene	108-88-3	300
1,2,4-Trichlorobenzene	120-82-1	20
Trichloromonofluoromethane	75-69-4	300
2.4.5-Trichlorophenol	95-95-4	100
Vanadium Pentoxide	1314-62-1	20
Warfarin	81-81-2	0.3
Xylenes	1330-20-7	80
Zinc Cyanide	557-21-1	50
Zinc Phosphide	1314-84-7	0.3

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix E Risk Specific Doses

BOARD NOTE: These are risk specific doses (RSDs) based on a risk of 1E-05.

Constituent	CAS No.	Unit risk (cu m/ug)	RSD (ug/cu m)
Acrylamide	79-06-1	1.3E-03	7.7E-03
Acrylonitrile	107-13-1	6.8E-05	1.5E-01
Aldrin	309-00-2	4.9E-03	2.0E-03
Aniline	62-53-3	7.4E-06	1.4E+00
Arsenic	7440-38-2	4.3E-03	2.3E-03
Benz(a)anthracene	56-55-3	8.9E-04	1.1E-02
Benzene	71-43-2	8.3E-06	1.2E+00
Benzidine	92-87-5	6.7E-02	1.5E-04
Benzo(a)pyrene	50-32-8	3.3E-03	3.0E-03
Beryllium	7440-41-7	2.4E-03	4.2E-03
Bis(2-chloroethyl)ether	111-44-4	3.3E-04	3.0E-02
Bis(chloromethyl)ether	542-88-1	6.2E-02	1.6E-04
Bis(2-ethylhexyl)-phthalate	117-81-7	2.4E-07	4.2E+01
1,3-Butadiene	106-99-0	2.8E-04	3.6E-02
Cadmium	7440-43-9	1.8E-03	5.6E-03
Carbon Tetrachloride	56-23-5	1.5E-05	6.7E-01
Chlordane	57-74-9	3.7E-04	2.7E-02
Chloroform	67-66-3	2.3E-05	4.3E-01
Chloromethane	74-87-3	3.6E-06	2.8E+00
Chromium VI	7440-47-3	1.2E-02	8.3E-04
DDT	50-29-3	9.7E-05	1.0E-01
Dibenz(a,h)anthracene	53-70-3	1.4E-02	7.1E-04
1,2-Dibromo-3-chloro-propane	96-12-8	6.3E-03	1.6E-03
1,2-Dibromoethane	106-93-4	2.2E-04	4.5E-02
1,1-Dichloroethane	75-34-3	2.6E-05	3.8E-01
1,2-Dichloroethane	107-06-2	2.6E-05	3.8E-01
1,1-Dichloroethylene	75-35-4	5.0E-05	2.0E-01

1,3-Dichloropropene	542-75-6	3.5E-01	2.9E-05
Dieldrin	60-57-1	4.6E-03	2.2E-03
Diethylstilbestrol	56-53-1	1.4E-01	7.1E-05
Dimethylnitrosamine	62-75-9	1.4E-02	7.1E-04
2,4-Dinitrotoluene	121-14-2	8.8E-05	1.1E-01
1,2-Diphenylhydrazine	122-66-7	2.2E-04	4.5E-02
1,4-Dioxane	123-91-1	1.4E-06	7.1E+00
Epichlorohydrin	106-89-8	1.2E-06	8.3E+00
Ethylene Oxide	75-21-8	1.0E-04	1.0E-01
Ethylene Dibromide	106-93-4	2.2E-04	4.5E-02
Formaldehyde	50-00-0	1.3E-05	7.7E-01
Heptachlor	76-44-8	1.3E-03	7.7E-03
Heptachlor Epoxide	1024-57-3	2.6E-03	3.8E-03
Hexachlorobenzene	118-74-1	4.9E-04	2.0E-02
Hexachlorobutadiene	87-68-3	2.0E-05	5.0E-01
Alpha-hexachlorocyclo-hexane	319-84-6	1.8E-03	5.6E-03
Beta-hexachlorocyclo-hexane	319-85-7	5.3E-04	1.9E-02
Gamma-hexachlorocyclo-hexane	58-89-9	3.8E-04	2.6E-02
Hexachlorocyclohexane, Technical		5.1E-04	2.0E-02
Hexachlorodibenzo-p-dioxin(1,2 Mixture)		1.3E+0	7.7E-06
Hexachloroethane	67-72-1	4.0E-06	2.5E+00
Hydrazine	302-01-2	2.9E-03	3.4E-03
Hydrazine Sulfate	302-01-2	2.9E-03	3.4E-03
3-Methylcholanthrene	56-49-5	2.7E-03	3.7E-03
Methyl Hydrazine	60-34-4	3.1E-04	3.2E-02
Methylene Chloride	75-09-2	4.1E-06	2.4E+00
4,4'-Methylene-bis-2-chloroaniline	101-14-4	4.7E-05	2.1E-01
Nickel	7440-02-0	2.4E-04	4.2E-02
Nickel Refinery Dust	7440-02-0	2.4E-04	4.2E-02
Nickel Subsulfide	12035-72-2	4.8E-04	2.1E-02
2-Nitropropane	79-46-9	2.7E-02	3.7E-04
N-Nitroso-n-butylamine	924-16-3	1.6E-03	6.3E-03
N-Nitroso-n-methylurea	684-93-5	8.6E-02	1.2E-04
N-Nitrosodiethylamine	55-18-5	4.3E-02	2.3E-04
N-Nitrosopyrrolidine	930-55-2	6.1E-04	1.6E-02
Pentachloronitrobenzene	82-68-8	7.3E-05	1.4E-01
PCBs	1336-36-3	1.2E-03	8.3E-03
Pronamide	23950-58-5	4.6E-06	2.2E+00
Reserpine	50-55-5	3.0E-03	3.3E-03
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	1746-01-6	4.5E+01	2.2E-07
1,1,2,2-Tetrachloroethane	79-34-5	5.8E-05	1.7E-01
Tetrachloroethylene	127-18-4	4.8E-07	2.1E+01
Thiourea	62-56-6	5.5E-04	1.8E-02
1,1,2-Trichloroethane	79-00-5	1.6E-05	6.3E-01
Trichloroethylene	79-01-6	1.3E-06	7.7E+00
2,4,6-Trichlorophenol	88-06-2	5.7E-06	1.8E+00
Toxaphene	8001-35-2	3.2E-04	3.1E-02
Vinyl Chloride	75-01-4	7.1E-06	1.4E+00

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix F Stack Plume Rise

Estimated Plume Rise (in Meters)
Based on Stack Exit Flow Rate and Gas Temperature

Flow rate (cu m/sec)	Exhaust Temperature (K°) <325	325-349	350-399	400-449	450-499	500-599	600-699	700-799	800-999	1000-1499	>1499
<0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-0.9	0	0	0	0	0	0	0	0	1	1	1
1.0-1.9	0	0	0	0	1	1	2	3	3	3	4
2.0-2.9	0	0	1	3	4	4	6	6	7	8	9
3.0-3.9	0	1	2	5	6	7	9	10	11	12	13
4.0-4.9	1	2	4	6	8	10	12	13	14	15	17
5.0-7.4	2	3	5	8	10	12	14	16	17	19	21
7.5-9.9	3	5	8	12	15	17	20	22	22	23	24
10.0-12.4	4	6	10	15	19	21	23	24	25	26	27
12.5-14.9	4	7	12	18	22	23	25	26	27	28	29
15.0-19.9	5	8	13	20	23	24	26	27	28	29	31
20.0-24.9	6	10	17	23	25	27	29	30	31	32	34
25.0-29.9	7	12	20	25	27	29	31	32	33	35	36
30.0-34.9	8	14	22	26	29	31	33	35	36	37	39
35.0-39.9	9	16	23	28	30	32	35	36	37	39	41
40.0-49.9	10	17	24	29	32	34	36	38	39	41	42
50.0-59.9	12	21	26	31	34	36	39	41	42	44	46
60.0-69.9	14	22	27	33	36	39	42	43	45	47	49
70.0-79.9	16	23	29	35	38	41	44	46	47	49	51
80.0-89.9	17	25	30	36	40	42	46	48	49	51	54
90.0-99.9	19	26	31	38	42	44	48	50	51	53	56
100.0-119.9	21	26	32	39	43	46	49	52	53	55	58
120.0-139.9	22	28	35	42	46	49	52	55	56	59	61
140.0-159.9	23	30	36	44	48	51	55	58	59	62	65
160.0-179.9	25	31	38	46	50	54	58	60	62	65	67
180.0-199.9	26	32	40	48	52	56	60	63	65	67	70
>199.9	26	33	41	49	54	58	62	65	67	69	73

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix G Health-Based Limits for Exclusion of Waste-Derived Residues

BOARD NOTE: The health-based concentration limits for 35 Ill. Adm. Code 721.Appendix H constituents for which a health-based concentration is not provided below is 2E-06 mg/kg.

Metals-TCLP Extract Concentration Limits

Constituent	CAS No.	Concentration limits (mg/L)
Antimony	7440-36-0	1E+00
Arsenic	7440-38-2	5E+00
Barium	7440-39-3	1E+02
Beryllium	7440-41-7	7E-03
Cadmium	7440-43-9	1E+00
Chromium	7440-47-3	5E+00
Lead	7439-92-1	5E+00
Mercury	7439-97-6	2E-01
Nickel	7440-02-0	7E+01
Selenium	7782-49-2	1E+00
Silver	7440-22-4	5E+00
Thallium	7440-28-0	7E+00

Nonmetals-Residue Concentration Limits

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Acetonitrile	75-05-8	2E-01
Acetophenone	98-86-2	4E+00
Acrolein	107-02-8	5E-01
Acrylamide	79-06-1	2E-04
Acrylonitrile	107-13-1	7E-04
Aldrin	309-00-2	2E-05
Allyl alcohol	107-18-6	2E-01
Aluminum phosphide	20859-73-8	1E-02
Aniline	62-53-3	6E-02
Barium cyanide	542-62-1	1E+00
Benz(a)anthracene	56-55-3	1E-04
Benzene	71-43-2	5E-03
Benzidine	92-87-5	1E-06
Bis(2-chloroethyl) ether	111-44-4	3E-04
Bis(chloromethyl) ether	542-88-1	2E-06
Bis(2-ethylhexyl) phthalate	117-81-7	3E+01
Bromoform	75-25-2	7E-01
Calcium cyanide	592-01-8	1E-06
Carbon disulfide	75-15-0	4E+00
Carbon tetrachloride	56-23-5	5E-03
Chlordane	57-74-9	3E-04
Chlorobenzene	108-90-7	1E+00
Chloroform	67-66-3	6E-02
Copper cyanide	544-92-3	2E-01
Cresols (Cresylic acid)	1319-77-3	2E+00
Cyanogen	460-19-5	1E+00
DDT	50-29-3	1E-03
Dibenz(a, h)-anthracene	53-70-3	7E-06
1,2-Dibromo-3-chloropropane	96-12-8	2E-05
p-Dichlorobenzene	106-46-7	7.5E-02

Dichlorodifluoromethane	75-71-8	7E+00
1,1-Dichloroethylene	75-35-4	5E-03
2,4-Dichlorophenol	120-83-2	1E-01
1,3-Dichloropropene	542-75-6	1E-03
Dieldrin	60-57-1	2E-05
Diethyl phthalate	84-66-2	3E+01
Diethylstilbestrol	56-53-1	7E-07
Dimethoate	60-51-5	3E-02
2,4-Dinitrotoluene	121-14-2	5E-04
Diphenylamine	122-39-4	9E-01
1,2-Diphenylhydrazine	122-66-7	5E-04
Endosulfan	115-29-7	2E-03
Endrin	72-20-8	2E-04
Epichlorohydrin	106-89-8	4E-02
Ethylene dibromide	106-93-4	4E-07
Ethylene oxide	75-21-8	3E-04
Fluorine	7782-41-4	4E+00
Formic acid	64-18-6	7E+01
Heptachlor	76-44-8	8E-05
Heptachlor epoxide	1024-57-3	4E-05
Hexachlorobenzene	118-74-1	2E-04
Hexachlorobutadiene	87-68-3	5E-03
Hexachlorocyclopentadiene	77-47-4	2E-01
Hexachlorodibenzo-p-dioxins	19408-74-3	6E-08
Hexachloroethane	67-72-1	3E-02
Hydrazine	302-01-1	1E-04
Hydrogen cyanide	74-90-8	7E-05
Hydrogen sulfide	7783-06-4	1E-06
Isobutyl alcohol	78-83-1	1E+01
Methomyl	16752-77-5	1E+00
Methoxychlor	72-43-5	1E-01
3-Methylcholanthrene	56-49-5	4E-05
4,4'-Methylenebis (2-chloroaniline)	101-14-4	2E-03
Methylene chloride	75-09-2	5E-02
Methyl ethyl ketone (MEK)	78-93-3	2E+00
Methyl hydrazine	60-34-4	3E-04
Methyl parathion	298-00-0	2E-02
Naphthalene	91-20-3	1E+01
Nickel cyanide	557-19-7	7E-01
Nitric oxide	10102-43-9	4E+00
Nitrobenzene	98-95-3	2E-02
N-Nitrosodi-n-butylamine	924-16-3	6E-05
N-Nitrosodiethylamine	55-18-5	2E-06
N-Nitroso-N-methylurea	684-93-5	1E-07
N-Nitrosopyrrolidine	930-55-2	2E-04
Pentachlorobenzene	608-93-5	3E-02
Pentachloronitrobenzene (PCNB)	82-68-8	1E-01
Pentachlorophenol	87-86-5	1E+00
Phenol	108-95-2	1E+00
Phenylmercury acetate	62-38-4	3E-03
Phosphine	7803-51-2	1E-02
Polychlorinated biphenyls, N.O.S	1336-36-3	5E-05
Potassium cyanide	151-50-8	2E+00
Potassium silver cyanide	506-61-6	7E+00
Pronamide	23950-58-5	3E+00
Pyridine	110-86-1	4E-02
Reserpine	50-55-5	3E-05
Selenourea	630-10-4	2E-01
Silver cyanide	506-64-9	4E+00
Sodium cyanide	143-33-9	1E+00
Strychnine	57-24-9	1E-02
1,2,4,5-Tetrachlorobenzene	95-94-3	1E-02
1,1,2,2-tetrachloroethane	79-34-5	2E-03
Tetrachloroethylene	127-18-4	7E-01
2,3,4,6-Tetrachlorophenol	58-90-2	1E-02

Tetraethyl lead	78-00-2	4E-06
Thiourea	62-56-6	2E-04
Toluene	108-88-3	1E+01
Toxaphene	8001-35-2	5E-03
1,1,2-Trichloroethane	79-00-5	6E-03
Trichloroethylene	79-01-6	5E-03
Trichloromonofluoromethane	75-69-4	1E+01
2,4,5-Trichlorophenol	95-95-4	4E+00
2,4,6-Trichlorophenol	88-06-2	4E+00
Vanadium pentoxide	1314-62-1	7E-01
Vinyl chloride	75-01-4	2E-03

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix H Potential PICs for Determination of Exclusion of Waste-Derived Residues

PICs Found in Stack Effluents

Volatiles	Semivolatiles
Benzene	Bis(2-ethylhexyl)phthalate
Toluene	Naphthalene
Carbon tetrachloride	Phenol
Chloroform	Diethyl phthalate
Methylene chloride	Butyl benzyl phthalate
Trichloroethylene	2,4-Dimethylphenol
Tetrachloroethylene	o-Dichlorobenzene
1,1,1-Trichloroethane	m-Dichlorobenzene
Chlorobenzene	p-Dichlorobenzene
cis-1,4-Dichloro-2-butene	Hexachlorobenzene
Bromochloromethane	2,4,6-Trichlorophenol
Bromodichloromethane	Fluoranthene
Bromoform	o-Nitrophenol
Bromomethane	1,2,4-Trichlorobenzene
Methylene bromide	o-Chlorophenol
Methyl ethyl ketone	Pentachlorophenol
	Pyrene
	Dimethyl phthalate
	Mononitrobenzene
	2,6-Toluene diisocyanate

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix I Methods Manual for Compliance with BIF Regulations

See "Methods Manual for Compliance with BIF Regulations". 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 IX, adopted at 56 Fed. Reg. 32688, July 17, 1991 and amended at 56 Fed. Reg. 42511, August 27, 1991, which is incorporated by reference. This incorporation includes no future editions or amendments.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix J Guideline on Air Quality Models

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, adopted at 56 Fed. Reg. 32688, July 17, 1991 and amended at 56 Fed. Reg. 42511, August 27, 1991, which is incorporated by reference. This incorporation includes no future editions or amendments.

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix K Lead-Bearing Materials That May be Processed in Exempt Lead Smelters

a) Exempt Lead-Bearing Materials When Generated or Originally Produced By Lead-Associated Industries.

BOARD NOTE: Lead-associated industries are lead smelters, lead-acid battery manufacturing and lead chemical manufacturing (e.g. manufacturing of lead oxide or other lead compounds).

Acid dump/fill solids

Sump mud

Materials from laboratory analyses

Acid filters

Baghouse bags

Clothing (e.g. coveralls, aprons, shoes, hats,, gloves)

Sweepings

Air filter bags and cartridges

Respiratory cartridge filters

Shop abrasive

Stacking boards

Waste shipping containers (e.g. cartons bags, drums, cardboard)

Paper hand towels

Wiping rags and sponges

Contaminated pallets

Water treatment sludges, filter cakes, residues, and solids

Emission control dusts, sludges, filter cakes, residues, and solids from lead-associated industries (e.g. K069 and D008 wastes)

Spent grinds, posts and separators

Spend batteries

Lead oxide and lead oxide residues

Lead plates and groups

Spent battery cases, covers, and vents

Pasting belts

Water filter media

Cheesecloth from pasting rollers

Pasting additive bags

Asphalt paving materials

b) Exempt Lead-Bearing Materials When Generated or Originally Produced By Any Industry

Charging jumpers and clips

Platen abrasive

Fluff from lead wire and cable casings

Lead-based pigments and compounding pigment dust

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Appendix L Nickel or Chromium-Bearing Materials that may be Processed in Exempt Nickel-Chromium Recovery Furnaces

a) Exempt Nickel or chromium-Bearing Materials when Generated by Manufacturers or Users of Nickel, Chromium or Iron.

Baghouse bags

Raney nickel catalyst

Floor sweepings

Air filters

Electroplating bath filters

Wastewater filter media

Wood Pallets

Disposable clothing (coveralls, aprons, hats, and gloves)

Laboratory samples and spent chemicals

Shipping containers and plastic liners from containers or vehicles used to transport nickel or chromium-containing wastes

Respirator cartridge filters

Paper hand towels

b) Exempt Nickel or Chromium-Bearing Materials when Generated by Any Industry

Electroplating wastewater treatment sludges (F006)

Nickel and/or chromium-containing solutions

Nickel and/or chromium-containing catalysts

Nickel-cadmium and nickel-iron batteries

Filter cake from wet scrubber system water treatment plants in the specialty steel industry

Filter cake from nickel-chromium alloy pickling operations

(Source: Added at 16 Ill. Reg. , effective)

Section 726.Table A Exempt Quantities for Small Quantity Burner Exemption

TESH (m)	Allowable Hazardous Waste Burning Rate (gal/mo)	TESH	Allowable Hazardous Waste Burning Rate (gal/mo)
0 to 3.9	0	40.0 to 44.9	210
4.0 to 5.9	13	45.0 to 49.9	260
6.0 to 7.9	18	50.0 to 54.9	330
8.0 to 9.9	27	55.0 to 59.9	400
10.0 11.9	40	60.0 to 64.9	490
12.0 to 13.9	48	65.0 to 69.9	610
14.0 to 15.9	59	70.0 to 74.9	680
16.0 to 17.9	69	75.0 to 79.9	760
18.0 to 19.9	76	80.0 to 84.9	850
20.0 to 21.9	84	85.0 to 89.9	960
22.0 to 23.9	93	90.0 to 94.9	1,100
24.0 to 25.9	100	95.0 to 99.9	1,200
26.0 to 27.9	110	100.0 to 104.9	1,300
28.0 to 29.9	130	105.0 to 109.9	1,500
30.0 to 34.9	140	110.0 to 114.9	1,700
35.0 to 39.9	170	115.0 or greater	1,900

(Source: Added at 16 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

SUBPART A: GENERAL

SUBPART C: PROHIBITION ON LAND DISPOSAL

SUBPART D: TREATMENT STANDARDS

SUBPART E: PROHIBITIONS ON STORAGE

Appendix F Technologies to Achieve Deactivation of Characteristics
Appendix G Federal Effective Dates
Appendix H National Capacity LDR Variances for UIC Wastes

Table A Constituent Concentrations in Waste Extract (CCWE)
Table B Constituent Concentrations in Wastes (CCW)
Table C Technology Codes and Description of Technology-Based Standards
Table D Technology-Based Standards by RCRA Waste Code
Table E Standards for Radioactive Mixed Waste

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111½, pars. 1022.4 and 1027).

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 R91-13 at 16 Ill. Reg. , effective

SUBPART A: GENERAL

Section 728.107 Waste Analysis and Recordkeeping

a) Except as specified in Section 728.132 ~~or 728.143~~ , if a generator's waste is listed in 35 Ill. Adm. Code 721.Subpart D, the generator shall test the generator's waste, or test an extract developed using the test method described in ~~Appendix A~~35 Ill. Adm. Code 721.Appendix B, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this Part. Except as specified in Section 728.132, if a generator's waste exhibits one or more of the characteristics set out at 35 Ill. Adm. Code 721.Subpart C, the generator shall test an extract using the test method described in Appendix I ("eye"), or use knowledge of the waste, to determine if the waste is restricted from land disposal under this Part.

1) If a generator determines that the generator is managing a restricted waste under this Part and determines that the waste does not meet the applicable treatment standards set forth in Subpart D or exceeds the applicable prohibition levels set forth in Section 728.132 or 728.139, with each shipment of waste the generator shall

notify the treatment or storage facility in writing of the appropriate treatment standard set forth in Subpart D and any applicable prohibition levels set forth in Section 728.132 or 728.139. The notice must include the following information:

A) USEPA Hazardous Waste Number;

B) The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either be included, or be referenced ~~as above, or~~ by including on the notification the ~~subcategory of the waste, the treatability group(s) of the waste(s),~~ applicable wastewater or nonwastewater (as defined in Section 728.102) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides), and the Section and subsection where the applicable treatment standard~~s~~ appear~~s~~. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Table C (e.g., INCIN, WETOX) also must be listed on the notification.

C) The manifest number associated with the shipment of waste; and

D) Waste analysis data, where available.

2) If a generator determines that the generator is managing a restricted waste under this Part, and determines that the waste can be land disposed without further treatment, with each shipment of waste the generator shall submit, to the treatment, storage or land disposal facility, a notice and a certification stating that the waste meets the applicable treatment standards set forth in Subpart D and the applicable prohibition levels set forth in Section 728.132 or 728.139.

A) The notice must include the following information:

i) USEPA Hazardous Waste Number;

ii) The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either be included or be referenced ~~as above, or~~ by including on the notification ~~the subcategory of the waste, the treatability group(s) of the waste(s),~~ wastewater or nonwastewater (as defined in Section 728.102) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides), and the Section and subsection where the applicable treatment standards appears. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Table C (e.g., INCIN, WETOX) also must be listed on the notification.

iii) The manifest number associated with the shipment of waste;

iv) Waste analysis data, where available.

B) The certification must be signed by an authorized representative and must state the following:

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 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132, 728.139 or Section 3004(d) of the Resource Conservation and Recovery Act. 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.

3) If a generator's waste is subject to an exemption from a prohibition on the type of land disposal method utilized for the waste (such as, but not limited to, a case-by-case extension under Section 728.105, an exemption under Section 728.106, an extension under Section 728.101(c)(3) or a nationwide capacity variance under 40 CFR 268.Subpart C (1989), with each shipment of waste, the generator shall submit a notice with the waste to the facility receiving the generator's waste, stating that the waste is not prohibited from land disposal. The notice must include the following information:

A) EPA hazardous waste number:

B) The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either be included, or be referenced ~~as above, or~~ by including on the notification the ~~subcategory of the waste, the treatability group(s) of the waste(s),~~ wastewater or nonwastewater (as defined in Section 728.102) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides), and the Section and subsection where the applicable treatment standard~~s~~ appear~~s~~. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Table C (e.g., INCIN, WETOX) also must be listed on the notification.

C) The manifest number associated with the shipment of waste;

D) Waste analysis data, where available, and

E) The date the waste is subject to the prohibitions.

4) If a generator is managing a prohibited waste in

tanks or containers regulated under 35 Ill. Adm. Code 722.134, and is treating such waste in such tanks or containers to meet applicable treatment standards under Subpart D, the generator shall develop and follow a written waste analysis plan which describes the procedures the generator will carry out to comply with the treatment standards. 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 waste(s) being treated, and contain all information necessary to treat the waste(s) in accordance with the requirements of this Part, including the selected testing frequency.

B) Such plan must be filed with the Agency a minimum of 30 days prior to the treatment activity, with delivery verified.

C) Wastes shipped off-site pursuant to this subsection must comply with the notification requirements of Section 728.107(a)(2).

5) If a generator determines whether the waste is restricted based solely on the generator's knowledge of the waste, the generator shall retain all supporting data used to make this determination on-site in the generator's files. If a generator determines whether the waste is restricted based on testing the waste or an extract developed using the test method described in Appendix A, the generator shall retain all waste analysis data on site in the generator's files.

6) <u>If a generator determines, subsequent to the point of generation, that the generator is managing a restricted waste which is excluded from the definition of hazardous or solid waste or exempt from regulation as a RCRA hazardous waste under 35 Ill. Adm. Code 721.102 - 721.106, the generator shall place, in the facility's file, a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from regulation as a RCRA hazardous waste, and the disposition of the waste.</u>

7) Generators shall retain on-site a copy of all notices, certifications, demonstrations, waste analysis data and other documentation produced pursuant to this Section for at least five 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 five 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 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 - 721.106, or exempted from regulation as a RCRA hazardous waste subsequent to the point of generation.

~~7~~8) If a generator is managing a lab pack that contains wastes identified in Appendix D and wishes to use the alternative treatment standard under Section 728.142, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with subsection (a)(1). The generator shall also comply with the requirements in subsections (a)(5) and (a)(6), and shall submit the following certification, which must be signed by an authorized representative:

> I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only the wastes specified in 35 Ill. Adm. Code 728.Appendix D or solid wastes not subject to regulation under 35 Ill. Adm. Code 721. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

~~8~~9) If a generator is managing a lab pack that contains organic wastes specified in Appendix E and wishes to use the alternate treatment standards under Section 728.142, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with subsection (a)(1). The generator also shall comply with the requirements in subsections (a)(5) and (a)(6), and shall submit the following certification which must be 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 and that the lab pack contains only organic waste specified in 35 Ill. Adm. Code 728.Appendix E or solid wastes not subject to regulation under 35 Ill. Adm. Code 721. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

~~9~~10) Small quantity generators with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) shall comply with the applicable notification and certification requirements of subsection (a) for the initial shipment of the waste subject to the agreement. Such generators shall 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 following notification pursuant to Section 31(d) of the Environmental Protection Act, until either any subsequent enforcement action is resolved, or the Agency notifies the generator documents need no be retained.

b) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by 35 Ill. Adm. Code 724.113 or 725.113. Such testing must be performed as provided in subsections (b)(1), (b)(2) and (b)(3).

1) For wastes with treatment standards expressed as concentrations in the waste extract (Section 728.141), the owner or operator of the treatment facility shall test the treatment residues or an extract of such residues developed using the test method described in Appendix A to assure that the treatment residues or extract meet the applicable treatment standards.

2) For wastes prohibited under Section 728.132 or 728.139 which are not subject to any treatment standards under Subpart D, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in Section 728.132 to assure that the treatment residues comply with the

applicable prohibitions.

3) For wastes with treatment standards expressed as concentrations in the waste (Section 728.143), the owner or operator of the treatment facility shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.

4) A notice must be sent with each waste shipment to the land disposal facility which includes the following information:

A) USEPA Hazardous Waste Number;

B) The corresponding treatment standards for wastes F001-F005, F039 and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either included, or be be referenced ~~as above, or~~ by including on the notification the ~~subcategory of the waste, the treatability group(s) of the waste(s),~~wastewater or nonwastewater (as defined in Section 728.102) category, the applicable subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides), and the Section and subsection where the applicable treatment standard~~s~~ appear~~s~~. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Table C (e.g., INCIN, WETOX) also must be listed on the notification.

C) The manifest number associated with the shipment of waste; and

D) Waste analysis data, where available.

5) The treatment facility shall submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the treatment standards specified in Subpart D and the applicable prohibitions set forth in Section 728.132 or 728.139.

A) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (Sections 728.141 or 728.143), or for wastes prohibited under Section 728.132 or 728.139 which are not subject to any treatment standards under Subpart D, the certification must be signed by an authorized representative and must state the following:

> 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 that, 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 performance levels specified in 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132 or 728.139 or section 3004(d) of the Resource Conservation and Recovery Act without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

B) For wastes with treatment standards expressed as technologies (Section 728.142), the certification must be signed by an authorized representative and must state the following:

> I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.142. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

C) For wastes with treatment standards expressed as concentrations in the waste pursuant to Section 728.143, if compliance with the treatment standards in Subpart D is based in part or in whole on the analytical detection limit alternative specified in Section 728.143(c), the certification also must state the following:

I certify under penalty of law that I have personally examined and am famil with the treatment technology and operation of the treatment process us to support this certification and tha based on my inquiry of those individu immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents ha been treated by incineration in units operated in accordance with 35 Ill. A Code 724.Subpart O) or 35 Ill. Adm. C 725.Subpart O, or by combustion in fu substitution units operating in accordance with applicable technical requirements, and I have been unable t detect the nonwastewater organic constituents despite having used best good faith efforts to analyze for such constituents. I am aware that there a significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

6) If the waste or treatment residue will be furthe managed at a different treatment or storage facility, the treatment, storage or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this Section.

7) Where the wastes are recyclable materials used i 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)(4). With each shipment of such wastes the owner or operator of the recycling facility shall submit a certification described subsection (b)(5), and a notice which includes t information listed in subsection (b)(4) (except the manifest number) to the Agency. The recycli facility also shall 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 an 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:

1) Have copies of the notice and certification specified in subsection (a) or (b), and the certification specified in Section 728.108 if applicable.

2) Test the waste, or an extract of the waste or treatment residue developed using the test method described in Appendix A or using any methods required by generators under Section 728.132, to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in Subpart D and all applicable prohibitions set forth in Sections 728.132 or 728.139. 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 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 shall 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 (3) with respect to such waste.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.109 Special Rules for Characteristic Wastes

a) The initial generator of a solid waste shall determine

each USEPA hazardous waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under Subpart D. For purposes of ~~part 268~~this Part, the waste will carry ~~a~~the waste code ~~designation~~ for any applicable listing under 35 Ill. Adm. Code 721.Subpart D~~, and also.~~ In addition, the waste will carry one or more of the waste code~~s designations~~ under 35 Ill. Adm. Code 721.Subpart C where the waste exhibits the relevant characteristic, except in the case when the treatment standard for the waste code listed in 35 Ill. Adm. Code 721.Subpart D operates in lieu of the standard for the waste code under 35 Ill. Adm. Code 721.Subpart C, as specified in subsection (b).

b) Where a prohibited waste is both listed under 35 Ill. Adm. Code 721.Subpart D and exhibits a characteristic under 35 Ill. Adm. Code 721.Subpart C, the treatment standard for the waste code listed in 35 Ill. Adm. Code 721.Subpart D will operate in lieu of the standard for the waste code under 35 Ill. Adm. Code 721.Subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under 35 Ill. Adm. Code 721.Subpart C shall be land disposed unless the waste complies with the treatment standards under Subpart D.

d) Wastes that exhibit a characteristic are also subject to Section 728.107 requirements, except that once the waste is no longer hazardous, for each shipment of such wastes to a non-hazardous waste facility, regulated under 35 Ill. Adm. Code 807 or 811 through 815, or exempted under Section 21(d)(1)(i) of the Environmental Protection Act, or similarly regulated in other States, the initial generator or the treatment facility need not send a Section 728.107 notification to such facility. In such circumstances, a notification and certification must be sent to the Agency, or, for out-of-State shipments, to the appropriate USEPA Regional Administrator or State authorized, pursuant to 40 CFR 271, to implement 40 CFR 268 requirements.

1) The notification must include the following information:

A) The name and address of the non-hazardous waste facility receiving the waste shipment;

B) A description of the waste as initially generated, including the applicable USEPA Hazardous Waste Number(s) ~~and treatability group(s)~~, the applicable wastewater or nonwastewater (as defined in Section 728.102) category, and the subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides);

C) The treatment standards applicable to the waste at the initial point of generation.

2) The certification must be signed by an authorized representative and must state the language found in Section 728.107(b)(5)(A).

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.110 First Third

The Board incorporates by reference 40 CFR 268.10 (1991). This Section incorporates no later editions or amendments.

(Source: Added at 16 Ill. Reg. , effective)

Section 728.111 Second Third

The Board incorporates by reference 40 CFR 268.11 (1991). This Section incorporates no later editions or amendments.

(Source: Added at 16 Ill. Reg. , effective)

Section 728.112 Third Third

The Board incorporates by reference 40 CFR 268.12 (1991). This Section incorporates no later editions or amendments.

(Source: Added at 16 Ill. Reg. , effective)

Section 728.113 Newly Listed Wastes

The Board incorporates by reference 40 CFR 268.13 (1991). This Section incorporates no later editions or amendments.

(Source: Added at 16 Ill. Reg. , effective

)

Section 728.133 Waste Specific Prohibitions -- First Third Wastes

a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous wastes numbers listed below are prohibited from land disposal (except in an injection well). ~~Until August 7, 1990, K061 wastes containing 15% zinc or greater are prohibited from land disposal pursuant to the treatment standards specified in Section 728.141 applicable to K061 wastes that contain less than 15% zinc.~~

F006 (nonwastewater)
K001
K004 wastes specified in Section 728.143(a) and Table B
K008 wastes specified in Section 728.143(a) and Table B
K015
K016
K018
K019
K020
K021 wastes specified in Section 728.143(a) and Table B
K022 (nonwastewater)
K024
K025 nonwastewaters specified in Section 728.143(a) and Table B
K030
K036 (nonwastewater)
K037
K044
K045 (nonexplosive)
K046 (nonwastewater)
K047
K060 (nonwastewater)
K061 (nonwastewaters containing less than 15% zinc)
K062 (non $CaSO_4$)
K069 (nonwastewater)
K086 (solvent washes),
K087
K099
K100 nonwastewaters specified in Section 728.143(a) and Table B
K101 (wastewater)
K101 (nonwastewater, low arsenic subcategory -- less than 1% total arsenic
K102 (wastewater)

K102 (nonwastewater, low arsenic subcategory -- less than 1% total arsenic
K103
K104

b) ~~Effective August 8, 1990, t~~The wastes~~s~~ specified in 35 Ill. Adm. Code 721.132 as USEPA Hazardous Waste No~~s~~. ~~K048, K049, K050, K051, K052, K061 (containing 15% zinc or greater), and~~ K071 ~~are~~is prohibited from land disposal.

c) ~~Effective August 8, 1990, t~~The wastes specified in Section 728.110 having a treatment standard in Subpart D based on incineration and which are contaminated soil and debris are prohibited from land disposal.

~~d) Until August 8, 1990, wastes included in subsection (b) and (c) may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105.~~

e) The requirements of subsection (a), (b), (c) and (d) do not apply if:

1) The wastes meet the applicable standards specified in Subpart D; or

2) Persons have been granted an adjusted standard pursuant to Section 728.106, with respect to those wastes and units covered by the petition; or

3) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.

~~f) Until May 8, 1990, the wastes specified in Section 728.110 for which treatment standards under Subpart D have not been promulgated, including those wastes which are subject to the statutory prohibitions of Section 728.139 or codified prohibitions under Section 728.132, but not including wastes subject to a treatment standard under Section 728.142, are prohibited from disposal in a landfill or surface impoundment unless unless a demonstration and certification have been submitted pursuant to Section 728.108.~~

g) To determine whether a hazardous waste listed in Section 728.110 exceeds the applicable treatment standards specified in Sections 728.131 and 728.143, the initial generator shall test a representative

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 Subpart D levels, the waste is prohibited from land disposal and all requirements of this Part are applicable except as otherwise specified.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.135 Waste Specific Prohibitions--Third Third wastes.

a) The following wastes are prohibited from land disposal.

1) The wastes specified in 35 Ill. Adm. Code 721.131 as EPA Hazardous Waste Numbers:

F002 (1,1,2-trichloroethane)
F005 (benzene)
F005 (2-ethoxyethanol)
F005 (2-nitropropane)
F006 (wastewaters),
F019
F025
F039 (wastewaters);

2) The wastes specified in 35 Ill. Adm. Code 721.132 as EPA Hazardous Waste Numbers:

K002
K003
K004 (wastewaters)
K005 (wastewaters)
K006
K008 (wastewaters)
K011 (wastewaters)
K013 (wastewaters)
K014 (wastewaters)
K015 (nonwastewaters)
K017
K021 (wastewaters)
K022 (wastewaters)
K025 (wastewaters)
K026
K029 (wastewaters)
K031 (wastewaters)
K032
K033
K034

K035
K041
K042
K046 (wastewaters, reactive nonwastewaters)
K048 (wastewaters)
K049 (wastewaters)
K050 (wastewaters)
K051 (wastewaters)
K052 (wastewaters)
K060 (wastewaters)
K061 (wastewaters) and (high zinc subcategory > 15% zinc)
K069 (wastewaters, calcium sulfate nonwastewaters)
K073
K083 ~~(wastewaters)~~
K084 (wastewaters)
K085
K095 (wastewaters)
K096 (wastewaters)
K097
K098
K100 (wastewaters)
K101 (wastewaters)
K102 (wastewaters)
K105
K106 (wastewaters)

3) The wastes specified in 35 Ill. Adm. Code 721.133(e) as EPA Hazardous Waste Numbers:

P001
P002
P003
P004
P005
P006
P007
P008
P009
P010 (wastewaters)
P011 (wastewaters)
P012 (wastewaters)
P014
P015
P016
P017
P018 ~~(wastewaters)~~
P020
P022
P023
P024

P024
P027
P028
P031
P033
P034
P036 (wastewaters)
P037
P038 (wastewaters)
P042
P045
P046
P047
P048
P049
P050
P051
P054
P056
P057
P058
P059
P060
P064
P065 (wastewaters)
P066
P067
P068
P069
P070
P072
P073
P075
P076
P077
P078
P081
P082
P084
P088
P092 (wastewaters)
P093
P095
P096
P101
P102
P103
P105
P108
~~P109~~
P110
P112

P113
P114
P115
P116
P118
P119
P120
P122
P123

4) The wastes specified in 35 Ill. Adm. Code 721.133(f) as EPA Hazardous Waste Numbers:

U001
U002
U003
U004
U005
U006
U007
U008
U009
U010
U011
U012
U014
U015
U016
U017
U018
U019
U020
U021
U022
U023
U024
U025
U026
U027
U029
U030
U031
U032
U033
U034
U035
U036
U037
U038
U039
U041
U042

U043
U044
U045
U046
U047
U048
U049
U050
U051
U052
U053
U055
U056
U057
U059
U060
U061
U062
U063
U064
U066
U067
U068
U070
U071
U072
U073
U074
U075
U076
U077
U078
U079
U080
U081
U082
U083
U084
U085
U086
U089
U090
U091
U092
U093
U094
U095
U096
U097
U098
U099
U101

U103
U105
U106
U108
U109
U110
U111
U112
U113
U114
U115
U116
U117
U118
U119
U120 ~~(wastewaters)~~
U121
U122
U123
U124
U125
U126
U127
U128
U129
U130
U131
U132
U133
U134
U135
U136 (wastewaters)
U137
U138
U140
U141
U142
U143
U144
U145
U146
U147
U148
U149
U150
U151 (wastewaters)
U152
U153
U154
U155
U156
U157

U158
U159
U160
U161
U162
U163
U164
U165
U166
U167
U168
U169
U170
U171
U172
U173
U174
U176
U177
U178
U179
U180
U181
U182
U183
U184
U185
U186
U187
U188
U189
U191
U192
U193
U194
U196
U197
U200
U201
U202
U203
U204
U205
U206
U207
U208
U209
U210
U211
U213
U214
U215

U216
U217
U218
U219
U220
U222
U225
U226
U227
U228
U234
U236
U237
U238
U239
U240
U243
U244
U246
U247
U248
U249

4) The following wastes identified as hazardous based on a characteristic alone:

D001
D002
D003
D004 (wastewaters)
D005
D006
D007
D008 (except for lead materials stored before secondary smelting)
D009 (wastewaters)
D010
D011
D012
D013
D014
D015
D016
D017

b) The following wastes are prohibited from land disposal. The wastes specified in 35 Ill. Adm. Code 721.132 as EPA Hazardous Waste Numbers:

K048 (nonwastewaters)
K049 (nonwastewaters)
K050 (nonwastewaters)

K051 (nonwastewaters)
K052 (nonwastewaters)

c) Effective May 8, 1992, the following wastes are prohibited from land disposal:

1) The wastes specified in 35 Ill. Adm. Code 721.131 as EPA Hazardous Waste Numbers:

F039 (nonwastewaters)

2) The wastes specified in 35 Ill. Adm. Code 721.132 as EPA Hazardous Waste Numbers:

K031 (nonwastewaters)
K084 (nonwastewaters)
K101 (nonwastewaters)
K102 (nonwastewaters)
K106 (nonwastewaters)

3) The wastes specified in 35 Ill. Adm. Code 721.133(e) as EPA Hazardous Waste Numbers:

P010 (nonwastewaters)
P011 (nonwastewaters)
P012 (nonwastewaters)
P036 (nonwastewaters)
P038 (nonwastewaters)
P065 (nonwastewaters)
P087 ~~(nonwastewaters)~~
P092 (nonwastewaters)

4) The wastes specified in 35 Ill. Adm. Code 721.133(f) as EPA Hazardous Waste Numbers:

U136 (nonwastewaters)
U151 (nonwastewaters)

5) The following wastes identified as hazardous based on a characteristic alone:

D004 (nonwastewaters)
D008 (lead materials stored before secondary smelting)
D009 (nonwastewaters);

6) Inorganic solids debris as defined in 35 Ill. Adm. Code 728.102~~(a)(7)~~ (which also applies to chromium refractory bricks carrying the EPA Hazardous Waste Numbers K048-K052)

7) RCRA hazardous wastes that contain naturally

occurring radioactive materials.

d) Effective May 8, 1992, hazardous wastes listed in ~~40 CFR 268.12~~Sections 728.110, 728.111 or 728.112 that are mixed radioactive/hazardous wastes, and soil or debris contaminated with hazardous wastes listed in Sections 728.110, 728.111 or 728.112 that are mixed radioactive/hazardous wastes, are prohibited from land disposal.

e) Effective May 8, 1992, the wastes specified in this Section having a treatment standard in Subpart D based on incineration, mercury retorting, vitrification, acid leaching followed by chemical precipitation or thermal recovery of metals and which are contaminated soil or debris, are prohibited from land disposal.

h) Between May 8, 1990, and May 8, 1992, wastes included in subsections (c), (d) and (e) shall be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 728.105(h)(2).

i) The requirements of subsections (a), (b), (c), (d) and (e) do not apply if:

1) The wastes meet the applicable standards specified in Subpart D;

2) Persons have 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 standards established pursuant to a petition granted under Section 728.144;

4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.

j) To determine whether a hazardous waste listed in ~~40 CFR 268.10, 268.11 and 268.12~~Section 728.110, 728.111 or 728.112 exceeds the applicable treatment standards specified in Sections 728.141 and 728.143, the initial generator shall either test a representative 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 use knowledge of the waste. If the waste contains

constituents in excess of the applicable Subpart D levels, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at 16 Ill. Reg. , effective)

SUBPART D: TREATMENT STANDARDS

Section 728.140 Applicability of Treatment Standards

a) A restricted waste identified in Section 728.141 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using the test method ~~Appendix A~~35 Ill. Adm. Code 721.Appendix B does not exceed the value shown in Table A for any hazardous constituent listed in Table A for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136. ~~Wastes D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136~~These wastes may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either the test method in 35 Ill. Adm. Code 721.Appendix ~~A~~B or the test method in ~~35 Ill. Adm. Code 728.~~Appendix ~~B~~I ("eye") of this Part does not exceed the ~~value~~concentrations shown in Table ~~B~~A for any hazardous constituent listed in Table A for that waste.

b) A restricted waste for which a treatment technology is specified under Section 728.142(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Agency under the procedures set forth in Section 728.142(b).

c) Except as otherwise specified in Section 728.143(c), a restricted waste identified in Section 728.143 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Table B for any hazardous constituent listed in Table B for that waste.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.142 Treatment Standards expressed as Specified Technologies

a) The following wastes in subsections (a)(1) and (2) and Table D and E must be treated using the technology or technologies specified in subsections (a)(1) and (2)

and Table C.

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 technical requirements at 40 CFR 761.70, incorporated by reference in 35 Ill. Adm. Code 720.111, or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. 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 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 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O. These treatment standards do not apply where the waste is subject to a Subpart ~~C~~D treatment standard 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, and that meet the criteria of the D001 ignitable liquids containing greater than 10% total organic constituents (TOC) subcategory, is subject to the DEACT treatment standard described in Table C. For purposes of this subsection, "de minimis losses" include:

   A) 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);

   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). The applicant shall 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 (Ill. Rev. Stat. 1987, ch 111½, pars. 1022.6 and 1039(h)), and is protective of human health or the environment. On the basis of such information and any other available information, the Agency shall 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). 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 shall comply with all limitations contained in such determination.

c) As an alternative to the otherwise applicable Subpart I treatment standards, 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 729.31 include additional restrictions on the use of lab packs.

2) All hazardous wastes contained in such lab packs are specified in Appendix D or Appendix E;

3) The lab packs are incinerated in accordance with the requirements of 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O; and

4) Any incinerator residues from lab packs containin

D004, D005, D006, D007, D008, D010 and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Subpart D.

d) Radioactive hazardous mixed wastes with treatment standards specified in Table E are not subject to any treatment standards specified in Section 728.141, Section 728.143 or Table D. Radioactive hazardous mixed wastes not subject to treatment standards in Table E remain subject to all applicable treatment standards specified in Section 728.141, Section 728.143 and Table D.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.144 Adjustment of Treatment Standard

a) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste cannot be treated to the specified level, or where the treatment technology is not appropriate to the waste, the generator or treatment facility may petition to the Board for an adjusted treatment standard. As justification, the petitioner shall demonstrate that, because the physical or chemical properties of the waste differ significantly from wastes analyzed in developing the treatment standard, the waste cannot be treated to specified level or by the specified methods.

b) Each petition must be submitted in accordance with the procedures in 35 Ill. Adm. Code 106.Subpart G.

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 adjustment of a treatment standard, the Board may request any

additional information or samples which are necessary to evaluate the petition.

e) The Board will give public notice and provide an opportunity for public comment, as provided in 35 Ill. Adm. Code 106. ~~The final decision on an adjusted treatment standard will be published in the Environmental Register.~~In conjunction with the normal updating of the RCRA regulations, the Board will maintain, in this Part, a listing of all adjusted 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. (Section 28.1(d)(3) of the Environmental Protection Act.)

f) A generator, treatment facility or disposal facility that is managing a waste covered by an adjusted treatment standard shall 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) Where the treatment standard is expressed as a concentration in a waste or waste extract and a waste generated under conditions specific to only one site cannot be treated to the specified level, or where treatment technology is not appropriate to the waste, the generator or treatment facility may petition the Board for a site-specific adjusted standard. The petitioner shall demonstrate that, because the physical or chemical properties of the waste differs significantly from the waste analyzed in developing the treatment standard, the waste cannot be treated to specified levels or by the specified methods.

i) Each petition for a site-specific adjusted standard must include the information in ~~40 CFR 260.20(b)(1) through (b)(4), incorporated by reference in 35 Ill. Adm. Code 720.111~~35 Ill. Adm. Code 720.120(b)(1) - (4).

j) After receiving a petition for a site-specific adjusted standard, the Board may request any additional information or samples which the Board determines are necessary to evaluate the application.

k) A generator, treatment facility or disposal facility

which is managing a waste covered by a site-specific adjusted standard from a treatment standard shall 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 standard shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Appendix D Organometallic Lab Packs

Hazardous waste with the following EPA hazardous waste ~~code~~s numbers may be placed in an "organometallic" or "Appendix D lab pack:"

P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, ~~P025,~~ P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P106, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P121, P122, P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, ~~U134, U135,~~ U136, ~~U137, U136,~~ U137, U138, ~~U139,~~ U140, U141, U142, U143, U144, U145, U146, U147, U148, U149, U150, U152, ~~U154,~~ U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249, ~~U328, U353, U359~~

F001, F002, F003, F004, F005, F006, F010, F020, F021, F022, F023, F024, F025 F026, F027, F028, F039

K001, K002, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, ~~K054,~~ K060, K061, ~~K064, K065, K066,~~ K069, K071, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, ~~K111, K112,~~ K113, K114, K115, K116~~, K117, K118, K123, K124, K125, K126, K136~~

D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D012, D013, D014, D015, D016, D017

~~U032, U136, U144, U145, U146, U163, U214, U215, U216, U217~~

BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Appendix E Organic Lab Packs

Hazardous wastes with the following EPA Hazardous Waste Code No. may be placed in an "organic" or "Appendix E" lab pack:

P001, P002, P003, P004, P005, ~~P006,~~ P007, P008, P009, ~~P013,~~ P014, ~~P015,~~ P016, P017, P018, P020, P021, P022, P023, ~~P025,~~ P024, P026, P027, P028, P030, P031, P033, P034, ~~P036,~~ P037, ~~P038,~~ P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P063, P064, ~~P064, P065,~~ P066, P067, P068, P069, P070, P071, P072, ~~P073, P074,~~ P075, P077, P081, P082, P084, P085, ~~P087,~~ P088, P089, ~~P092,~~ P093, P094, P095, ~~P096,~~ P097, P098, ~~P099,~~ P101, P102, ~~P103, P104,~~ P105, P106, P108, P109, ~~P110,~~ P111, P112, ~~P113, P114, P115,~~ P116, P118~~, P119, P120, P122,~~ P123

U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, ~~U051,~~ U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, ~~U139,~~ U140, U141,

U142, U143, U147, U148, U149, U150, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, ~~U205,~~ U206, U207, U208, U209, U210, U211, U213, ~~U214,~~ U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249~~, U328, U353, U359~~

F001, F002, F003, F004, F005, F010, F020, F021, F022, F023, ~~F024,~~ F025, F026, F027, F028

~~K001,~~ K009, K010, K011, K013, K014, ~~K015,~~ K016, K017, K018, K019, K020, ~~K021, K022,~~ K023, K024, K025, K026, K027, K029, K030, ~~K031,~~ K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, ~~K046,~~ K047, ~~K048, K049, K050, K051, K052, K054,~~ K060, ~~K065,~~ K073, ~~K083, K084,~~ K085, ~~K086, K087,~~ K093, K094, K095, K096, K097, K098, K099, ~~K101, K102,~~ K103, K104, K105, ~~K111, K112,~~ K113, K114, ~~K115,~~ K116~~, K117, K118, K123, K124, K125, K126, K136~~

D001, D012, D013, D014, D015, D016, D017

BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.

(Source: Amended at 16 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.

~~Waste Code~~	~~Waste Category~~	~~Effective date~~
~~California list~~	~~Liquid hazardous wastes, including free liquids associated with solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l or certain metals or compounds of these metals greater than or equal to the prohibition levels~~	~~July 8, 1987~~
~~California list~~	~~Liquid (aqueous) hazardous wastes having a pH less than or equal to 2~~	~~July 8, 1987~~

California list	Dilute HOC wastewaters, defined as HOC-waste mixtures that are primarily water and that contain greater than or equal to 1,000 mg/l but less than 10,000 mg/l	July 8, 1987
California list	Liquid hazardous waste containing PCBs greater than or equal to 50 ppm	July 8, 1987
California list	Other liquid and non-liquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg	Nov. 8, 1988
California list	Soil and debris HOCs not from CERCLA/RCRA corrective actions	July 8, 1989
California list	Soil and debris HOCs from CERCLA/RCRA corrective actions	Nov. 8, 1990
D001	All	Aug. 8, 1990
D002	All	Aug. 8, 1990
D003	All	Aug. 8, 1990
D004	Inorganic solid debris	May 8, 1992
D004	Nonwastewater	May 8, 1992
D004	Wastewater	Aug. 8, 1990
D005	Inorganic solid debris	May 8, 1992
D005	All others	Aug. 8, 1990
D006	Inorganic solid debris	May 8, 1992
D006	All others	Aug. 8, 1990
D007	Inorganic solid debris	May 8, 1992
D007	All others	Aug. 8, 1990
D008	Inorganic solid debris	May 8, 1992
D008	Lead acid batteries	May 8, 1992
D008	All others	Aug. 8, 1990

D009	Inorganic solid debris	May 8, 1
D009	High mercury nonwastewater	May 8, 1992
D009	Low mercury nonwastewater	May 8, 1992
D009	All others	Aug. 8, 1990
D010	Inorganic solid debris	May 8, 1992
D010	All others	Aug. 8, 1990
D011	Inorganic solid debris	May 8, 1992
D011	All others	Aug. 8, 1990
D012	All	Aug. 8, 1990
D013	All	Aug. 8, 1990
D014	All	Aug. 8, 1990
D015	All	Aug. 8, 1990
D016	All	Aug. 8, 1990
D017	All	Aug. 8, 1990
F001-F005	All, except in next listing	Nov. 8, 1986
F001-F005	Small quantity generators, CERCLA/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids, and non CERCLA/RCRA corrective action soils with less than 1 percent total solvent constituents	Nov. 8, 1988
F001-F005	Soil and debris	Nov. 8, 1990
F002 b	All	Aug. 8, 1990
F005 c	All	Aug. 8, 1990
F006	Wastewater	Aug. 8, 1990
F006	Nonwastewater	Aug. 8, 1988
F006 (cyanides)	Nonwastewater	July 8, 1989

F007	All	July 8, 1989
F008	All	July 8, 1989
F009	All	July 8, 1989
F010	Soil and debris	June 8, 1991
F010	All others	June 8, 1989
F011	All	July 8, 1989
F012	All	July 8, 1989
F019	All	Aug. 8, 1990
F020	Soil and debris	Nov. 8, 1990
F020	All others	Nov. 8, 1988
F021	Soil and debris	Nov. 8, 1990
F021	All others	Nov. 8, 1988
F022	Soil and debris	Nov. 8, 1990
F022	All others	Nov. 8, 1988
F023	Soil and debris	Nov. 8, 1990
F023	All others	Nov. 8, 1988
F024	Soil and debris	June 8, 1991
F024 (metals)	Nonwastewater	Aug. 8, 1990
F024 (dioxins/furans)	All	Aug. 8, 1990
F024	All others	June 8, 1989
F025	All	Aug. 8, 1990
F026	Soil and debris	Nov. 8, 1990
F026	All others	Nov. 8, 1988
F027	Soil and debris	Nov. 8, 1990
F027	All others	Nov. 8, 1988

F028	Soil and debris	Nov. 8, 1990
F028	All others	Nov. 8, 1988
F039	Wastewater	Aug. 8, 1990
F039	Nonwastewater	May. 8, 1992
K001	Soil and debris	Aug. 8, 1990
K001 (lead/organics)	All	Aug. 8, 1990
K001	All others	Aug. 8, 1988
K002	All	Aug. 8, 1990
K003	All	Aug. 8, 1990
K004	All	Aug. 8, 1990
K005 d	All	Aug. 8, 1990
K006	All	Aug. 8, 1990
K007 d	All	Aug. 8, 1990
K008	All	Aug. 8, 1990
K009	Soil and debris	June 8, 1991
K009	All others	June 8, 1989
K010	Soil and debris	June 8, 1991
K010	All others	June 8, 1989
K011	Wastewater	Aug. 8, 1990
K011	Nonwastewater	June 8, 1989
K011	Soil and debris	June 8, 1991
K013	Wastewater	Aug. 8, 1990
K013	Nonwastewater	June 8, 1989
K013	Soil and debris	June 8, 1991
K014	Wastewater	Aug. 8, 1990

K014	Nonwastewater	June 8, 1989
K014	Soil and debris	June 8, 1991
K015	Wastewater	Aug. 8, 1988
K015	Nonwastewater	Aug. 8, 1990
K016	Soil and debris	Aug. 8, 1990
K016	All others	Aug. 8, 1988
K017	All	Aug. 8, 1990
K018	Soil and debris	Aug. 8, 1990
K018	All others	Aug. 8, 198J
K019	Soil and debris	Aug. 8, 1990
K019	All others	Aug. 8, 1988
K020	Soil and debris	Aug. 8, 1990
K020	All others	Aug. 8, 1988
K021 e	All	Aug. 8, 1990
K022	Wastewater	Aug. 8, 1990
K022	Nonwastewater	Aug. 8, 1988
K022	Soil and debris	Aug. 8, 1990
K023	Soil and debris	June 8, 1991
K023	All others	June 8, 1989
K024	Soil and debris	Aug. 8, 1990
K024	All others	Aug. 8, 1988
K025 e	All	Aug. 8, 1990
K026	All	Aug. 8, 1990
K027	Soil and debris	June 8, 1991
K027	All others	June 8, 1989
K028	Soil and debris	June 8, 1991

~~K028 (metals)~~	~~Nonwastewater~~	~~Aug. 8,~~ ~~9~~
~~K028~~	~~All others~~	~~June 8, 19~~
~~K029~~	~~Wastewater~~	~~Aug. 8, 199~~
~~K029~~	~~Nonwastewater~~	~~June 8, 198~~
~~K029~~	~~Soil and debris~~	~~June 8, 199~~
~~K030~~	~~Soil and debris~~	~~Aug. 8, 199~~
~~K030~~	~~All others~~	~~Aug. 8, 198~~
~~K031~~	~~Wastewater~~	~~Aug. 8, 199~~
~~K031~~	~~Nonwastewater~~	~~May 8, 1992~~
~~K032~~	~~All~~	~~Aug. 8, 199~~
~~K033~~	~~All~~	~~Aug. 8, 199~~
~~K034~~	~~All~~	~~Aug. 8, 199~~
~~K035~~	~~All~~	~~Aug. 8, 199~~
~~K036 e~~	~~All~~	~~Aug. 8, 199~~
~~K037~~	~~Soil and debris~~	~~Aug. 8, 199~~
~~K037~~	~~Wastewater~~	~~Aug. 8, 199~~
~~K037~~	~~All others~~	~~Aug. 8, 198~~
~~K038~~	~~Soil and debris~~	~~June 8, 199~~
~~K038~~	~~All others~~	~~June 8, 198~~
~~K039~~	~~Soil and debris~~	~~June 8, 1991~~
~~K039~~	~~All others~~	~~June 8, 1989~~
~~K040~~	~~Soil and debris~~	~~June 8, 1991~~
~~K040~~	~~All others~~	~~June 8, 1989~~
~~K041~~	~~All~~	~~Aug. 8, 1990~~
~~K042~~	~~All~~	~~Aug. 8, 1990~~
~~K043~~	~~Soil and debris~~	~~June 8, 1~~

K043	All others	June 8, 1989
K044	All	Aug. 8, 1990
K045	All	Aug. 8, 1990
K046	Nonreactive nonwastewater	Aug. 8, 1988
K046	All others	Aug. 8, 1990
K047	All	Aug. 8, 1990
K048	Wastewater	Aug. 8, 1990
K048	Nonwastewater	Nov. 8, 1990
K049	Wastewater	Aug. 8, 1990
K049	Nonwastewater	Nov. 8, 1990
K050	Wastewater	Aug. 8, 1990
K050	Nonwastewater	Nov. 8, 1990
K051	Wastewater	Aug. 8, 1990
K051	Nonwastewater	Nov. 8, 1990
K052	Wastewater	Aug. 8, 1990
K052	Nonwastewater	Nov. 8, 1990
K060	All	Aug. 8, 1990
K061	Wastewater	Aug. 8, 1990
K061	Nonwastewater	Aug. 8, 1988
K062	All	Aug. 8, 1988
K069	All	Aug. 8, 1990
K073	All	Aug. 8, 1990
K083	All	Aug. 8, 1990
K084	Wastewater	Aug. 8, 1990
K084	Nonwastewater	May 8, 1992
K085	All	Aug. 8, 1990

K086	All	Aug. 8, 1990
K087	Soil and debris	Aug. 8, 1990
K087	All others	Aug. 8, 1988
K093	Soil and debris	June 8, 1991
K093	All others	June 8, 1989
K094	Soil and debris	June 8, 1991
K094	All others	June 8, 1989
K095	Wastewater	Aug. 8, 1990
K095	Nonwastewater	June 8, 1989
K095	Soil and debris	June 8, 1991
K096	Wastewater	Aug. 8, 1990
K096	Nonwastewater	June 8, 1989
K096	Soil and debris	June 8, 1991
K097	All	Aug. 8, 1990
K098	All	Aug. 8, 1990
K099	All	Aug. 8, 1988
K100 e	All	Aug. 8, 1990
K101	Wastewater	Aug. 8, 1988
K101	Nonwastewater	May 8, 1992
K102	Wastewater	Aug. 8, 1988
K102	Nonwastewater	May 8, 1992
K103	Soil and debris	Aug. 8, 1990
K103	All others	Aug. 8, 1988
K104	Soil and debris	Aug. 8, 1990
K104	All others	Aug. 8, 1988
K105	All	Aug. 8, 1990

K106	High mercury nonwastewater	May 8, 1992
K106	Low mercury nonwastewater	May. 8, 1992
K106	All others	Aug. 8, 1990
K113	Soil and debris	June 8, 1991
K113	All others	June 8, 1989
K114	Soil and debris	June 8, 1991
K114	All others	June 8, 1989
K115	Soil and debris	June 8, 1991
K115	All others	June 8, 1989
K116	Soil and debris	June 8, 1991
K116	All others	June 8, 1989
P001	All	Aug. 8, 1990
P002	All	Aug. 8, 1990
P003	All	Aug. 8, 1990
P004	All	Aug. 8, 1990
P005	All	Aug. 8, 1990
P006	All	Aug. 8, 1990
P007	All	Aug. 8, 1990
P008	All	Aug. 8, 1990
P009	All	Aug. 8, 1990
P010	Wastewater	Aug. 8, 1990
P010	Nonwastewater	May 8, 1992
P011	Wastewater	Aug. 8, 1990
P011	Nonwastewater	May 8, 1992
P012	Wastewater	Aug. 8, 1990
P012	Nonwastewater	May 8, 1992

P013	All	Aug. 8, 9
P014	All	Aug. 8, 199
P015	All	Aug. 8, 199
P016	All	Aug. 8, 199
P017	All	Aug. 8, 199
P018	All	Aug. 8, 199
P020	All	Aug. 8, 199
P021	All	June 8, 198
P022	All	Aug. 8, 199
P023	All	Aug. 8, 199
P024	All	Aug. 8, 199
P026	All	Aug. 8, 199
P027	All	Aug. 8, 199
P028	All	Aug. 8, 199
P029	All	June 8, 198
P030	All	June 8, 198
P031	All	Aug. 8, 199
P033	All	Aug. 8, 199
P034	All	Aug. 8, 199
P036	Wastewater	Aug. 8, 199
P036	Nonwastewater	May 8, 1992
P037	All	Aug. 8, 199
P038	Wastewater	Aug. 8, 199
P038	Nonwastewater	May 8, 1992
P039	Soil and debris	June 8, 1991
P039	All others	June 8, : 9

~~P040~~	~~Soil and debris~~	~~June 8, 1991~~
~~P040~~	~~All others~~	~~June 8, 1989~~
~~P041~~	~~Soil and debris~~	~~June 8, 1991~~
~~P041~~	~~All others~~	~~June 8, 1989~~
~~P042~~	~~All~~	~~Aug. 8, 1990~~
~~P043~~	~~Soil and debris~~	~~June 8, 1991~~
~~P043~~	~~All others~~	~~June 8, 1989~~
~~P044~~	~~Soil and debris~~	~~June 8, 1991~~
~~P044~~	~~All others~~	~~June 8, 1989~~
~~P045~~	~~All~~	~~Aug. 8, 1990~~
~~P046~~	~~All~~	~~Aug. 8, 1990~~
~~P047~~	~~All~~	~~Aug. 8, 1990~~
~~P048~~	~~All~~	~~Aug. 8, 1990~~
~~P049~~	~~All~~	~~Aug. 8, 1990~~
~~P050~~	~~All~~	~~Aug. 8, 1990~~
~~P051~~	~~All~~	~~Aug. 8, 1990~~
~~P054~~	~~All~~	~~Aug. 8, 1990~~
~~P056~~	~~All~~	~~Aug. 8, 1990~~
~~P057~~	~~All~~	~~Aug. 8, 1990~~
~~P058~~	~~All~~	~~Aug. 8, 1990~~
~~P059~~	~~All~~	~~Aug. 8, 1990~~
~~P060~~	~~All~~	~~Aug. 8, 1990~~
~~P062~~	~~Soil and debris~~	~~June 8, 1991~~
~~P062~~	~~All others~~	~~June 8, 1989~~
~~P063~~	~~All~~	~~June 8, 1989~~
~~P064~~	~~All~~	~~Aug. 8, 1990~~

~~P065~~	~~High mercury nonwastewater~~	~~May 8, 1992~~
~~P065~~	~~Low mercury nonwastewater~~	~~May 8, 1992~~
~~P065~~	~~All others~~	~~Aug. 8, 1990~~
~~P066~~	~~All~~	~~Aug. 8, 1990~~
~~P067~~	~~All~~	~~Aug. 8, 1990~~
~~P068~~	~~All~~	~~Aug. 8, 1990~~
~~P069~~	~~All~~	~~Aug. 8, 1990~~
~~P070~~	~~All~~	~~Aug. 8, 1990~~
~~P071~~	~~Soil and debris~~	~~June 8, 1991~~
~~P071~~	~~All others~~	~~June 8, 1989~~
~~P072~~	~~All~~	~~Aug. 8, 1990~~
~~P073~~	~~All~~	~~Aug. 8, 1990~~
~~P074~~	~~All~~	~~June 8, 1989~~
~~P075~~	~~All~~	~~Aug. 8, 1990~~
~~P076~~	~~All~~	~~Aug. 8, 1990~~
~~P077~~	~~All~~	~~Aug. 8, 1990~~
~~P078~~	~~All~~	~~Aug. 8, 1990~~
~~P081~~	~~All~~	~~Aug. 8, 1990~~
~~P082~~	~~All~~	~~Aug. 8, 1990~~
~~P084~~	~~All~~	~~Aug. 8, 1990~~
~~P085~~	~~Soil and debris~~	~~June 8, 1991~~
~~P085~~	~~All others~~	~~June 8, 1989~~
~~P087~~	~~All~~	~~May 8, 1992~~
~~P088~~	~~All~~	~~Aug. 8, 1990~~
~~P089~~	~~Soil and debris~~	~~June 8, 1991~~
~~P089~~	~~All others~~	~~June 8, 1989~~

P092	High mercury nonwastewater	May 8, 1992
P092	Low mercury nonwastewater	May 8, 1992
P092	All others	Aug. 8, 1990
P093	Soil and debris	May 8, 1992
P093	All others	Aug. 8, 1990
P094	Soil and debris	June 8, 1991
P094	All others	June 8, 1989
P095	Soil and debris	May 8, 1992
P095	All others	Aug. 8, 1990
P096	All	Aug. 8, 1990
P097	Soil and debris	June 8, 1991
P097	All others	June 8, 1989
P098	All	June 8, 1989
P099 (silver)	Wastewater	Aug. 8, 1990
P099 (cyanides)	Wastewater	June 8, 1989
P099 (cyanides/silver)	Nonwastewater	June 8, 1989
P101	All	Aug. 8, 1990
P102	All	Aug. 8, 1990
P103	All	Aug. 8, 1990
P104 (silver)	Wastewater	Aug. 8, 1990
P104 (cyanides)	Wastewater	June 8, 1989
P104 (cyanides/silver)	Nonwastewater	June 8, 1989
P105	All	Aug. 8, 1990
P106	All	June 8, 1989

P108	Soil and debris	May 8, 1992
P108	All others	Aug. 8, 1990
P109	Soil and debris	June 8, 1991
P109	All others	June 8, 1989
P110	All	Aug. 8, 1990
P111	Soil and debris	June 8, 1991
P111	All others	June 8, 1989
P112	All	Aug. 8, 1990
P113	All	Aug. 8, 1990
P114	All	Aug. 8, 1990
P115	All	Aug. 8, 1990
P116	Soil and debris	May 8, 1992
P116	All others	Aug. 8, 1990
P118	Soil and debris	May 8, 1992
P118	All others	Aug. 8, 1990
P119	All	Aug. 8, 1990
P120	All	Aug. 8, 1990
P121	All	June 8, 1989
P122	All	Aug. 8, 1990
P123	All	Aug. 8, 1990
U001	All	Aug. 8, 1990
U002	All	Aug. 8, 1990
U003	Soil and debris	May 8, 1992
U003	All others	Aug. 8, 1990
U004	All	Aug. 8, 1990
U005	All	Aug. 8, 1990

~~U006~~	~~Soil and debris~~	~~May 8, 1992~~
~~U006~~	~~All others~~	~~Aug. 8, 1990~~
~~U007~~	~~Soil and debris~~	~~May 8, 1992~~
~~U007~~	~~All others~~	~~Aug. 8, 1990~~
~~U008~~	~~All~~	~~Aug. 8, 1990~~
~~U009~~	~~All~~	~~Aug. 8, 1990~~
~~U010~~	~~Soil and debris~~	~~May 8, 1992~~
~~U010~~	~~All others~~	~~Aug. 8, 1990~~
~~U011~~	~~Soil and debris~~	~~May 8, 1992~~
~~U011~~	~~All others~~	~~Aug. 8, 1990~~
~~U012~~	~~All~~	~~Aug. 8, 1990~~
~~U014~~	~~Soil and debris~~	~~May 8, 1992~~
~~U014~~	~~All others~~	~~Aug. 8, 1990~~
~~U015~~	~~Soil and debris~~	~~May 8, 1992~~
~~U015~~	~~All others~~	~~Aug. 8, 1990~~
~~U016~~	~~All~~	~~Aug. 8, 1990~~
~~U017~~	~~Soil and debris~~	~~May 8, 1992~~
~~U017~~	~~All others~~	~~Aug. 8, 1990~~
~~U018~~	~~All~~	~~Aug. 8, 1990~~
~~U019~~	~~All~~	~~Aug. 8, 1990~~
~~U020~~	~~Soil and debris~~	~~May 8, 1992~~
~~U020~~	~~All others~~	~~Aug. 8, 1990~~
~~U021~~	~~Soil and debris~~	~~May 8, 1992~~
~~U021~~	~~All others~~	~~Aug. 8, 1990~~
~~U022~~	~~All~~	~~Aug. 8, 1990~~
~~U023~~	~~All~~	~~Aug. 8, 1990~~

U024	All	Aug. 8, 1990
U025	All	Aug. 8, 1990
U026	Soil and debris	May 8, 1992
U026	All others	Aug. 8, 1990
U027	All	Aug. 8, 1990
U028	Soil and debris	June 8, 1991
U028	All others	June 8, 1989
U029	All	Aug. 8, 1990
U030	All	Aug. 8, 1990
U031	All	Aug. 8, 1990
U032	All	Aug. 8, 1990
U033	Soil and debris	May 8, 1992
U033	All others	Aug. 8, 1990
U034	Soil and debris	May 8, 1992
U034	All others	Aug. 8, 1990
U035	Soil and debris	May 8, 1992
U035	All others	Aug. 8, 1990
U036	All	Aug. 8, 1990
U037	All	Aug. 8, 1990
U038	Soil and debris	May 8, 1992
U038	All others	Aug. 8, 1990
U039	All	Aug. 8, 1990
U041	Soil and debris	May 8, 1992
U041	All others	Aug. 8, 1990
U042	Soil and debris	May 8, 1992
U042	All others	Aug. 8, 1990

~~U043~~	~~All~~	~~Aug. 8, 1990~~
~~U044~~	~~All~~	~~Aug. 8, 1990~~
~~U045~~	~~All~~	~~Aug. 8, 1990~~
~~U046~~	~~Soil and debris~~	~~May 8, 1992~~
~~U046~~	~~All others~~	~~Aug. 8, 1990~~
~~U047~~	~~All~~	~~Aug. 8, 1990~~
~~U048~~	~~All~~	~~Aug. 8, 1990~~
~~U049~~	~~Soil and debris~~	~~May 8, 1992~~
~~U049~~	~~All others~~	~~Aug. 8, 1990~~
~~U050~~	~~All~~	~~Aug. 8, 1990~~
~~U051~~	~~All~~	~~Aug. 8, 1990~~
~~U052~~	~~All~~	~~Aug. 8, 1990~~
~~U053~~	~~All~~	~~Aug. 8, 1990~~
~~U055~~	~~All~~	~~Aug. 8, 1990~~
~~U056~~	~~All~~	~~Aug. 8, 1990~~
~~U057~~	~~All~~	~~Aug. 8, 1990~~
~~U058~~	~~Soil and debris~~	~~June 8, 1992~~
~~U058~~	~~All others~~	~~June 8, 1989~~
~~U059~~	~~Soil and debris~~	~~May 8, 1992~~
~~U059~~	~~All others~~	~~Aug. 8, 1990~~
~~U060~~	~~Soil and debris~~	~~May 8, 1992~~
~~U060~~	~~All others~~	~~Aug. 8, 1990~~
~~U061~~	~~Soil and debris~~	~~May 8, 1992~~
~~U061~~	~~All others~~	~~Aug. 8, 1990~~
~~U062~~	~~Soil and debris~~	~~May 8, 1992~~
~~U062~~	~~All others~~	~~Aug. 8, 1990~~

~~U063~~	~~All~~	~~Aug. 8, 1990~~
~~U064~~	~~All~~	~~Aug. 8, 1990~~
~~U066~~	~~All~~	~~Aug. 8, 1990~~
~~U067~~	~~All~~	~~Aug. 8, 1990~~
~~U068~~	~~All~~	~~Aug. 8, 1990~~
~~U069~~	~~Soil and debris~~	~~June 8, 1991~~
~~U069~~	~~All others~~	~~June 8, 1989~~
~~U070~~	~~All~~	~~Aug. 8, 1990~~
~~U071~~	~~All~~	~~Aug. 8, 1990~~
~~U072~~	~~All~~	~~Aug. 8, 1990~~
~~U073~~	~~Soil and debris~~	~~May 8, 1992~~
~~U073~~	~~All others~~	~~Aug. 8, 1990~~
~~U074~~	~~Soil and debris~~	~~May 8, 1992~~
~~U074~~	~~All others~~	~~Aug. 8, 1990~~
~~U075~~	~~All~~	~~Aug. 8, 1990~~
~~U076~~	~~All~~	~~Aug. 8, 1990~~
~~U077~~	~~All~~	~~Aug. 8, 1990~~
~~U078~~	~~All~~	~~Aug. 8, 1990~~
~~U079~~	~~All~~	~~Aug. 8, 1990~~
~~U080~~	~~All~~	~~Aug. 8, 1990~~
~~U081~~	~~All~~	~~Aug. 8, 1990~~
~~U082~~	~~All~~	~~Aug. 8, 1990~~
~~U083~~	~~All~~	~~Aug. 8, 1990~~
~~U084~~	~~All~~	~~Aug. 8, 1990~~
~~U085~~	~~All~~	~~Aug. 8, 1990~~
~~U086~~	~~All~~	~~Aug. 8, 1990~~

U087	Soil and debris	June 8, 1991
U087	All others	June 8, 1989
U088	Soil and debris	June 8, 1991
U088	All others	June 8, 1989
U089	All	Aug. 8, 1990
U090	All	Aug. 8, 1990
U091	Soil and Debris	May 8, 1992
U091	All others	Aug. 8, 1990
U092	Soil and debris	May 8, 1992
U092	All others	Aug. 8, 1990
U093	Soil and debris	May 8, 1992
U093	All others	Aug. 8, 1990
U094	All	Aug. 8, 1990
U095	Soil and debris	May 8, 1992
U095	All others	Aug. 8, 1990
U096	All	Aug. 8, 1990
U097	Soil and debris	May 8, 1992
U097	All others	Aug. 8, 1990
U098	All	Aug. 8, 1990
U099	All	Aug. 8, 1990
U101	All	Aug. 8, 1990
U102	Soil and debris	June 8, 1991
U102	All others	June 8, 1989
U103	All	Aug. 8, 1990
U105	All	Aug. 8, 1990
U106	All	Aug. 8, 1990

U107	Soil and debris	June 8, 1991
U107	All others	June 8, 1989
U108	All	Aug. 8, 1990
U109	All	Aug. 8, 1990
U110	Soil and debris	May 8, 1992
U110	All others	Aug. 8, 1990
U111	All	Aug. 8, 1990
U112	All	Aug. 8, 1990
U113	All	Aug. 8, 1990
U114	Soil and debris	May 8, 1992
U114	All others	Aug. 8, 1990
U115	All	Aug. 8, 1990
U116	Soil and debris	May 8, 1992.
U116	All others	Aug. 8, 1990
U117	All	Aug. 8, 1990
U118	All	Aug. 8, 1990
U119	Soil and debris	May 8, 1992
U119	All others	Aug. 8, 1990
U120	All	Aug. 8, 1990
U121	All	Aug. 8, 1990
U122	All	Aug. 8, 1990
U123	All	Aug. 8, 1990
U124	All	Aug. 8, 1990
U125	All	Aug. 8, 1990
U126	All	Aug. 8, 1990
U127	All	Aug. 8, 1990

U128	All	Aug. 8, 1990
U129	All	Aug. 8, 1990
U130	Soil and debris	May 8, 1992
U130	All others	Aug. 8, 1990
U131	All	Aug. 8, 1990
U132	Soil and debris	May 8, 1992
U132	All others	Aug. 8, 1990
U133	All	Aug. 8, 1990
U134	All	Aug. 8, 1990
U135	All	Aug. 8, 1990
U136	Wastewater	Aug. 8, 1990
U136	Nonwastewater	May 8, 1992
U137	All	Aug. 8, 1990
U138	All	Aug. 8, 1990
U140	All	Aug. 8, 1990
U141	All	Aug. 8, 1990
U142	All	Aug. 8, 1990
U143	Soil and debris	May 8, 1992
U143	All others	Aug. 8, 1990
U144	All	Aug. 8, 1990
U145	All	Aug. 8, 1990
U146	All	Aug. 8, 1990
U147	All	Aug. 8, 1990
U148	Soil and debris	May 8, 1992
U148	All others	Aug. 8, 1990
U149	Soil and debris	May 8, 1992

~~U149~~	~~All others~~	~~Aug. 8, 1990~~
~~U150~~	~~Soil and debris~~	~~May 8, 1992~~
~~U150~~	~~All others~~	~~Aug. 8, 1990~~
~~U151~~	~~High mercury nonwastewater~~	~~May 8, 1992~~
~~U151~~	~~Low mercury nonwastewater~~	~~May 8, 1992~~
~~U151~~	~~Soil and debris~~	~~May 8, 1992~~
~~U151~~	~~All others~~	~~Aug. 8, 1990~~
~~U152~~	~~All~~	~~Aug. 8, 1990~~
~~U153~~	~~Soil and debris~~	~~May 8, 1992~~
~~U153~~	~~All others~~	~~Aug. 8, 1990~~
~~U154~~	~~All~~	~~Aug. 8, 1990~~
~~U155~~	~~All~~	~~Aug. 8, 1990~~
~~U156~~	~~Soil and debris~~	~~May 8, 1992~~
~~U156~~	~~All others~~	~~Aug. 8, 1990~~
~~U157~~	~~All~~	~~Aug. 8, 1990~~
~~U158~~	~~All~~	~~Aug. 8, 1990~~
~~U159~~	~~All~~	~~Aug. 8, 1990~~
~~U160~~	~~All~~	~~Aug. 8, 1990~~
~~U161~~	~~All~~	~~Aug. 8, 1990~~
~~U162~~	~~All~~	~~Aug. 8, 1990~~
~~U163~~	~~Soil and debris~~	~~May 8, 1992~~
~~U163~~	~~All others~~	~~Aug. 8, 1990~~
~~U164~~	~~Soil and debris~~	~~May 8, 1992~~
~~U164~~	~~All others~~	~~Aug. 8, 1990~~
~~U165~~	~~All~~	~~Aug. 8, 1990~~
~~U166~~	~~All~~	~~Aug. 8, 1990~~

~~U167~~	~~Soil and debris~~	~~May 8, 1992~~
~~U167~~	~~All others~~	~~Aug. 8, 1990~~
~~U168~~	~~Soil and debris~~	~~May 8, 1992~~
~~U168~~	~~All others~~	~~Aug. 8, 1990~~
~~U169~~	~~All~~	~~Aug. 8, 1990~~
~~U170~~	~~All~~	~~Aug. 8, 1990~~
~~U171~~	~~Soil and debris~~	~~May 8, 1992~~
~~U171~~	~~All others~~	~~Aug. 8, 1990~~
~~U172~~	~~All~~	~~Aug. 8, 1990~~
~~U173~~	~~Soil and debris~~	~~May 8, 1992~~
~~U173~~	~~All others~~	~~Aug. 8, 1990~~
~~U174~~	~~All~~	~~Aug. 8, 1990~~
~~U176~~	~~Soil and debris~~	~~May 8, 1992~~
~~U176~~	~~All others~~	~~Aug. 8, 1990~~
~~U177~~	~~Soil and debris~~	~~May 8, 1992~~
~~U177~~	~~All others~~	~~Aug. 8, 1990~~
~~U178~~	~~Soil and debris~~	~~May 8, 1992~~
~~U178~~	~~All others~~	~~Aug. 8, 1990~~
~~U179~~	~~All~~	~~Aug. 8, 1990~~
~~U180~~	~~All~~	~~Aug. 8, 1990~~
~~U181~~	~~All~~	~~Aug. 8, 1990~~
~~U182~~	~~All~~	~~Aug. 8, 1990~~
~~U183~~	~~All~~	~~Aug. 8, 1990~~
~~U184~~	~~Soil and debris~~	~~May 8, 1992~~
~~U184~~	~~All others~~	~~Aug. 8, 1990~~
~~U185~~	~~All~~	~~Aug. 8, 1990~~

U186	All	Aug. 8, 199
U187	All	Aug. 8, 1990
U188	All	Aug. 8, 1990
U189	All	Aug. 8, 1990
U190	Soil and debris	June 8, 1991
U190	All others	June 8, 1989
U191	Soil and debris	May 8, 1992
U191	All others	Aug. 8, 1990
U192	All	Aug. 8, 1990
U193	Soil and debris	May 8, 1992
U193	All others	Aug. 8, 1990
U194	Soil and debris	May 8, 1992
U194	All others	Aug. 8, 1990
U196	All	Aug. 8, 199
U197	All	Aug. 8, 1990
U200	Soil and debris	May 8, 1992
U200	All others	Aug. 8, 1990
U201	All	Aug. 8, 1990
U202	Soil and debris	May 8, 1992
U202	All others	Aug. 8, 1990
U203	All	Aug. 8, 1990
U204	All	Aug. 8, 1990
U205	All	Aug. 8, 1990
U206	Soil and debris	May 8, 1992
U206	All others	Aug. 8, 1990
U207	All	Aug. 8, 1990

~~U208~~	~~All~~	~~Aug. 8, 1990~~
~~U209~~	~~All~~	~~Aug. 8, 1990~~
~~U210~~	~~All~~	~~Aug. 8, 1990~~
~~U211~~	~~All~~	~~Aug. 8, 1990~~
~~U213~~	~~All~~	~~Aug. 8, 1990~~
~~U214~~	~~All~~	~~Aug. 8, 1990~~
~~U215~~	~~All~~	~~Aug. 8, 1990~~
~~U216~~	~~All~~	~~Aug. 8, 1990~~
~~U217~~	~~All~~	~~Aug. 8, 1990~~
~~U218~~	~~Soil and debris~~	~~May 8, 1992~~
~~U218~~	~~All others~~	~~Aug. 8, 1990~~
~~U219~~	~~Soil and debris~~	~~May 8, 1992~~
~~U219~~	~~All others~~	~~Aug. 8, 1990~~
~~U220~~	~~All~~	~~Aug. 8, 1990~~
~~U221~~	~~Soil and debris~~	~~June 8, 1991~~
~~U221~~	~~All others~~	~~June 8, 1989~~
~~U222~~	~~Soil and debris~~	~~May 8, 1992~~
~~U222~~	~~All others~~	~~Aug. 8, 1990~~
~~U223~~	~~Soil and debris~~	~~June 8, 1991~~
~~U223~~	~~All others~~	~~June 8, 1989~~
~~U225~~	~~All~~	~~Aug. 8, 1990~~
~~U226~~	~~All~~	~~Aug. 8, 1990~~
~~U227~~	~~All~~	~~Aug. 8, 1990~~
~~U228~~	~~All~~	~~Aug. 8, 1990~~
~~U234~~	~~Soil and debris~~	~~May 8, 1992~~
~~U234~~	~~All others~~	~~Aug. 8, 1990~~

U235	Soil and debris	June 8, 1991
U235	All others	June 8, 1989
U236	Soil and debris	May 8, 1992
U236	All others	Aug. 8, 1990
U237	Soil and debris	May 8, 1992
U237	All others	Aug. 8, 1990
U238	Soil and debris	May 8, 1992
U238	All others	Aug. 8, 1990
U239	All	Aug. 8, 1990
U240	Soil and debris	May 8, 1992
U240	All others	Aug. 8, 1990
U243	All	Aug. 8, 1990
U244	Soil and debris	May 8, 1992
U244	All others	Aug. 8, 1990
U246	All	Aug. 8, 1990
U247	All	Aug. 8, 1990
U248	All	Aug. 8, 1990
U249	All	Aug. 8, 1990

a This table does not include mixed radioactive wastes (from the First, Second, and Third Third rules) which are receiving a national capacity variance until May 8, 1992 for all applicable treatment technologies.

b Standards are being promulgated for 1,1,2-trichloroethane and 2- nitropropane for wastewaters and nonwastewaters.

c Standards are being promulgated for benzene and 2-ethoxyethanol for wastewaters and nonwastewaters.

d Treatment standards for nonwastewaters disposed of after June 8, 1989, were promulgated June 8, 1989.

e Treatment standards for nonwastewaters disposed of after August 17, 1988, were promulgated May 2, 1989.

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
California list	Liquid hazardous wastes, including free liquids associated with solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l or certain metals or compounds of these metals greater than or equal to the prohibition levels	July 8, 1987.
California list	Liquid (aqueous) hazardous wastes having a pH less than or equal to 2	July 8, 1987.
California list	Dilute HOC wastewaters, defined as HOC-waste mixtures that are primarily water and that contain greater than or equal to 1,000 mg /l but less than 10,000 mg/l	July 8, 1987.
California list	Liquid hazardous waste containing PCBs greater than or equal to 50 ppm	July 8, 1987.
California list	Other liquid and nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1,000 mg	Nov. 8, 1988.
D001	All	Aug. 8, 1990.
D002	All	Aug. 8, 1990.
D003	All	Aug. 8, 1990.
D004	Wastewater	Aug. 8, 1990.
D004	Nonwastewater	May 8, 1992.
D005	All	Aug. 8, 1990.
D006	All	Aug. 8, 1990.
D007	All	Aug. 8, 1990.
D008	Lead materials before secondary smelting	May 8, 1992.
D008	All others	Aug. 8, 1990.
D009	Nonwastewater	May 8, 1992.
D009	All others	Aug. 8, 1990.
D010	All	Aug. 8, 1990.
D011	All	Aug. 8, 1990.
D012	All	Aug. 8, 1990.
D013	All	Aug. 8, 1990.
D014	All	Aug. 8, 1990.
D015	All	Aug. 8, 1990.
D016	All	Aug. 8, 1990.
D017	All	Aug. 8, 1990.
F001	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F001	All others	Nov. 8, 1986.
F002 (1,1,2-trichloroethane)	Wastewater and Nonwastewater	Aug. 8, 1990.
F002	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F002	All others	Nov. 8, 1986.
F003	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F003	All others	Nov. 8, 1986.
F004	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F004	All others	Nov. 8, 1986.
F005 (benzene, 2-ethoxy ethanol, 2-	Wastewater and Nonwastewater	Aug. 8, 1990.

nitropropane)		
F005	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. 8, 1988.
F005	All others	Nov. 8, 1986.
F006	Wastewater	Aug. 8, 1990.
F006	Nonwastewater	Aug. 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	Dec. 8, 1989.
F011	All others	July 8, 1989.
F012 (cyanides)	Nonwastewater	Dec. 8, 1989.
F012	All others	July 8, 1989.
F019	All	Aug. 8, 1990.
F020	All	Nov. 8, 1988.
F021	All	Nov. 8, 1988.
F022	All	Nov. 8, 1988.
F023	All	Nov. 8, 1988.
F024 (metals)	Wastewater	June 8, 1989.
F024 (metals)	Nonwastewater	Aug. 8, 1990.
F024 B	All others	June 8, 1989.
F025	All	Aug. 8, 1990.
F026	All	Nov. 8, 1988.
F027	All	Nov. 8, 1988.
F028	All	Nov. 8, 1988.
F039	Wastewater	Aug. 8, 1990.
F039	Nonwastewater	May 8, 1992.
K001 (organics) B	All	Aug. 8, 1988.
K001	All others	Aug. 8, 1988.
K002	All	Aug. 8, 1990.
K003	All	Aug. 8, 1990.
K004	Wastewater	Aug. 8, 1990.
K004 C	Nonwastewater	Aug. 8, 1988.
K005	Wastewater	Aug. 8, 1990.
K005 C	Nonwastewater	June 8, 1989.
K006	All	Aug. 8, 1990.
K007	Wastewater	Aug. 8, 1990.
K007 C	Nonwastewater	June 8, 1989.
K008	Wastewater	Aug. 8, 1990.
K008 C	Nonwastewater	Aug. 8, 1988.
K009	All	June 8, 1989.
K010	All	June 8, 1989.
K011	Wastewater	Aug. 8, 1990.
K011	Nonwastewater	June 8, 1989.
K013	Wastewater	Aug. 8, 1990.
K013	Nonwastewater	June 8, 1989.
K014	Wastewater	Aug. 8, 1990.
K014	Nonwastewater	June 8, 1989.
K015	Wastewater	Aug. 8, 1988.
K015	Nonwastewater	Aug. 8, 1990.
K016	All	Aug. 8, 1988.
K017	All	Aug. 8, 1990.
K018	All	Aug. 8, 1988.
K019	All	Aug. 8, 1988.
K020	All	Aug. 8, 1988.
K021	Wastewater	Aug. 8, 1990.
K021 C	Nonwastewater	Aug. 8, 1988.
K022	Wastewater	Aug. 8, 1990.
K022	Nonwastewater	Aug. 8, 1988.
K023	All	June 8, 1989.
K024	All	Aug. 8, 1988.

K025	Wastewater	Aug. 8, 1990.
K025 C	Nonwastewater	Aug. 8, 1988.
K026	All	Aug. 8, 1990.
K027	All	June 8, 1989.
K028 (metals)	Nonwastewater	Aug. 8, 1990.
K028	All others	June 8, 1989.
K029	Wastewater	Aug. 8, 1990.
K029	Nonwastewater	June 8, 1989.
K030	All	Aug. 8, 1988.
K031	Wastewater	Aug. 8, 1990.
K031	Nonwastewater	May 8, 1992.
K032	All	Aug. 8, 1990.
K033	All	Aug. 8, 1990.
K034	All	Aug. 8, 1990.
K035	All	Aug. 8, 1990.
K036	Wastewater	June 8, 1989.
K036 C	Nonwastewater	Aug. 8, 1988.
K037 B	Wastewater	Aug. 8, 1988.
K037	Nonwastewater	Aug. 8, 1988.
K038	All	June 8, 1989.
K039	All	June 8, 1989.
K040	All	June 8, 1989.
K041	All	Aug. 8, 1990.
K042	All	Aug. 8, 1990.
K043	All	June 8, 1989.
K044 C	All	Aug. 8, 1988.
K045 C	All	Aug. 8, 1988.
K046 (Nonreactive)	Nonwastewater	Aug. 8, 1988.
K046	All others	Aug. 8, 1990.
K047 C	All	Aug. 8, 1988.
K048	Wastewater	Aug. 8, 1990.
K048	Nonwastewater	Nov. 8, 1990.
K049	Wastewater	Aug. 8, 1990.
K049	Nonwastewater	Nov. 8, 1990.
K050	Wastewater	Aug. 8, 1990.
K050	Nonwastewater	Nov. 8, 1990.
K051	Wastewater	Aug. 8, 1990.
K051	Nonwastewater	Nov. 8, 1990.
K052	Wastewater	Aug. 8, 1990.
K052	Nonwastewater	Nov. 8, 1990.
K060	Wastewater	Aug. 8, 1990.
K060 C	Nonwastewater	Aug. 8, 1988.
K061	Wastewater	Aug. 8, 1990.
K061 (low zinc) (interim standard for high zinc remains in effect until August 7, 1991).	Nonwastewater	Aug. 8, 1988.
K062	All	Aug. 8, 1988.
K069 (Non-Calcium Sulfate) C	Nonwastewater	Aug. 8, 1988.
K069	All others	Aug. 8, 1990.
K071	All	Aug. 8, 1990.
K073	All	Aug. 8, 1990.
K083	All	Aug. 8, 1990.
K084	Wastewater	Aug. 8, 1990.
K084	Nonwastewater	May 8, 1992.
K085	All	Aug. 8, 1990.
K086 (organics) B	All	Aug. 8, 1988.
K086	All others	Aug. 8, 1988.

K087	All	Aug. 8, 1988.
K093	All	June 8, 1989.
K094	All	June 8, 1989.
K095	Wastewater	Aug. 8, 1990.
K095	Nonwastewater	June 8, 1989.
K096	Wastewater	Aug. 8, 1990.
K096	Nonwastewater	June 8, 1989.
K097	All	Aug. 8, 1990.
K098	All	Aug. 8, 1990.
K099	All	Aug. 8, 1988.
K100	Wastewater	Aug. 8, 1990.
K100 C	Nonwastewater	Aug. 8, 1988.
K101 (organics)	Wastewater	Aug. 8, 1988.
K101 (metals)	Wastewater	Aug. 8, 1990.
K101 (organics)	Nonwastewater	Aug. 8, 1988.
K101 (metals)	Nonwastewater	May 8, 1992.
K102 (organics)	Wastewater	Aug. 8, 1988.
K102 (metals)	Wastewater	Aug. 8, 1990.
K102 (organics)	Nonwastewater	Aug. 8, 1988.
K102 (metals)	Nonwastewater	May 8, 1992.
K103	All	Aug. 8, 1988.
K104	All	Aug. 8, 1988.
K105	All	Aug. 8, 1990.
K106	Wastewater	Aug. 8, 1990.
K106	Nonwastewater	May 8, 1992.
K113	All	June 8, 1989.
K114	All	June 8, 1989.
K115	All	June 8, 1989.
K116	All	June 8, 1989.
P001	All	Aug 8, 1990.
P002	All	Aug. 8, 1990.
P003	All	Aug. 8, 1990.
P004	All	Aug. 8, 1990.
P005	All	Aug. 8, 1990.
P006	All	Aug. 8, 1990.
P007	All	Aug. 8, 1990.
P008	All	Aug. 8, 1990.
P009	All	Aug. 8, 1990.
P010	Wastewater	Aug. 8, 1990.
P010	Nonwastewater	May 8, 1992.
P011	Wastewater	Aug. 8, 1990.
P011	Nonwastewater	May 8, 1992.
P012	Wastewater	Aug. 8, 1990.
P012	Nonwastewater	May 8, 1992.
P013 (barium)	Nonwastewater	Aug. 8, 1990.
P013	All others	June 8, 1989.
P014	All	Aug. 8, 1990.
P015	All	Aug. 8, 1990.
P016	All	Aug. 8, 1990.
P017	All	Aug. 8, 1990.
P018	All	Aug. 8, 1990.
P020	All	Aug. 8, 1990.
P021	All	June 8, 1989.
P022	All	Aug. 8, 1990.
P023	All	Aug. 8, 1990.
P024	All	Aug. 8, 1990.
P026	All	Aug. 8, 1990.
P027	All	Aug. 8, 1990.
P028	All	Aug. 8, 1990.
P029	All	June 8, 1989.
P030	All	June 8, 1989.
P031	All	Aug. 8, 1990.
P033	All	Aug. 8, 1990.
P034	All	Aug. 8, 1990.
P036	Wastewater	Aug. 8, 1990.

P036	Nonwastewater	May 8, 1992.
P037	All	Aug. 8, 1990.
P038	Wastewater	Aug. 8, 1990.
P038	Nonwastewater	May 8, 1992.
P039	All	June 8, 1989.
P040	All	June 8, 1989.
P041	All	June 8, 1989.
P042	All	Aug. 8, 1990.
P043	All	June 8, 1989.
P044	All	June 8, 1989.
P045	All	Aug. 8, 1990.
P046	All	Aug. 8, 1990.
P047	All	Aug. 8, 1990.
P048	All	Aug. 8, 1990.
P049	All	Aug. 8, 1990.
P050	All	Aug. 8, 1990.
P051	All	Aug. 8, 1990.
P054	All	Aug. 8, 1990.
P056	All	Aug. 8, 1990.
P057	All	Aug. 8, 1990.
P058	All	Aug. 8, 1990.
P059	All	Aug. 8, 1990.
P060	All	Aug. 8, 1990.
P062	All	June 8, 1989.
P063	All	June 8, 1989.
P064	All	Aug. 8, 1990.
P065	Wastewater	Aug. 8, 1990.
P065	Nonwastewater	May 8, 1992.
P066	All	Aug. 8, 1990.
P067	All	Aug. 8, 1990.
P068	All	Aug. 8, 1990.
P069	All	Aug. 8, 1990.
P070	All	Aug. 8, 1990.
P071	All	June 8, 1989.
P072	All	Aug. 8, 1990.
P073	All	Aug. 8, 1990.
P074	All	June 8, 1989.
P075	All	Aug. 8, 1990.
P076	All	Aug. 8, 1990.
P077	All	Aug. 8, 1990.
P078	All	Aug. 8, 1990.
P081	All	Aug. 8, 1990.
P082	All	Aug. 8, 1990.
P084	All	Aug. 8, 1990.
P085	All	June 8, 1989.
P087	All	May 8, 1992.
P088	All	Aug. 8, 1990.
P089	All	June 8, 1989.
P092	Wastewater	Aug. 8, 1990.
P092	Nonwastewater	May 8, 1992.
P093	All	Aug. 8, 1990.
P094	All	June 8, 1989.
P095	All	Aug. 8, 1990.
P096	All	Aug. 8, 1990.
P097	All	June 8, 1989.
P098	All	June 8, 1989.
P099 (silver)	Wastewater	Aug. 8, 1990.
P099	All others	June 8, 1989.
P101	All	Aug. 8, 1990.
P102	All	Aug. 8, 1990.
P103	All	Aug. 8, 1990.
P104 (silver)	Wastewater	Aug. 8, 1990.
P104	All others	June 8, 1989.
P105	All	Aug. 8, 1990.
P106	All	June 8, 1989.

P108	All	Aug. 8, 1990.
P109	All	June 8, 1989.
P110	All	Aug. 8, 1990.
P111	All	June 8, 1989.
P112	All	Aug. 8, 1990.
P113	All	Aug. 8, 1990.
P114	All	Aug. 8, 1990.
P115	All	Aug. 8, 1990.
P116	All	Aug. 8, 1990.
P118	All	Aug. 8, 1990.
P119	All	Aug. 8, 1990.
P120	All	Aug. 8, 1990.
P121	All	June 8, 1989.
P122	All	Aug. 8, 1990.
P123	All	Aug. 8, 1990.
U001	All	Aug. 8, 1990.
U002	All	Aug. 8, 1990.
U003	All	Aug. 8, 1990.
U004	All	Aug. 8, 1990.
U005	All	Aug. 8, 1990.
U006	All	Aug. 8, 1990.
U007	All	Aug. 8, 1990.
U008	All	Aug. 8, 1990.
U009	All	Aug. 8, 1990.
U010	All	Aug. 8, 1990.
U011	All	Aug. 8, 1990.
U012	All	Aug. 8, 1990.
U014	All	Aug. 8, 1990.
U015	All	Aug. 8, 1990.
U016	All	Aug. 8, 1990.
U017	All	Aug. 8, 1990.
U018	All	Aug. 8, 1990.
U019	All	Aug. 8, 1990.
U020	All	Aug. 8, 1990.
U021	All	Aug. 8, 1990.
U022	All	Aug. 8, 1990.
U023	All	Aug. 8, 1990.
U024	All	Aug. 8, 1990.
U025	All	Aug. 8, 1990.
U026	All	Aug. 8, 1990.
U027	All	Aug. 8, 1990.
U028	All	June 8, 1989.
U029	All	Aug. 8, 1990.
U030	All	Aug. 8, 1990.
U031	All	Aug. 8, 1990.
U032	All	Aug. 8, 1990.
U033	All	Aug. 8, 1990.
U034	All	Aug. 8, 1990.
U035	All	Aug. 8, 1990.
U036	All	Aug. 8, 1990.
U037	All	Aug. 8, 1990.
U038	All	Aug. 8, 1990.
U039	All	Aug. 8, 1990.
U041	All	Aug. 8, 1990.
U042	All	Aug. 8, 1990.
U043	All	Aug. 8, 1990.
U044	All	Aug. 8, 1990.
U045	All	Aug. 8, 1990.
U046	All	Aug. 8, 1990.
U047	All	Aug. 8, 1990.
U048	All	Aug. 8, 1990.
U049	All	Aug. 8, 1990.
U050	All	Aug. 8, 1990.
U051	All	Aug. 8, 1990.
U052	All	Aug. 8, 1990.

U053	All	Aug. 8, 1990.
U055	All	Aug. 8, 1990.
U056	All	Aug. 8, 1990.
U057	All	Aug. 8, 1990.
U058	All	June 8, 1989.
U059	All	Aug. 8, 1990.
U060	All	Aug. 8, 1990.
U061	All	Aug. 8, 1990.
U062	All	Aug. 8, 1990.
U063	All	Aug. 8, 1990.
U064	All	Aug. 8, 1990.
U066	All	Aug. 8, 1990.
U067	All	Aug. 8, 1990.
U068	All	Aug. 8, 1990.
U069	All	June 8, 1989.
U070	All	Aug. 8, 1990.
U071	All	Aug. 8, 1990.
U072	All	Aug. 8, 1990.
U073	All	Aug. 8, 1990.
U074	All	Aug. 8, 1990.
U075	All	Aug. 8, 1990.
U076	All	Aug. 8, 1990.
U077	All	Aug. 8, 1990.
U078	All	Aug. 8, 1990.
U079	All	Aug. 8, 1990.
U080	All	Aug. 8, 1990.
U081	All	Aug. 8, 1990.
U082	All	Aug. 8, 1990.
U083	All	Aug. 8, 1990.
U084	All	Aug. 8, 1990.
U085	All	Aug. 8, 1990.
U086	All	Aug. 8, 1990.
U087	All	June 8, 1989.
U088	All	June 8, 1989.
U089	All	Aug. 8, 1990.
U090	All	Aug. 8, 1990.
U091	All	Aug. 8, 1990.
U092	All	Aug. 8, 1990.
U093	All	Aug. 8, 1990.
U094	All	Aug. 8, 1990.
U095	All	Aug. 8, 1990.
U096	All	Aug. 8, 1990.
U097	All	Aug. 8, 1990.
U098	All	Aug. 8, 1990.
U099	All	Aug. 8, 1990.
U101	All	Aug. 8, 1990.
U102	All	June 8, 1989.
U103	All	Aug. 8, 1990.
U105	All	Aug. 8, 1990.
U106	All	Aug. 8, 1990.
U107	All	June 8, 1989.
U108	All	Aug. 8, 1990.
U109	All	Aug. 8, 1990.
U110	All	Aug. 8, 1990.
U111	All	Aug. 8, 1990.
U112	All	Aug. 8, 1990.
U113	All	Aug. 8, 1990.
U114	All	Aug. 8, 1990.
U115	All	Aug. 8, 1990.
U116	All	Aug. 8, 1990.
U117	All	Aug. 8, 1990.
U118	All	Aug. 8, 1990.
U119	All	Aug. 8, 1990.
U120	All	Aug. 8, 1990.
U121	All	Aug. 8, 1990.

U122	All	Aug. 8, 1990.
U123	All	Aug. 8, 1990.
U124	All	Aug. 8, 1990.
U125	All	Aug. 8, 1990.
U126	All	Aug. 8, 1990.
U127	All	Aug. 8, 1990.
U128	All	Aug. 8, 1990.
U129	All	Aug. 8, 1990.
U130	All	Aug. 8, 1990.
U131	All	Aug. 8, 1990.
U132	All	Aug. 8, 1990.
U133	All	Aug. 8, 1990.
U134	All	Aug. 8, 1990.
U135	All	Aug. 8, 1990.
U136	Wastewater	Aug. 8, 1990.
U136	Nonwastewater	May 8, 1992.
U137	All	Aug. 8, 1990.
U138	All	Aug. 8, 1990.
U140	All	Aug. 8, 1990.
U141	All	Aug. 8, 1990.
U142	All	Aug. 8, 1990.
U143	All	Aug. 8, 1990.
U144	All	Aug. 8, 1990.
U145	All	Aug. 8, 1990.
U146	All	Aug. 8, 1990.
U147	All	Aug. 8, 1990.
U148	All	Aug. 8, 1990.
U149	All	Aug. 8, 1990.
U150	All	Aug. 8, 1990.
U151	Wastewater	Aug. 8, 1990.
U151	Nonwastewater	May 8, 1992.
U152	All	Aug. 8, 1990.
U153	All	Aug. 8, 1990.
U154	All	Aug. 8, 1990.
U155	All	Aug. 8, 1990.
U156	All	Aug. 8, 1990.
U157	All	Aug. 8, 1990.
U158	All	Aug. 8, 1990.
U159	All	Aug. 8, 1990.
U160	All	Aug. 8, 1990.
U161	All	Aug. 8, 1990.
U162	All	Aug. 8, 1990.
U163	All	Aug. 8, 1990.
U164	All	Aug. 8, 1990.
U165	All	Aug. 8, 1990.
U166	All	Aug. 8, 1990.
U167	All	Aug. 8, 1990.
U168	All	Aug. 8, 1990.
U169	All	Aug. 8, 1990.
U170	All	Aug. 8, 1990.
U171	All	Aug. 8, 1990.
U172	All	Aug. 8, 1990.
U173	All	Aug. 8, 1990.
U174	All	Aug. 8, 1990.
U176	All	Aug. 8, 1990.
U177	All	Aug. 8, 1990.
U178	All	Aug. 8, 1990.
U179	All	Aug. 8, 1990.
U180	All	Aug. 8, 1990.
U181	All	Aug. 8, 1990.
U182	All	Aug. 8, 1990.
U183	All	Aug. 8, 1990.
U184	All	Aug. 8, 1990.
U185	All	Aug. 8, 1990.
U186	All	Aug. 8, 1990.

U187	All	Aug. 8, 1990.
U188	All	Aug. 8, 1990.
U189	All	Aug. 8, 1990.
U190	All	June 8, 1989.
U191	All	Aug. 8, 1990.
U192	All	Aug. 8, 1990.
U193	All	Aug. 8, 1990.
U194	All	Aug. 8, 1990.
U196	All	Aug. 8, 1990.
U197	All	Aug. 8, 1990.
U200	All	Aug. 8, 1990.
U201	All	Aug. 8, 1990.
U202	All	Aug. 8, 1990.
U203	All	Aug. 8, 1990.
U204	All	Aug. 8, 1990.
U205	All	Aug. 8, 1990.
U206	All	Aug. 8, 1990.
U207	All	Aug. 8, 1990.
U208	All	Aug. 8, 1990.
U209	All	Aug. 8, 1990.
U210	All	Aug. 8, 1990.
U211	All	Aug. 8, 1990.
U213	All	Aug. 8, 1990.
U214	All	Aug. 8, 1990.
U215	All	Aug. 8, 1990.
U216	All	Aug. 8, 1990.
U217	All	Aug. 8, 1990.
U218	All	Aug. 8, 1990.
U219	All	Aug. 8, 1990.
U220	All	Aug. 8, 1990.
U221	All	June 8, 1989.
U222	All	Aug. 8, 1990.
U223	All	June 8, 1989.
U225	All	Aug. 8, 1990.
U226	All	Aug. 8, 1990.
U227	All	Aug. 8, 1990.
U228	All	Aug. 8, 1990.
U234	All	Aug. 8, 1990.
U235	All	June 8, 1989.
U236	All	Aug. 8, 1990.
U237	All	Aug. 8, 1990.
U238	All	Aug. 8, 1990.
U239	All	Aug. 8, 1990.
U240	All	Aug. 8, 1990.
U243	All	Aug. 8, 1990.
U244	All	Aug. 8, 1990.
U246	All	Aug. 8, 1990.
U247	All	Aug. 8, 1990.
U248	All	Aug. 8, 1990.
U249	All	Aug. 8, 1990.

A This table does not include mixed radioactive wastes (from the First, Second,and Third rules) which are receiving a national capacity variance until May 8, 1992, for all applicable treatment technologies. This table also does not include contaminated soil and debris wastes.

B The standard has been revised in the Third Third Final Rule.

C No land disposal standard has been revised in the Third Third Final Rule.

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 of RCRA corrective actions.	Nov. 8, 1990.
2.	Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than 1% total solvents (F001-F005) or dioxins (F020-F023 and F026-F028).	Nov. 8, 1988.
3.	Soil and debris contaminated with California list HOCs from CERCLA response or RCRA corrective actions.	Nov. 8, 1990.
4.	Soil and debris contaminated with California list HOCs not from CERCLA response or RCRA corrective actions.	July 8, 1989.
5.	All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration.	Aug. 8, 1990.
6.	All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration.	June 8, 1991.
7.	All soil and debris contaminated with Third Third wastes or, First or Second Third "soft hammer" wastes which 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.

BOARD NOTE: This table is provided for the convenience of the reader.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Appendix H National Capacity LDR Variances for UIC Wastes

~~Waste Code~~	~~Waste Category~~	~~Effective date~~
~~F001-F005~~	~~All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents~~	~~August 8, 1990~~

California list	Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l, or containing certain metals or compounds of these metals greater than or equal to the prohibition levels	August 8, 1990
California list	Liquid hazardous waste having a pH less than or equal to 2	August 8, 1990
California list	Hazardous wastes containing HOCs in total concentrations less than 10,000 mg/l but greater than or equal to 1,000 mg/l	August 8, 1990
D002 b	All	May 8, 1992
D003 (cyanides)	All	May 8, 1992
D003 (sulfides)	All	May 8, 1992
D003 (explosives, reactives)	All	May 8, 1992
D007	All	May 8, 1992
D009	High Mercury Nonwastewater	May 8, 1992
D009	Low Mercury Nonwastewater	May 8, 1992
F011	All	June 8, 1991
F039	Wastewater	May 8, 1992
K009	Wastewater	June 8, 1991
K011	Nonwastewater	June 8, 1991
K011	Wastewater	May 8, 1992
K013	Nonwastewater	June 8, 1991
K013	Wastewater	May 8, 1992
K014	All	May 8, 1992
K016 (dilute)	All	June 8, 1991

~~K048~~	~~All~~	~~August 8, 1990~~
~~K049~~	~~All~~	~~August 8, 1990~~
~~K050~~	~~All~~	~~August 8, 1990~~
~~K051~~	~~All~~	~~August 8, 1990~~
~~K052~~	~~All~~	~~August 8, 1990~~
~~K062~~	~~All~~	~~August 8, 1990~~
~~K071~~	~~All~~	~~August 8, 1990~~
~~K104~~	~~All~~	~~August 8, 1990~~

~~a Wastes that are deep well disposed on-site receive a six-month variance, with restrictions effective in November 1990.~~

~~b Deepwell injected D002 liquids with a pH less than 2 must meet the California List treatment standards on August 8, 1990.~~

Waste code	Waste category	Effective date
F001-F005	All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents	Aug. 8, 1990.
California list	Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l, or containing certain metals or compounds of these metals greater than or equal to the prohibition levels	Aug. 8, 1990.
California list	Liquid hazardous waste having a pH less than or equal to 2	Aug. 8, 1990.
California list	Hazardous wastes containing HOCs in total concentrations less than	Aug. 8, 1990.

	10,000 mg/l but greater than or equal to 1,000 mg/l	
D002 B	All	May 8, 1992.
D003 (cyanides)	All	May 8, 1992.
D003 (sulfides)	All	May 8, 1992.
D003 (explosives, reactives).	All	May 8, 1992.
D007	All	May 8, 1992.
D009	Nonwastewater	May 8, 1992.
F007	All	June 8, 1991.
F039	Wastewater	May 8, 1992.
K009	Wastewater	June 8, 1991.
K011	Nonwastewater	June 8, 1991.
K011	Wastewater	May 8, 1992.
K013	Nonwastewater	June 8, 1991.
K013	Wastewater	May 8, 1992.
K014	All	May 8, 1992.
K016 (dilute)	All	June 8, 1991.
K049	All	Aug. 8, 1990.
K050	All	Aug. 8, 1990.
K051	All	Aug. 8, 1990.
K052	All	Aug. 8, 1990.
K062	All	Aug. 8, 1990.
K071	All	Aug. 8, 1990.
K104	All	Aug. 8, 1990.

A Wastes that are deep well disposed on-site receive a six-month variance, with restrictions effective in November 1990.

B Deepwell injected D002 liquids with a pH less than 2 must meet the California List treatment standards on August 8, 1990.

BOARD NOTE: This table is provided for the convenience of the reader.

(Source: Amended at 16 Ill. Reg. , effective

)

Section 728.Appendix I EP Toxicity Test Method and Structural Integrity Test

The Board incorporates by reference 40 CFR 268, Appendix IX, adopted at 56 Fed. Reg. 3876, January 31, 1991. This Section incorporates no future amendments or editions.

(Source: Added at 16 Ill. Reg. , effective
)

Section 728.Table A Constituent Concentrations in Waste Extract (CCWE)

D, F and K Listed Wastes

Waste Code	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Wastewaters	Concentration (mg/L) Nonwastewaters
D004	Table B	Arsenic	7440-38-2	NA	5.0 #A
D005	Table B	Barium	7440-39-3	NA	100.
D006	Table B	Cadmium	7440-43-9	NA	1.0
D007	Table B	Chromium (Total)	7440-47-32	NA	5.0
D008	Table B	Lead	7439-92-1	NA	5.0 A
D009 (Low Mercury Subcategory--less than 260 mg/kg Mercury)					
	Tables B & D	Mercury	7439-97-6	NA	0.20
D010	Table B	Selenium	7782-49-2	NA	5.7
D011	Table B	Silver	7440-22-4	NA	5.0
F001-F005 spent solvents					
	Tables B & D	Acetone	67-64-1	0.2505	0.59
		n-Butyl alcohol	71-36-3	5.0	5.0
		Carbon disulfide	75-15-0	1.05	4.81
		Carbon tetrachloride	56-23-5	0.05	0.96
		Chlorobenzene	108-90-7	0.15	0.05
		Cresols (and cresylic acid)		2.82	0.75
		Cyclohexanone	108-94-1	0.125	0.75
		1,2-Dichlorobenzene	95-50-1	0.65	0.125
		Ethyl acetate	141-78-6	0.05	0.75
		Ethylbenzene	100-41-4	0.05	0.053
		Ethyl ether	60-29-7	0.05	0.75
		Isobutanol	78-83-1	5.0	5.0
		Methanol	67-56-1	0.25	0.75
		Methylene chloride	75-9-2	0.20	0.996
		Methyl ethyl ketone	78-93-3	0.05	0.75
		Methyl isobutyl ketone	108-10-1	0.05	0.33
		Nitrobenzene	98-95-3	0.66	0.125
		Pyridine	110-86-1	1.12	0.33
		Tetrachloroethylene	127-18-4	0.079	0.05

		Toluene	108-88-3	1.12	0.33
		1,1,1-Trichloroethane	71-55-6	1.05	0.41
		1,1,2-Trichloro-1,2,2-trifluoro-ethane	76-13-1	1.05	0.96
		Trichloroethylene	79-01-6	0.062	0.091
		Trichlorofluoromethane	75-69-4	0.05	0.96
		Xylene		0.05	0.15
F006	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F007	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F008	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F009	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F011	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F012	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Nickel	7440-02-0	NA	0.32
		Silver	7440-22-4	NA	0.072
F019	Table B	Chromium (Total)	7440-47-32	NA	~~0.072~~ 5.2
F020-F023 and F026-F028 dioxin-containing wastes * B					
		HxCDD-All Hexachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		HxCDF-All Hexachlorodibenzofurans		<1. ppb	<1. ppb
		PeCDD-All Pentachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		PeCDF-All Pentachlorodibenzofurans		<1. ppb	<1. ppb
		TCDD-All Tetrachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		TCDF-All Tetrachlorodibenzofurans		~~<1. ppb~~	~~<1. ppb~~
		2,4,5-Trichlorophenol	95-95-4	~~<0.05 ppm~~ <1. ppb	~~<0.05 ppm~~ <1. ppb
		2,4,6-Trichlorophenol	88-06-2	<0.05 ppm	<0.05 ppm
		2,3,4,6-Tetrachlorophenol	58-90-2	<0.05 ppm	<0.05 ppm
		Pentachlorophenol	87-86-5	< 0.0501 ppm	< 0.0501 ppm
F024	Table B	Chromium (Total)	7440-47-32	NA	0.073

		Lead	7439-92-1	NA	~~0.021~~ Reserv
		Nickel	7440-02-0	NA	0.088
F039	Table B	Antimony	7440-36-0	NA	0.23
		Arsenic	7440-38-2	NA	5.0
		Barium	7440-39-3	NA	52.
		Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Mercury	7439-97-6	NA	0.025
		Nickel	7440-02-0	NA	0.32
		Selenium	7782-49-2	NA	5.7
		Silver	7440-22-4	NA	0.072
K001	Table B	Lead	7439-92-1	NA	0.51
K002	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K003	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K004	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K005	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (anhydrous)	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (hydrated)	Table B	Chromium (Total)	7440-47-32	NA	5.2
K007	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K008	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K015	Table B	Chromium (Total)	7440-47-32	NA	1.7
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.2~~
		Nickel	7440-02-0	NA	0.2
K021	Table B	Antimony	7440-36-0	NA	0.23 #
K022	Table B	Chromium (Total)	7440-47-32	NA	5.2
		Nickel	7440-02-~~2~~-0	NA	0.32
K028	Table B	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-~~2~~-0	NA	0.088
K031	Table B	Arsenic	7440-38-2	NA	5.6 # A
K046	Table B	Lead	7439-92-1	NA	0.18
K048	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-~~2~~-0	NA	0.20
K049	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-~~2~~-0	NA	0.20

K050	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-~~2~~-0	NA	0.20
K051	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-~~2~~-0	NA	0.20
K052	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-~~2~~-0	NA	0.20
K061 (Low Zinc Subcategory--less than 15% Total Zinc)					
	Table B	Cadmium	7440-43-9	NA	0.14
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.24
		Nickel	7440-02-~~2~~-0	NA	0.32
K061 (High Zinc Subcategory--greater than 15% Total Zinc)--effective until August 7, 1991					
	Table B	Cadmium	7440-43-9	NA	0.14
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.24
		Nickel	7440-02-0	NA	0.32
K062	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K069 (Calcium Sulfate Subcategory)					
	Tables B & D	Cadmium	7440-43-9	NA	0.14
		Lead	7439-92-1	NA	0.24
~~K071 (Low Mercury Subcategory--less than 16 mg/kg Mercury)~~					
K071	Table B	Mercury	7439-97-6	NA	0.025
K083	Table B	Nickel	7440-02-~~2~~-0	NA	0.088
K084	Table B	Arsenic	7440-38-2	NA	5.6 #A
K086	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K087	Table B	Lead	7439-92-1	NA	0.51
K100	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
K101	Table B	Arsenic	7440-38-2	NA	5.6 #A
K102	Table B	Arsenic	7440-38-2	NA	5.6 #A
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)					
	Tables B & D	Mercury	7439-97-6	NA	~~0.20~~0.020
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--that are not residues from RMERC)					
	Tables B & D	Mercury	7439-97-6	NA	~~A0.20~~0.025
K115	Table B	Nickel	7440-02-~~2~~-0	NA	0.32

~~#--These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.~~

~~*--These waste codes are not subcategorized into wastewaters and nonwastewaters.~~

~~NA--Not Applicable.~~

P and U Listed Wastes

Waste Code	See Also	Commercial Chemical Name	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Waste-waters	Concentration (mg/L) Nonwaste-waters
P010	Table B	Arsenic acid	Arsenic	7440-38-2	NA	5.6 A
P011	Table B	Arsenic pent-oxide	Arsenic	7440-38-2	NA	5.6 A
P012	Table B	Arsenic trioxide	Arsenic	7440-38-2	NA	5.6 A
P013	Table B	Barium cyanide	Barium	7440-39-3	NA	52.
P036	Table B	Dichlorophenyl-arsine	Arsenic	7440-38-2	NA	5.6 A
P038	Table B	Diethylarsine	Arsenic	7440-38-2	NA~~5~~	5.6 A
P065 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)						
	Tables B & D	Mercury fulminate	Mercury	7439-97-6	NA	0.20
P065 (Low Mercury Subcategory--less than 260 mg/kg Mercury--incinerator residues (and are not residues from RMERC))						
	Tables B & D	Mercury fulminate	Mercury	7439-97-6	NA	0.025
P073	Table B	Nickel carbonyl	Nickel	7440-02-~~2~~0	NA	0.32
P074	Table B	Nickel cyanide	Nickel	7440-02-~~2~~0	NA	0.32
P092 (Low Mercury Subcategory -- less than 260 mg/kg Mercury residues from RMERC)						
	Tables B & D	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.20
P092 (Low Mercury Subcategory--less than 260 mg/kg Mercury--incinerator residues (and are not residues from RMERC))						
	Tables B & D	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.025
P099	Table B	Potassium silver cyanide	Silver	7440-22-4	NA	0.072
P103	Table B	Selenourea	Selenium	7782-49-2	NA	5.7
P104	Table B	Silver cyanide	Silver	7440-22-4	NA	0.072
P110	Table B	Tetraethyl lead	Lead	7439-92-1	NA	0.51
P114	Table B	Thallium selenite	Selenium	7782-49-2	NA	5.7
U032	Table B	Calcium chromate	Chromium (Total)	7440-47-32	NA	0.094
U051	Table B	Creosote	Lead	7439-92-1	NA	0.51
U136	Table B	Cacodylic acid	Arsenic	7440-38-2	NA	5.6
U144	Table B	Lead acetate	Lead	7439-92-1	NA	0.51

U145	Table B	Lead phosphate	Lead	7439-92-1	NA	0.51
U146	Table B	Lead subacetate	Lead	7439-92-1	NA	0.51
U151 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)						
	Tables B & D	Mercury	Mercury	7439-97-6	NA	0.20
U151 (Low Mercury Subcategory--less than 260 mg/kg Mercury--that are not residues from RMERC)						
	Tables B & D	Mercury	Mercury	7439-97-6	NA	0.025
U204	Table B	Selenium dioxide	Selenium	7782-49-2	NA	5.7
U205	Table B	Selenium sulfide	Selenium	7782-49-2	NA	5.7

#A-- These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.

*B-- These waste codes are not subcategorized into wastewaters and nonwastewaters.

NA-- Not Applicable.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Table B Constituent Concentrations in Waste (CCW)

D, F and K Listed Wastes

Waste Code	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Wastewaters	Concentration (mg/L) Nonwastewaters
D003 (Reactive cyanides subcategory--based on ~~Cyanides (Amenable)~~ 35 Ill. Adm. Code 721.123(a)(5))					
	NA	Cyanides (Total)	57-12-5	Res.	# 590. C
		Cyanides (Amenable)	57-12-5	0.86	30.
D004	Table A	Arsenic	7440-38-2	5.0	NA
D005	Table A	Barium	7440-39-3	100.	NA
D006	Table A	Cadmium	7440-43-9	1.0	NA
D007	Table A	Chromium (Total)	7440-47-32	5.0	NA
D008	Table A	Lead	7439-92-1	5.0	NA
D009	Table A	Mercury	7439-97-6	0.20	NA
D010	Table A	Selenium	7782-49-2	1.0	NA
D011	Table A	Silver	7440-22-4	5.0	NA
D012	Table D	Endrin	720-20-8	NA	0.13 A
D013	Table D	Lindane	58-89-9	NA	0.066 A
D014	Table D	Methoxychlor	72-43-5	NA	0.18 A
D015	Table D	Toxaphene	8001-35-1	NA	1.3 A

D016	Table D	2,4-D	94-75-7	NA		10.0 A
D017	Table D	2,4,5-TP (Silvex)	93-76-5	NA		7.9 A
F001-F005 spent solvents						
	Tables A & D	1,1,2-Trichloroethane	71-55-6	0.030	a	7.6 A
		Benzene	71-43-2	0.070	a	3.7 A
F001-F005 spent solvents (Pharmaceutical industry wastewater subcategory)						
		Methylene chloride	75-09-2	0.44		NA
F006	Table A	Cyanides (Total)	57-12-5	1.2		590.
		Cyanides (Amenable)	57-12-5	0.86		30.
		Cadmium	7440-43-9	1.6		NA
		Chromium	7440-47-32	0.32		NA
		Lead	7439-92-1	0.040		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F007	Table A	Cyanides (Total)	57-12-5	1.9		590.
		Cyanides (Amenable)	57-12-5	0.1		30.
		Chromium (Total)	7440-47-32	0.32		NA
		Lead	7439-92-1	0.04		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F008	Table A	Cyanides (Total)	57-12-5	1.9		590.
		Cyanides (Amenable)	57-12-5	0.13		30.
		Chromium	7440-47-32	0.32		NA
		Lead	7439-92-1	0.04		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F009	Table A	Cyanides (Total)	57-12-5	1.95		590.
		Cyanides (Amenable)	57-12-5	0.1		30.
		Chromium	7440-47-32	0.32		NA
		Lead	7439-92-1	0.04		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F010	NA	Cyanides (Total)	57-12-5	1.9		1.5
		Cyanides (Amenable)	57-12-5	0.1		NA
F011	Table A	Cyanides (Total)	57-12-5	1.9		110.
		Cyanides (Amenable)	57-12-5	0.1		9.1
		Chromium (Total)	7440-47-32	0.32		NA
		Lead	7439-92-1	0.04		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F012	Table A	Cyanides (Total)	57-12-5	1.9		110.
		Cyanides (Amenable)	57-12-5	0.1		9.1
		Chromium (Total)	7440-47-32	0.32		NA
		Lead	7439-92-1	0.04		NA
		Nickel	7440-02-~~2~~-0	0.44		NA
F019	Table A	Cyanides (Total)	57-12-5	1.2	R	590. C
		Cyanides (Amenable)	57-12-5	0.86	R	30. C
		Chromium (Total)	7440-47-32	0.32		NA
F024	(Note: F024 organic standards must be treated via incineration (INCIN))					
	Tables A & D	2-Chloro-1,3-butadiene	126-99-8	a 0.28 A		a 0.28 A
		3-Chloropropene	107-05-1	a 0.28 A		a 0.28 A
		1,1-Dichloroethane	75-34-3	a 0.014 A		a 0.014 A
		1,2-Dichloroethane	107-06-2	a 0.014 A		a 0.014 A
		1,2-Dichloropropane	78-87-5	a 0.014 A		a 0.014 A
		cis-1,3-Dichloropropene	10061-01-5	a 0.014 A		a 0.014 A
		trans-1,3-Dichloropropene	10061-02-6	a 0.014 A		a 0.014 A

		Bis(2-ethylhexyl)phthalate	117-81-7	ø	0.036 A	ø	1.8 A
		Hexachloroethane	67-72-1	ø	0.036 A	ø	1.8 A
		Chromium (Total)	7440-47-32		0.35		NA
		Nickel	7440-02-2-0		0.47		NA
F025 (Light ends subcategory)							
		Chloroform	67-6366-3	ø	0.046 B	ø	6.2 A
		1,2-Dichloroethane	107-06-2	ø	0.21 B	ø	6.2 A
		1,1-Dichloroethylene	75-35-4	ø	0.025 B	ø	6.2 A
		Methylene chloride	75-9-2	ø	0.089 B	ø	31. A
		Carbon tetrachloride	56-23-5	ø	0.057 B	ø	6.2 A
		1,1,2-Trichloroethane	79-00-5	ø	0.054 B	ø	6.2 A
		Trichloroethylene	79-01-6	ø	0.054 B	ø	5.6 A
		Vinyl chloride	75-01-4	ø	0.27 B	ø	33. A
F025 (Spent filters ≠ or aids and desiccants subcategory)							
		Chloroform	67-66-3	ø	0.046 B	ø	6.2 A
		Methylene chloride	75-9-2	ø	0.089 B	ø	31. A
		Carbon tetrachloride	56-23-5	ø	0.057 B	ø	6.2 A
		1,1,2-Trichloroethane	79-00-5	ø	0.054 B	ø	6.2 A
		Trichloroethylene	79-01-6	ø	0.054 B	ø	5.6 A
		Vinyl chloride	75-01-4	ø	0.27 B	ø	33. A
		Hexachlorobenzene	118-74-1	ø	0.055 B	ø	37. A
		Hexachlorobutadiene	87-68-3	ø	0.055 B	ø	28. A
		Hexachloroethane	67-72-1	ø	0.055 B	ø	30. A
F039	Table A	Acetone	67-64-1	ø	0.28 B	ø	160. A
		Acenaphthalene	208-96-8	ø	0.059 B	ø	3.4 A
		Acenaphthene	83-32-9	ø	0.059 B	ø	4.0 A
		Acetonitrile	75-05-8	ø	0.17 B		NA
		Acetophenone	96-86-2	ø	0.010 B	ø	9.7 A
		2-Acetylaminofluorene	53-96-3	ø	0.059 B	ø	140. A
		Acrolein	107-02-8		0.29 B		NA
		Acrylonitrile	107-13-1	ø	0.24 B	ø	84. A
		Aldrin	309-00-2	ø	0.021 B	ø	0.068 A
		4-Aminobiphenyl	92-67-1	ø	0.13 B		NA
		Aniline	62-53-3	ø	0.81 B	ø	14. A
		Anthracene	120-12-7	ø	0.059 B	ø	4.0 A
		Aramine	140-57-8		0.36 B		NA
		Aroclor 1016	12674-11-2	ø	0.013 B	ø	0.92 A
		Aroclor 1221	11104-28-2	ø	0.014 B	ø	0.92 A
		Aroclor 1232	11141-16-5	ø	0.013 B	ø	0.92 A
		Aroclor 1242	53469-21-9	ø	0.017 B	ø	0.92 A
		Aroclor 1248	12672-29-6	ø	0.013 B	ø	0.92 A
		Aroclor 1254	11097-69-1	ø	0.014 B	ø	1.8 A
		Aroclor 1260	11096-82-5	ø	0.014 B	ø	1.8 A
		alpha-BHC	319-84-6	ø	0.00014 B	ø	0.066 A
		beta-BHC	319-85-7	ø	0.00014 B	ø	0.066 A
		delta-BHC	319-86-8	ø	0.023 B	ø	0.066 A
		gamma-BHC	58-89-9	ø	0.0017 B	ø	0.066 A
		Benzene	71-43-2	ø	0.14 B	ø	36. A
		Benzo(a)anthracene	56-55-3	ø	0.059 B	ø	8.2 A
		Benzo(b)fluoranthene	205-99-2	ø	0.055 B	ø	3.4 A
		Benzo(k)fluoranthene	207-08-9	ø	0.059 B	ø	3.4 A
		Benzo(g,h,i)perylene	191-24-2	ø	0.0055 B	ø	1.5 A
		Benzo(a)pyrene	50-32-8	ø	0.061 B	ø	8.2 A
		Bromodichloromethane	75-27-4	ø	0.35 B	ø	15. A
		Bromoform (Tribromomethane)	75-25-2	ø	0.63 B	ø	15. A
		Bromomethane (methyl bromide)	74-63-9	ø	0.11 B	ø	15. A
		4-Bromophenyl phenyl ether	101-55-3	ø	0.055 B	ø	15. A
		n-Butyl alcohol	71-36-3	ø	5.6 B	ø	2.6 A
		Butyl benzyl phthalate	85-68-7	ø	0.017 B	ø	7.9 A
		2-sec-Butyl-4,6-dinitrophenol	88-85-7	ø	0.066 B	ø	2.5 A
		Carbon tetrachloride	56-23-5	ø	0.057 B	ø	5.6 A
		Carbon disulfide	75-15-0	ø	0.014 B		NA

Chlordane	57-74-9	s	0.0033 B	s	0.13 A
p-Chloroaniline	106-47-8	s	0.46 B	s	16. A
Chlorobenzene	108-90-7	s	0.057 B	s	5.7 A
Chlorobenzilate	510-15-6	s	0.10 B		NA
2-Chloro-1,3-butadiene	126-99-8		0.057 B		NA
Chlorodibromomethane	124-48-1	s	0.057 B	s	~~15~~. A
Chloroethane	75-00-3	s	0.27 B	s	6.0 A
bis(2-Chloroethoxy)methane	111-91-1	s	0.036 B	s	7.2 A
bis(2-Chloroethyl) ether	111-44-4	s	0.033	s	7.2
~~2-Chloroethyl vinyl ether~~		~~s~~	~~0.057 B~~		~~NA~~
Chloroform	67-66-3	s	0.046 B	s	5.6 A
bis(2-Chloroisopropyl) ether	39638-32-9	s	0.055 B	s	7.2 A
p-Chloro-m-cresol	59-50-7	s	0.018 B	s	14. A
Chloromethane (Methyl chloride)	74-87-3	s	0.19 B	s	33. A
2-Chloronaphthalene	91-8-7	s	0.055 B	s	5.6 A
2-Chlorophenol	95-57-8	s	0.044 B	s	5.7 A
3-Chloropropene	107-05-1	s	0.036 B	s	28. A
Chrysene	218-01-9	s	0.059 B	s	8.2 A
o-Cresol	95-48-7	s	0.11 B	s	5.6 A
Cresol (m- and p-isomers)		s	0.77 B	s	3.2 A
Cyclohexanone	108-94-1	s	0.36 B		NA
1,2-Dibromo-3-chloropropane	96-12-8	s	0.11 B	s	15. A
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	s	0.028 B	s	15. A
Dibromomethane	74-95-3	s	0.11 B	s	15. A
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	s	0.72 B	s	10. A
o,p'-DDD	53-19-0	s	0.023 B	s	0.087 A
p,p'-DDD	72-54-8	s	0.023 B	s	0.087 A
o,p'-DDE	3424-82-6	s	0.031 B	s	0.087 A
p,p'-DDE	72-55-9	s	0.031 B	s	0.087 A
o,p'-DDT	789-02-6	s	0.0039 B	s	0.087 A
p,p'-DDT	50-29-3	s	0.0039 B	s	0.087 A
Dibenzo(a,h)anthracene	53-70-3	s	0.055 B	s	8.2 A
Dibenzo(a,e)pyrene	192-65-4		0.061 B		NA
m-Dichlorobenzene	541-73-1	s	0.036 B	s	6.2 A
o-Dichlorobenzene	95-50-1	s	0.088 B	s	6.2 A
p-Dichlorobenzene	106-46-7	s	0.090 B	s	6.2 A
Dichlorodifluoromethane	75-71-8	s	0.23 B	s	7.2 A
1,1-Dichloroethane	75-34-3	s	0.059 B	s	7.2 A
1,2-Dichloroethane	107-06-2	s	0.21 B	s	7.2 A
1,1-Dichloroethylene	75-35-4	s	0.025 B	s	33. A
trans-1,2-Dichloro~~ethene~~ethylene		s	0.054 B	s	33. A
2,4-Dichlorophenol	120-83-2	s	0.044 B	s	14. A
2,6-Dichlorophenol	87-65-0	s	0.044 B	s	14. A
1,2-Dichloropropane	78-87-5	s	0.85 B	s	18. A
cis-1,3-Dichloropropene	10061-01-5	s	0.036 B	s	18. A
trans-1,3-Dichloropropene	10061-02-6	s	0.036 B	s	18. A
Dieldrin	60-57-1	s	0.017 B	s	0.13 A
Diethyl phthalate	84-66-2	s	0.20 B	s	28. A
~~p-Dimethylaminoazobenzene~~	~~60-11-3~~	~~s~~	~~0.13~~		~~NA~~
2,4-Dimethyl phenol	105-67-9	s	0.036 B	s	14. A
Dimethyl phthalate	131-11-3	s	0.047 B	s	28. A
Di-n-butyl phthalate	84-74-2	s	0.057 B	s	28. A
1,4-Dinitrobenzene	100-25-4	s	0.32 B	s	2.3 A
4,6-Dinitro-o-cresol	534-52-1	s	0.28 B	s	160. A
2,4-Dinitrophenol	51-28-5	s	0.12 B	s	160. A
2,4-Dinitrotoluene	121-14-2	s	0.32 B	s	140. A
2,6-Dinitrotoluene	606-20-2	s	0.55 B	s	28. A
Di-n-octyl phthalate	117-84-0	s	0.017 B	s	28. A
Di-n-propylnitrosoamine	621-64-7	s	0.40 B~~a~~		14. A
Diphenylamine	122-39-4		0.51 B		NA
1,2-Diphenyl hydrazine	122-66-7	s	0.087 B		NA
Diphenylnitrosamine	621-64-7		0.40 B		NA

1,4-Dioxane	123-91-1	c	0.12 B	a	170. A
Disulfoton	298-04-4	c	0.017 B	a	6.2 A
Endosulfan I	939-98-8	c	0.023 B	a	0.066 A
Endosulfan II	33213-6-5	c	0.029 B	a	0.13 A
Endosulfan sulfate	1031-07-8	c	0.029 B	a	0.13 A
Endrin	72-20-8	c	0.0028 B	a	0.13 A
Endrin aldehyde	7421-93-4	c	0.025 B	a	0.13 A
Ethyl acetate	141-78-6	a	0.34 B	a	33. A
Ethyl cyanide	107-12-0	c	0.24 B	NA	360. A
Ethyl benzene	100-41-4	c	0.057 B	a	6.0 A
Ethyl ether	60-29-7	a	0.12 B	a	160. A
bis(2-Ethylhexyl) phthalate	117-81-7	a	0.28 B	a	28. A
Ethyl methacrylate	97-63-2	c	0.14 B	a	160. A
Ethylene oxide	75-21-8	c	0.12 B		NA
Famphur	52-85-7	c	0.017 B	a	15. A
Fluoranthene	206-44-0	a	0.068 B	a	8.2 A
Fluorene	86-73-7	c	0.059 B	a	4.0 A
Fluorotrichloromethane	75-69-4	c	0.020 B	a	33. A
Heptachlor	76-44-8	c	0.0012 B	a	0.066 A
Heptachlor epoxide	1024-57-3	a	0.016 B	a	0.066 A
Hexachlorobenzene	118-74-1	c	0.055 B	a	37. A
Hexachlorobutadiene	87-68-3	c	0.055 B	a	28. A
Hexachlorocyclopentadiene	77-47-4	c	0.057 B	a	3.6 A
Hexachlorodibenzofurans		c	0.000063 B	a	0.001 A
Hexachlorodibenzo-p-dioxins		c	0.000063 B	a	0.001 A
Hexachloroethane	67-72-1	c	0.055 B	a	28. A
Hexachloropropene	1888-71-7	c	0.035 B	a	28. A
Indeno(1,2,3,-c,d)pyrene	193-39-5	a	0.0055 B	a	8.2 A
Iodomethane	74-88-4	c	0.019 B	a	65. A
Isobutanol	78-83-1	c	5.6 B	a	170. A
Isodrin	465-73-6	c	0.021 B	a	0.066 A
Isosafrole	120-58-1	a	0.081 B	a	2.6 A
Kepone	143-50-8	c	0.0011 B	a	0.13 A
Methacrylonitrile	126-98-7	c	0.24 B	a	84. A
Methanol	67-50-1		5.6 B		NA
Methapyrilene	91-80-5	a	0.081 B	a	1.5 A
Methoxychlor	72-43-5	c	0.25 B	a	0.18 A
3-Methylcholanthrene	56-49-5	c	0.0055 B	a	15. A
4,4-Methylene-bis-(2-chloroaniline)	101-14-4	c	0.50 B	a	35. A
Methylene chloride	75-09-2	a	0.089 B	a	33. A
Methyl ethyl ketone	78-93-3	c	0.28 B	a	36. A
Methyl isobutyl ketone	108-10-1	c	0.14 B	a	33. A
Methyl methacrylate	80-62-6	c	0.14 B	a	160. A
Methyl methansulfonate	66-27-3	a	0.018 B		NA
Methyl parathion	298-00-40	c	0.014 B	c	4.6 A
Naphthalene	91-20-3	c	0.059 B	a	3.1 A
2-~~Naphtyl~~Naphthylamine	91-59-8	c	0.52 B		NA
p-Nitroaniline	100-01-6	a	0.028 B	a	28. A
Nitrobenzene	98-95-3	a	0.068 B	a	14. A
5-Nitro-o-toluidine	99-55-8	c	0.32 B	a	28. A
4-Nitrophenol	100-02-7	c	0.12 B	a	29. A
N-Nitrosodiethylamine	55-18-5	a	0.40 B	a	28. A
N-Nitrosodimethylamine	62-75-9	a	0.40 B		NA
N-Nitroso-di-n-butylamine	924-16-3	a	0.40 B	a	17. A
N-Nitrosomethylethylamine	105-95-6	c	0.40 B	a	2.3 A
N-Nitrosomorpholine	59-89-2	a	0.40 B	a	2.3 A
N-Nitrosopiperidine	100-75-4	c	0.013 B	a	35. A
N-Nitrosopyrrolidine	930-55-2	c	0.013 B	a	35. A
Parathion	56-38-2	a	0.~~017~~0.014 B	a	4.6 A
Pentachlorobenzene	608-93-5	a	0.055 B	a	37. A
Pentachlorodibenzo-furans		a	0.~~00003~~00063 B	a	0.001 A
Pentachlorodibenzo-p-dioxins		a	0.000063 B	a	0.001 A
Pentachloronitrobenzene	82-68-8	c	0.055 B	a	4.8 A

		Pentachlorophenol	87-86-5	e	0.089 B	e	7.4 A
		Phenacetin	62-44-2	e	0.081 B	e	16. A
		Phenanthrene	85-01-8	e	0.059 B	e	3.1 A
		Phenol	108-95-2	e	0.039 B	e	6.2 A
		Phorate	298-02-2	e	0.021 B	e	4.6 A
		~~Propanenitrile (ethyl cyanide)~~	~~107-12-0~~	~~e~~	~~0.24~~	~~e~~	~~360.~~
		Phthalic anhydride	65-44-9		0.069 B		NA
		Pronamide	23950-58-5	e	0.093 B	e	1.5 A
		Pyrene	129-00-0	e	0.067 B	e	8.2 A
		Pyridine	110-86-1	e	0.014 B	e	16. A
		Safrole	94-59-7	e	0.081 B	e	22. A
		Silvex (2,4,5-TP)	93-72-1	e	0.72 B	e	7.9 A
		2,4,5-T	93-76-5	e	0.72 B	e	7.9 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	e	0.055 B	e	19. A
		Tetrachlorodibenzofurans		e	0.000063 B	e	0.001 A
		Tetrachlorodibenzo-p-dioxins		e	0.000063 B	e	0.001 A
		~~2,3,7,8-Tetrachlorodibenzo-p-dioxin~~		~~e~~	~~0.000063~~		~~NA~~
		1,1,1,2-Tetrachloroethane	630-20-6	e	0.057 B	e	42. A
		1,1,2,2-Tetrachloroethane	79-34-6	e	0.057 B	e	42. A
		Tetrachloro~~ethene~~ethylene	127-18-4	e	0.056 B	e	5.6 A
		2,3,4,6-Tetrachlorophenol	58-90-2	e	0.030 B	e	37. A
		Toluene	108-88-3	e	0.080 B	e	28. A
		Toxaphene	8001-35-1	e	0.0095 B	e	1.3 A
		1,2,4-Trichlorobenzene	120-82-1	e	0.055 B	e	19. A
		1,1,1-Trichloroethane	71-55-6	e	0.054 B	e	5.6 A
		1,1,2-Trichloroethane	79-00-5	e	0.054 B	e	5.6 A
		Trichloroethylene	79-01-6	e	0.054 B	e	5.6 A
		2,4,5-Trichlorophenol	95-95-4	e	0.18 B	e	37. A
		2,4,6-Trichlorophenol	88-06-2	e	0.035 B	e	37. A
		1,2,3-Trichloropropane	96-18-4	e	0.85 B	e	28. A
		1,1,2-Trichloro-1,2,2-trifluoro-ethane	76-13-1	e	0.057 B	e	28. A
		Tris(2,3-dibromopropyl)phosphate	126-72-7		0.11 B		NA
		Vinyl chloride	75-01-4	e	0.27 B	e	33. A
		Xylene(s)		e	0.32 B	e	28. A
		Cyanides (Total)	57-12-5	e	1.2 B	e	1.8 A
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~e~~	~~0.86~~		~~NA~~
		Fluoride	16964-48-8	e	35. B		NA
		Sulfide	8496-25-8	e	14. B		NA
		Antimony	7440-36-0	e	1.9 B		NA
		Arsenic	7440-38-2	~~e~~	~~5.0~~		NA
					1.4 B		
		Barium	7440-39-3	e	1.2 B		NA
		Beryllium	7440-41-7	e	0.82 B		NA
		Cadmium	7440-43-9	e	0.20 B		NA
		Chromium (Total)	7440-47-32	e	0.37 B		NA
		Copper	7440-50-8	e	1.3 B		NA
		Lead	7439-92-1	e	0.28 B		NA
		Mercury	7439-97-6	e	0.15 B		NA
		Nickel	7440-02~~-2~~-0	e	0.55 B		NA
		Selenium	7782-49-2	e	0.82 B		NA
		Silver	7440-22-4	e	0.29 B		NA
		Thallium	7440-28-0		1.4 B		NA
		Vanadium	7440-62-2	e	0.042 B		NA
		Zinc	7440-66-6		1.0 B		NA
K001	Table A	Naphthalene	91-20-3	e	0.031 A	e	1.5 A
		Pentachlorophenol	87-86-5	~~e~~	~~0.031~~	~~e~~	~~1.5~~ A
					0.18 A		7.4 A
		Phenanthrene	85-01-8	e	0.031 A	e	1.5 A
		Pyrene	129-00-0	e	0.028 A	e	1.5 A
		Toluene	~~106~~108-88-3	e	0.028 A	e	28. A
		Xylenes (Total)		e	0.032 A	e	33. A
		Lead	7439-92-1	e	0.037		NA

K002	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
K003	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
K004	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
K005	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
		Cyanides (Total)	57-12-5	~~a~~	0.74 B	~~R~~		D
K006	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
K007	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B	~~R~~		NA
		Cyanides (Total)	57-12-5	~~a~~	0.74 B			D
K008	Table A	Chromium (Total)	7440-47-32	~~a~~	20.9 B			NA
		Lead	7439-92-1	~~a~~	3.4 B			NA
K009	NA	Chloroform	67-66-3		0.1	~~a~~		6.0 A
K010	NA	Chloroform	67-66-3		0.1			6.0 A
K011	NA	Acetonitrile	75-05-8		38.			1.8 A
		Acrylonitrile	107-13-1		0.06			1.4 A
		Acrylamide	79-06-1		19.			23. A
		Benzene	71-43-2		0.02			0.03 A
		Cyanide (Total)	57-12-5		21.			57.
K013	NA	Acetonitrile	75-05-8		38.	~~a~~		1.8 A
		Acrylonitrile	107-13-1		0.06	~~a~~		1.4 A
		Acrylamide	79-06-1		19.	~~a~~		23. A
		Benzene	71-43-2		0.02	~~a~~		0.03 A
		Cyanide (Total)	57-12-5		21.			57.
K014	NA	Acetonitrile	75-05-8		38.	~~a~~		1.8 A
		Acrylonitrile	107-13-1		0.06	~~a~~		1.4 A
		Acrylamide	79-06-1		19.	~~a~~		23. A
		Benzene	71-43-2		0.02	~~a~~		0.03 A
		Cyanide (Total)	57-12-5		21.			57.
K015	Table A	Anthracene	120-12-7		1.0 ~~a~~			3.4 A
		Benzal chloride	98-87-3		0.28	~~a~~		6.2 A
		Sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene	205-99-2 207-08-9		0.~~02~~929			3.4 A
		Phenanthrene	85-01-8		0.27	~~a~~		3.4 A
		Toluene	108-88-3		0.15	~~a~~		6.0 A
		Chromium (Total)	7440-47-32		0.32			NA
		Nickel	7440-02-~~2~~-0		0.44			NA
K016	NA	Hexachlorobenzene	118-74-1	~~a~~	0.033 A	~~a~~		28. A
		Hexachlorobutadiene	87-68-3	~~a~~	0.007 A	~~a~~		5.~~8~~6 A
		Hexachlorocyclopentadiene	77-47-4	~~a~~	0.007 A	~~a~~		5.6 A
		Hexachloroethane	67-72-1	~~a~~	0.033 A	~~a~~		28. A
		Tetrachloroethene	127-18-4	~~a~~	0.007 A	~~a~~		6.0 A
K017	NA	1,2-Dichloropropane	78-87-5	~~ca~~	0.85 AB	~~a~~		~~28~~18. A
		1,2,3-Trichloropropane	96-18-4	~~ca~~	0.85 AB	~~a~~		28. A
		Bis(2-chloroethyl)ether	111-44-4	~~ca~~	0.033 AB	~~a~~		7.2 A
K018	NA	Chloroethane	75-00-3	~~a~~	0.007 A	~~a~~		6.0 A

		Chloromethane	74-87-3		0.007 A		NA
		1,1-Dichloroethane	75-34-3	a	0.007 A	a	6.0 A
		1,2-Dichloroethane	107-06-2	a	0.007 A	a	6.0 A
		Hexachlorobenzene	118-74-1		0.033 A		28. A
		Hexachlorobutadiene	87-68-3	a	0.033007 A	a	5.6 A
		Hexachloroethane	67-72-1	a	0.007NA	a	28. A
		Pentachloroethane	76-01-7	a	0.007 A	a	5.6 A
		1,1,1-Trichloroethane	71-55-6	a	0.007 A	a	6.0 A
K019	NA	Bis(2-chloroethyl)ether	111-44-4	a	0.007 A	a	5.6 A
		Chlorobenzene	108-90-7	a	0.006 A	a	6.0 A
		Chloroform	67-66-3	a	0.006007 A	a	6.0 A
		p-Dichlorobenzene	106-46-7	a	0.008 A		NA
		1,2-Dichloroethane	107-06-2	a	0.008007 A		NA6.0 A
		Fluorene	86-73-7	a	0.007 A		NA
		Hexachloroethane	67-72-1	a	0.033 A	a	28. A
		Naphthalene	91-20-3	a	0.007 A	a	5.6 A
		Phenanthrene	85-01-8	a	0.007 A	a	5.6 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	a	0.017 A		NA
		Tetrachloroethene	127-18-4	a	0.007 A	a	6.0 A
		1,2,4-Trichlorobenzene	120-82-1	a	0.023 A	a	19. A
		1,1,1-Trichloroethane	71-55-6	a	0.007 A	a	6.0 A
K020	NA	1,2-Dichloroethane	107-06-2	a	0.007 A	a	6.0 A
		1,1,2,2-Tetrachloroethane	79-34-6	a	0.007 A	a	5.6 A
		Tetrachloroethene	127-18-4	a	0.007 A	a	6.0 A
K021	Table A	Chloroform	67-66-3	a	0.046 B	a	6.2 A
		Carbon tetrachloride	58-23-5	a	0.057 B	a	6.2 A
		Antimony	58-23-57440-36-0	a	0.057.60 B	a	6.2NA A
K022	Table A	Toluene	108-88-3	a	0.060080 B	a	0.034 A
		Acetophenone	96-86-2		0.010	a	19. A
		Diphenylamine	22-39-4	a	0.52 B		NA
		Diphenylnitrosamine	86-30-6	a	0.40 B		NA
		Sum of Diphenylamine and Diphenylnitrosamine			NA	a	13. A
		Phenol	108-95-2		0.039	a	12. A
		Chromium (Total)	7440-47-32		0.35		NA
		Nickel	7440-02-0-0		0.47		NA
K023	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	a	0.54 A	a	28. A
K024	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	a	0.54 A	a	28. A
K028	Table A	1,1-Dichloroethane	75-34-3	a	0.007 A	a	6.0 A
		trans-1,2-Dichloroethene		a	0.033 A	a	6.0 A
		Hexachlorobutadiene	87-68-3	a	0.007 A	a	5.6 A
		Hexachloroethane	67-72-1	a	0.033 A	a	28. A
		Pentachloroethane	76-01-7	a	0.033 A	a	5.6 A
		1,1,1,2-Tetrachloroethane	630-20-6	a	0.007 A	a	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6	a	0.007 A	a	5.6 A
		1,1,1-Trichloroethane	71-55-6	a	0.007 A	a	6.0 A
		1,1,2-Trichloroethane	79-00-5	a	0.007 A	a	6.0 A
		Tetrachloroethylene	127-18-4	a	0.007 A	a	6.0 A
		Cadmium	7440-43-9		6.4		NA
		Chromium (Total)	7440-47-32		0.35		NA
		Lead	7439-92-1		0.037		NA
		Nickel	7440-02-2-0		0.47		NA
K029	NA	Chloroform	67-66-3		0.46	a	6.0 A
		1,2-Dichloroethane	107-06-2		0.21	a	6.0 A

		1,1-Dichloroethylene	75-35-4		0.025	a	6.0 A
		1,1,1-Trichloroethane	71-55-6		0.054	a	6.0 A
		Vinyl chloride	75-01-4		0.27	a	6.0 A
K030	NA	o-Dichlorobenzene	95-50-1	a	0.008 A		NA
		p-Dichlorobenzene	106-46-7	a	0.~~006~~008 A		NA
		Hexachlorobutadiene	87-68-3	a	0.007 A	a	5.6 A
		Hexachloroethane	67-72-1	a	0.033 A	a	28. A
		Hexachloropropene	1888-71-7		NA	a	19. A
		Pentachlorobenzene	608-93-5		NA	a	28. A
		Pentachloroethane	76-01-7	a	0.007 A	a	5.6 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	a	0.017 A	a	14. A
		Tetrachloro~~ethane~~ethene	127-18-4	a	0.007 A	a	6.0 A
		1,2,4-Trichlorobenzene	120-82-1	a	0.023 A	a	19. A
K031	Table A	Arsenic	7440-38-2		0.79		NA A
K032	NA	Hexachlorocyclopentadiene	77-47-4	c	0.057 B	a	24. A
		Chlordane	57-74-9	c	0.0033 B	a	0.26 A
		Heptachlor	76-44-8	c	0.0012 B	a	0.066 A
		Heptachlor epoxide	1024-57-3	c	0.016 B	a	0.066 A
K033	NA	Hexachlorocyclopentadiene	77-47-4	c	0.057 B	a	2.4 A
K034	NA	Hexachlorocyclopentadiene	77-47-4	c	0.057 B	a	2.4 A
K035	NA	Acenaphthene	83-32-9		NA	a	3.4 A
		Anthracene	120-12-7		NA	a	3.4 A
		Benz(a)anthracene	56-55-3	c	0.59 B	a	3.4 A
		Benzo(a)pyrene	50-32-8		NA	a	3.4 A
		Chrysene	218-01-9	c	0.059 B	a	3.4 A
		Dibenz(a,h)anthracene	53-70-3		NA	a	3.4 A
		Fluoranthene	206-44-0	c	0.068 B	a	3.4 A
		Fluorene	86-73-7		NA	a	3.4 A
		Indeno(1,2,3-cd)pyrene	193-39-5		NA	a	3.4 A
		Cresols (m- and p-isomers)		a	0.77 B		NA
		Naphthalene	91-20-3	c	0.059 B	a	3.4 A
		o-Cresol	95-48-7	c	0.11 B		NA
		Phenanthrene	85-01-8	c	0.059 B	a	3.4 A
		Phenol	108-95-2		0.039		NA
		Pyrene	129-00-0	c	0.067 B	a	8.2 A
K036	NA	Disulfoton	298-04-4	c	0.025 B	a	0.1 A
K037	NA	Disulfoton	298-04-4	c	0.025 B	a	0.1 A
		Toluene	108-88-3	c	0.080 B	a	28. A
K038	NA	Phorate	298-02-2		0.025 B	a	0.1 A
K040	NA	Phorate	298-02-2		0.025 B	a	0.1 A
K041	NA	Toxaphene	8001-35-1	a	0.0095 B	a	2.6 A
K042	NA	1,2,4,5-Tetrachlorobenzene	95-94-3	c	0.055 B	a	4.4 A
		o-Dichlorobenzene	95-50-1	c	0.088 B	a	4.4 A
		p-Dichlorobenzene	106-46-7	a	0.090 B	a	4.4 A
		Pentachlorobenzene	~~808~~608-93-5	c	0.055 B	a	4.4 A
		1,2,4-Trichlorobenzene	120-82-1	c	0.055 B	a	4.4 A
K043	NA	2,4-Dichlorophenol	120-83-2	a	0.049 A	a	0.38 A
		2,6-Dichlorophenol	87-65-0	a	0.013 A	a	0.34 A
		2,4,5-Trichlorophenol	95-95-4	a	0.016 A	a	8.2 A
		2,4,6-Trichlorophenol	88-06-2	a	0.039 A	a	7.86 A
		Tetrachlorophenols (Total)		a	0.018 A	a	0.68 A
		Pentachlorophenol	87-86-5	a	0.022 A	a	1.9 A

		Tetrachloroethene	79-01-6	a	0.006 A	a	1.7 A
		Hexachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Hexachlorodibenzo-furans		a	0.001 A	a	0.001 A
		Pentachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Pentachlorodibenzo-furans		a	0.001 A	a	0.001 A
		Tetrachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Tetrachlorodibenzo-furans		a	0.001 A	a	0.001 A
K046	Table A	Lead	7439-92-1		0.037		NA
K048	Table A	Benzene	71-43-2	a	0.011 A	a	14. A
		Benzo(a)pyrene	50-32-8	a	0.047 A	a	12. A
		Bis(2-ethylhexyl)phthalate	117-81-7	a	0.043 A	a	7.3 A
		Chrysene	218-01-9	a	0.043 A	a	15. A
		Di-n-butyl phthalate	84-74-2	a	0.06 A	a	3.6 A
		Ethylbenzene	100-41-4	a	0.011 A	a	14. A
		Fluorene	86-73-7	a	0.005 A		NA
		Naphthalene	91-20-3	a	0.033 A	a	42. A
		Phenanthrene	85-01-8	a	0.039 A	a	34. A
		Phenol	108-95-2	a	0.047 A	a	3.6 A
		Pyrene	129-00-0	a	0.045 A	a	36. A
		Toluene	108-88-3	a	0.011 A	a	14. A
		Xylene(s)		a	0.011 A	a	22. A
		Cyanides (Total)	57-12-5	a	0.~~028~~029 A	a	1.8 A
		Chromium (Total)	7440-47-32		0.2		NA
		Lead	7439-92-1		0.037		NA
K049	Table A	Anthracene	120-12-7	a	0.039 A	a	28. A
		Benzene	71-43-2	a	0.011 A	a	14. A
		Benzo(a)pyrene	50-32-8	a	0.047 A	a	12. A
		Bis(2-ethylhexyl)phthalate	117-81-7	a	0.043 A	a	7.3 A
		Carbon disulfide	75-15-0	a	0.011 A		NA
		Chrysene	218-01-9	a	0.043 A	a	15. A
		2,4-Dimethylphenol	105-67-9	a	0.033 A		NA
		Ethylbenzene	100-41-4	a	0.011 A	a	14. A
		Naphthalene	91-20-3	a	0.033 A	a	42. A
		Phenanthrene	85-01-8	a	0.039 A	a	34. A
		Phenol	108-95-2	a	0.047 A	a	3.6 A
		Pyrene	129-00-0	a	0.045 A	a	36. A
		Toluene	108-88-3	a	0.011 A	a	14. A
		Xylene(s)		a	0.011 A	a	22. A
		Cyanides (Total)	57-12-5	a	0.028 A	a	1.8 A
		Chromium (Total)	7440-47-32		0.2		NA
		Lead	7439-92-1		0.037 A		NA
K050	Table A	Benzo(a)pyrene	50-32-8	a	0.047 A	a	12. A
		Phenol	108-95-2	a	0.047 A	a	3.6 A
		Cyanides (Total)	57-12-5	a	0.028 A	a	1.8 A
		Chromium (Total)	7440-47-32		0.2		NA
		Lead	7439-92-1		0.037		NA
K051	Table A	Acenaphthene	~~83-32-9~~208-96-8	a	0.05 A		NA
		Anthracene	120-12-7	a	0.039 A	a	28. A
		Benzene	71-43-2	a	0.011 A	a	14. A
		Benzo(a)anthracene	~~50-32-8~~117-81-7	a	0.043 A	a	20. A
		Benzo(a)pyrene	50-32-8	a	0.047 A	a	12. A
		Bis(2-ethylhexyl)phthalate	75-15-0	a	0.043 A	a	7.3 A
		Chrysene	218-01-9	a	0.043 A	a	15. A
		Di-n-butyl phthalate	105-67-9	a	0.06 A	a	3.6 A
		Ethylbenzene	100-41-4	a	0.011 A	a	14. A
		Fluorene	86-73-7	a	0.05a A		NA
		Naphthalene	91-20-3	a	0.033 A	a	42. A
		Phenanthrene	85-01-8	a	0.039 A	a	34. A
		Phenol	108-95-2	a	0.047 A	a	3.6 A
		Pyrene	129-00-0	a	0.045 A	a	36. A

		Toluene	108-88-3	a	0.011 A	a	14. A
		Xylene(s)		a	0.011 A	a	22. A
		Cyanides (Total)	57-12-5	a	0.028 A	a	1.8 A
		Chromium (Total)	7440-47-32		0.2		NA
		Lead	7439-92-1		0.037		NA
K052	Table A	Benzene	71-43-2	a	0.011 A	a	14. A
		Benzo(a)pyrene	50-32-8	a	0.047 A	a	12. A
		o-Cresol	95-48-7	a	0.011 A	a	6.2 A
		p-Cresol	106-44-5	a	0.011 A	a	6.2 A
		2,4-Dimethylphenol	105-67-9	a	0.033aA		NA
		Ethylbenzene	100-41-4	a	0.011 A	a	14. A
		Naphthalene	91-20-3	a	0.033 A	a	42. A
		Phenanthrene	85-01-8	a	0.039 A	a	34 A
		Phenol	108-95-2	a	0.047 A	a	3.6 A
		Toluene	108-88-3	a	0.011 A	a	14. A
		Xylene(s)		a	0.011 A	a	22. A
		Cyanides (Total)	57-12-5	a	0.028 A	a	1.8 A
		Chromium (Total)	7440-47-32		0.2		NA
		Lead	7439-92-1		0.037		NA
K060	NA	Benzene	71-43-2	c	0.17 AB	a	0.071 A
		Benzo(a)pyrene	50-32-8	c	0.035 AB	a	3.6 A
		Naphthalene	91-20-3	c	0.028 AB	a	3.4 A
		Phenol	108-95-2	c	0.042 AB	a	3.4 A
		Cyanides (Total)	57-12-5		1.9		1.2
K061	Tables A-& D	Cadmium	7440-43-9		1.61		NA
		Chromium (Total)	7440-47-32		0.32		NA
		Lead	7439-92-1		0.51		NA
		Nickel	7440-02-2-0		0.44		NA
K062	Table A	Chromium (Total)	7440-47-32		0.32		NA
		Lead	7439-92-1		0.04		NA
		Nickel	7440-02-2-0		0.44		NA
K069	Tables A & D	Cadmium	7440-43-9		1.6		NA
		Lead	7439-92-1		0.51		NA
K071	Table A	Mercury	7439-97-6		0.030		NA
K073	NA	Carbon tetrachloride	58-23-5	c	0.057 B	a	6.2 A
		Chloroform	67-66-3	c	0.046 B	a	6.2 A
		Hexachloroethane	67-72-1	c	0.055 B	a	30. A
		Tetrachloroethene	127-18-4	c	0.056 B	a	6.2 A
		1,1,1-Trichloroethane	71-55-6	c	0.054 B	a	6.2 A
K083	Table A	Benzene	71-43-2	c	0.14 B	a	6.6 A
		Aniline	62-53-3	c	0.81	a	14. A
		Diphenylamine	22-39-4	c	0.52 B		NA
		Diphenylnitrosamine	86-30-6	c	0.40 B		NA
		Sum of Diphenylamine and Diphenylnitrosamine			NA	a	14. A
		Nitrobenzene	98-95-3	c	0.068 B	a	14. A
		Phenol	108-95-2		0.039	a	5.6 A
		Cyclohexanone	108-94-1		0.36	a	30.
		Nickel	7440-02-2-0		0.47		NA
K084	NA	Arsenic	7440-38-2		0.79		NA
K085	NA	Benzene	71-43-2	c	0.14 B	a	4.4 A
		Chlorobenzene	108-90-7	c	0.057 B	a	4.4 A
		o-Dichlorobenzene	95-50-1	c	0.088 B	a	4.4 A

		m-Dichlorobenzene	541-73-1	e	0.036 B	e	4.4 A
		p-Dichlorobenzene	106-46-7	e	0.090 B	e	4.4 A
		1,2,4-Trichlorobenzene	120-82-1	e	0.055 B	e	4.4 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	e	0.055 B	e	4.4 A
		Pentachlorobenzene	608-93-5		0.055 B	e	4.4 A
		Hexachlorobenzene	118-74-1	e	0.055 B	e	4.4 A
		Aroclor 1016	12674-11-2	e	0.013 B	e	0.92 A
		Aroclor 1221	11104-28-2	e	0.014 B	e	0.92 A
		Aroclor 1232	11141-16-5	e	0.013 B	e	0.92 A
		Aroclor 1242	53469-21-9	e	0.017 B	e	0.92 A
		Aroclor 1248	12672-29-6	e	0.013 B	e	0.92 A
		Aroclor 1254	11097-69-1	e	0.014 B	e	1.8 A
		Aroclor 1260	11096-82-5	e	0.014 B	e	1.8 A
K086	Table A	Acetone	67-64-1		0.28	e	160. A
		Acetophenone	96-86-2		0.010	e	9.7 A
		Bis(2-ethylhexyl)phthalate	117-81-7	e	0.28 B	e	28. A
		n-Butyl alcohol	71-36-3		5.6	e	2.6 A
		Butylbenzylphthalate	85-68-7	e	0.017 B	e	7.9 A
		eCyclohexanone	108-94-1		0.36		NA
		1,2-Dichlorobenzene	95-50-1		0.088	e	6.02 A
		Diethyl phthalate	84-66-2	e	0.20 B	e	28. A
		Dimethyl phthalate	131-11-3	e	0.047 B	e	28. A
		Di-n-butyl phthalate	84-74-2	e	0.057 B	e	28. A
		Di-n-octyl phthalate	117-84-0	e	0.017 B	e	28. A
		Ethyl acetate	141-78-6	e	0.34 B	e	33. A
		Ethylbenzene	100-41-4	e	0.057 B	e	6.0 A
		Methanol	67-56-1	e	5.6 B		NA
		Methyl isobutyl ketone	108-10-1		0.14	e	33. A
		Methyl ethyl ketone	78-93-3		0.28	e	36. A
		Methylene chloride	75-09-2	e	0.089 B	e	33. A
		Naphthalene	91-20-3	e	0.059 B	e	3.1 A
		Nitrobenzene	98-95-3	e	0.068 B	e	14. A
		Toluene	108-88-3	e	0.080 B	e	28. A
		1,1,1-Trichloroethane	71-55-6	e	0.054 B	e	5.6 A
		Trichloroethylene	79-01-6	e	0.054 B	e	5.6 A
		Xylene(s) (Total)	(Total)	e	0.32 B	e	28. A
		Cyanides (Total)	57-12-5		1.9		1.5 A
		Chromium (Total)	7440-47-32		0.32		NA
		Lead	7439-92-1		0.037		NA
K087	Table A	Acenaphthalene	208-96-8	e	0.028 A		3.4 A
		Benzene	71-43-2	e	0.014 A	e	0.071 A
		Chrysene	218-01-9	e	0.028 A	e	3.4 A
		Fluoranthene	206-44-0	e	0.028 A	e	3.4 A
		Indeno(1,2,3-cd)pyrene	193-39-5	e	0.028 A	e	3.4 A
		Naphthalene	91-20-3	e	0.028 A	e	3.4 A
		Phenanthrene	85-01-8	e	0.028 A	e	3.4 A
		Toluene	108-88-3	e	0.008 A	e	0.65 A
		Xylene(s)		e	0.014 A	e	0.07 A
		Lead	7439-92-1		0.037		NA
K093	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	e	0.54 A	e	28. A
K094	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	e	0.54 A	e	28. A
K095	NA	1,1,1,2-Tetrachloroethane	630-20-6		0.057	e	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6		0.057	e	5.6 A
		Tetrachloroethene	127-18-4		0.056	e	6.0 A
		1,1,2-Trichloroethane	79-00-5		0.054	e	6.0 A
		Trichloroethylene	79-01-6		0.054	e	5.6 A
		Hexachloroethane	67-72-1		0.055	e	28. A
		Pentachloroethane	76-01-7		0.055	e	5.6 A

K096	NA	1,1,1,2-Tetrachloroethane	630-20-6		0.057	a	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6		0.057	a	5.6 A
		Tetrachloroethene	127-18-4		0.056	a	6.0 A
		1,1,2-Trichloroethane	79-00-5		0.054	a	6.0 A
		Trichloroethene (Trichloroethylene)	79-01-6		0.054	a	5.6 A
		1,3-Dichlorobenzene	541-73-1		0.036	a	5.6 A
		Pentachloroethane	76-01-7		0.055	a	5.6 A
		1,2,4-Trichlorobenzene	120-82-1		0.055	a	19. A
K097	NA	Hexachlorocyclopentadiene	77-47-4	c	0.057 B		2.4 A
		Chlordane	57-74-9	c	0.0033 B	a	0.26 A
		Heptachlor	76-44-8	c	0.0012 B	a	0.066 A
		Heptachlor epoxide	1024-57-3	c	0.016 B	a	0.066 A
K098	NA	Toxaphene	8001-35-1	a	0.0095 B	a	2.6 A
K099	NA	2,4-Dichlorophenoxyacetic acid	94-75-7	a	1.0 A	a	1.0 A
		Hexachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Hexachlorodibenzofurans		a	0.001 A	a	0.001 A
		Pentachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Pentachlorodibenzofurans		a	0.001 A	a	0.001 A
		Tetrachlorodibenzo-p-dioxins		a	0.001 A	a	0.001 A
		Tetrachlorodibenzofurans		a	0.001 A	a	0.001 A
K100	Table A	Cadmium	7440-43-9		[illegible]		NA
		Chromium (Total)	7440-47-32		0.32		NA
		Lead	7439-92-1		0.51		NA
K101	NA	o-Nitroaniline		a	0.27 A	a	14. A
		Arsenic	7440-38-2		0.79		NA
		Cadmium	7440-43-9		0.24		NA
		Lead	7439-92-1		0.17		NA
		Mercury	7439-97-6		0.082		NA
K102	Table A	o-Nitrophenol		a	0.028 A	a	13. A
		Arsenic	7440-38-2		0.79		NA
		Cadmium	7440-43-9		0.24		NA
		Lead	7439-92-1		0.17		NA
		Mercury	7439-97-6		0.082		NA
K103	NA	Aniline	62-53-3	a	4.5		5.6 A
		Benzene	71-43-2	a	0.15	a	6.0 A
		2,4-Dinitrophenol	51-28-5	a	0.61	a	5.6 A
		Nitrobenzene	98-95-3	a	0.073	a	5.6 A
		Phenol	108-95-2	a	1.4	a	5.6 A
K104	NA	Aniline	62-53-3	a	4.5	a	5.6 A
		Benzene	71-43-2	a	0.15	a	6.0 A
		2,4-Dinitrophenol	51-28-5	a	0.61	a	5.6 A
		Nitrobenzene	98-95-3	a	0.073	a	5.6 A
		Phenol	108-95-2	a	1.4	a	5.6 A
		Cyanides (Total)	57-12-5		2.7	a	1.8 A
K105	NA	Benzene	71-43-2		0.14	a	4.4 A
		Chlorobenzene	108-90-7		0.057	a	4.4 A
		o-Dichlorobenzene	95-50-1		0.088	a	4.4 A
		p-Dichlorobenzene	106-46-7		0.090	a	4.4 A
		2,4,5-Trichlorophenol	95-95-4		0.18	a	4.4 A
		2,4,6-Trichlorophenol	88-06-2		0.035	a	4.4 A
		2-Chlorophenol	95-57-8		0.044	a	4.4 A
		Phenol	108-95-2		0.039	a	4.4 A
K106	Tables A & D	Mercury	7439-97-6		0.030		NA

K115	Table A	Nickel	7440-02-~~2~~0	0.47	NA

~~a Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in Section 728.107.~~

~~c Based on analysis of composite samples.~~

~~R As analyzed using SW-846 Method 9010; sample size: 0.5-10; distillation time: one hour to one hour and fifteen minutes.~~

~~NA Not Applicable.~~

TABLE B (CCW): P AND U LISTED WASTES

Waste Code	Commercial Chemical Name	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Wastewaters	Concentration (mg/L) Nonwastewaters
P004	Aldrin	NA	Aldrin	309-00-2	0.21 B	0.066 A
P010	Arsenic acid	Table A	Arsenic	7440-38-2	0.79	NA
P011	Arsenic pentoxide	Table A	Arsenic	7440-38-2	0.79	NA
P012	Arsenic trioxide	Table A	Arsenic	7440-38-2	0.79	NA
P013	Barium cyanide	Table A	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.1	110. 9.1
P020	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	NA	2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	± 2.5 A
P021	Calcium cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.1	110. 9.1
P022	Carbon disulfide	Table D	Carbon disulfide	75-15-0	0.014	NA
P024	p-Chloroaniline	NA	p-Chloroaniline	106-47-8	0.46	± 16. A
P029	Copper cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.1	110. 9.1
P030	Cyanides (soluble salts and complexes)	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.1	110. 9.1
P036	Dichlorophenylarsine	Table A	Arsenic	7440-38-2	0.79	NA
P037	Dieldrin	NA	Dieldrin	60-57-1	± 0.017 B	± 0.13 A
P038	Diethylarsine	Table A	Arsenic	7440-38-2	0.79	NA
P039	Disulfoton	NA	Disulfoton	298-04-4	0.017	± 0.1 A
P047	4,6-Dinitro-o-cresol	NA	4,6-Dinitro-o-cresol	534-52-4	± 0.28 B	± 160. A

P048	2,4-Dinitro-phenol	NA	2,4-Dinitrophenol	51-28-5	*	0.12 B	*	160. A
P050	Endosulfan	NA	Endosulfan I	939-98-8	*	0.023 B	*	0.066 A
			Endosulfan II	33213-6-5	*	0.029 B	*	0.13 A
			Endosulfan sulfate	1031-07-8	*	0.029 B	*	0.13 A
P051	Endrin	NA	Endrin	72-20-8	*	0.0028 B	*	0.13 A
			Endrin aldehyde	7421-93-4	*	0.025 B	*	0.13 A
P056	Fluoride	Table D	Fluoride	16694-48-8		35.		NA
P059	Heptachlor	NA	Heptachlor	76-44-8	*	0.0012 B	*	0.066 A
			Heptachlor epoxide	1024-57-3	*	0.016 B	*	0.066 A
P060	Isodrin	NA	Isodrin	465-73-6	*	0.021 B	*	0.066 A
P063	Hydrogen cyanide	NA	Cyanides (Total)	57-12-5		1.9		110.
			Cyanides (Amenable)	57-12-5		0.10		9.1
P065	Mercury fulminate	Tables A & D	Mercury	7439-97-6		0.030		NA
P071	Methyl parathion	NA	Methyl parathion	298-00-0		0.025	*	0.1 A
P073	Nickel carbonyl	Table A	Nickel	7440-02-~~2~~-0		0.4432		NA
P074	Nickel cyanide	Table A	Cyanides (~~Table~~ Total)	57-12-5		1.9		110.
			Cyanides (Amenable)	57-12-5		0.10		9.1
			Nickel	7440-02-~~2~~-0		0.44		NA
P077	p-Nitroaniline	NA	p-Nitroaniline	100-01-6	*	0.028 B	*	28. A
P082	N-Nitrosodi-methylamine	Table D	N-Nitrosodimethyl-amine	62-75-9	*	0.40 B		NA
P089	Parathion	NA	Parathion	56-38-2		0.025	*	0.1 A
P092	Phenylmercury acetate	Tables A & D	Mercury	7439-97-6		0.030		NA
P094	Phorate	NA	Phorate	298-02-2		0.025	*	0.1 A
P097	Famphur	NA	Famphur	52-85-7		0.025	*	0.1 A
P098	Potassium cyanide	NA	Cyanides (Total)	57-12-5		1.9		110.
			Cyanides (Amenable)	57-12-5		0.10		9.1
P099	Potassium silver cyanide	Table A	Cyanides (Total)	57-12-5		1.9		110.
			Cyanides (Amenable)	57-12-5		0.1		9.1
			Silver	7440-22-4		0.29		NA
P101	Ethyl cyanide (Propanenitrile)	NA	Ethyl cyanide (Propanenitrile)	107-12-0	*	0.24 B	*	360. A
P103	Selenourea	Table A	Selenium	7782-49-2	*	1.0 B		NA
P104	Silver cyanide	Table A	Cyanides (Total)	57-12-5		1.9		110.
			Cyanides (Amenable)	57-12-5		0.10		9.1
			Silver	7440-22-4		0.29		NA

P106	Sodium cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5		1.9 0.10		110. 9.1
P110	Tetraethyl lead	Tables A & D	Lead	7439-92-1		0.040		NA
P113	Thallic oxide	Table D	Thallium	7440-28-0	*	0.14 B		NA
P114	Thallium selenite	Table A	Selenium	7782-49-2		1.0		NA
P115	Thallium (I) sulfate	Table D	Thallium	7440-28-0	*	0.14 B		NA
P119	Ammonia vanadate	Table D	Vanadium	7440-62-2	*	28. B		NA
P120	Vanadium pentoxide	Table D	Vanadium	7440-62-2	*	28. B		NA
P121	Zinc cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5		1.9 0.10		110. 9.1
P123	Toxaphene	NA	Toxaphene	8001-35-1	*	0.0095 B	*	1.3 A
U002	Acetone	NA	Acetone	67-64-1		0.28	*	160. A
U003	Acetonitrile	Table D	Acetonitrile	75-05-8		0.17	NA	0.17
U004	Acetophenone	NA	Acetophenone	98-86-2	*	0.010 A	*	9.7 A
U005	2-Acetylaminofluorene	NA	2-Acetylaminofluorene	53-96-3	*	0.059 B	*	140. A
U009	Acrylonitrile	NA	Acrylonitrile	107-13-1	*	0.24 A	*	84. A
U012	Aniline	NA	Aniline	62-53-3		0.81	*	14. A
U018	Benz(a)anthracene	NA	Benz(a)anthracene	56-55-3	*	0.059 B	*	8.2 A
U019	Benzene	NA	Benzene	71-43-2	*	0.14 B	*	36. A
U022	Benzo(a)pyrene	NA	Benzo(a)pyrene	50-32-8	*	0.061 B	*	8.2 A
U024	Bis(2-chloroethoxy)methane	NA	Bis(2-chloroethoxy)methane	111-91-1		0.036	*	7.2 A
U025	Bis(2-chloroethyl) ether	NA	Bis(2-chloroethyl) ether	111-44-4		0.033	*	7.2 A
U027	Bis(2-chloroisopropyl) ether	NA	Bis(2-chloroisopropyl) ether	39638-32-9	*	0.055 B	*	7.2 A
U028	Bis(2-ethylhexyl) pthalate	NA	Bis(2-ethylhexyl) pthalate	117-81-7	*	0.54 A	*	28. A
U029	Bromomethane (Methyl bromide)	NA	Bromomethane (Methyl bromide)	74-83-9	*	0.11 A	*	15. A
U030	4-Bromophenyl phenyl ether	NA	4-Bromophenyl phenyl ether	101-55-3	*	0.055 A	*	15. A
U031	n-Butyl alcohol	NA	n-Butyl alcohol	71-36-3		5.6	*	2.6 A
U032	Calcium chromate	Table A	Chromium (Total)	7440-47-32		0.32		NA

U036	Chlordane (alpha and gamma)	NA	Chlordane (alpha and gamma)	57-74-9	*	0.00033 B	*	0.13 A
U037	Chlorobenzene	NA	Chlorobenzene	108-90-7	*	0.057 B	*	5.7 A
U038	Chlorobenzilate	Table D	Chlorobenzilate	510-15-6	*	0.10 B		NA
U039	p-Chloro-m-cresol	NA	p-Chloro-m-cresol	59-50-7	*	0.018 B	*	14. A
U042	2-Chloroethyl vinyl	Table D	2-Chloroethyl vinyl	110-75-8		0.057		NA
U043	Vinyl chloride	NA	Vinyl chloride	75-01-4	*	0.27 B	*	33. A
U044	Chloroform	NA	Chloroform	67-66-3	*	0.046 B	*	5.6 A
U045	Chloromethane (Methyl chloride)	NA	Chloromethane (Methyl chloride)	74-87-3	*	0.19 B	*	33. A
U047	2-Chloronaphthalene	NA	2-Chloronaphthalene	91-58-7	*	0.055 B	*	5.6 A
U048	2-Chlorophenol	NA	2-Chlorophenol	95-57-8	*	0.044 B	*	5.7 A
U050	Chrysene	NA	Chrysene	218-01-9	*	0.059 B	*	8.2 A
U051	Creosote	Table A	Naphthalene	91-20-3	*	0.031	*	1.5 A
			Pentachlorophenol	87-86-5	*	0.18	*	7.4 A
			Phenanthrene	85-01-8	*	0.031	*	1.5 A
			Pyrene	129-00-0	*	0.028	*	~~28.~~ 1.5 A
			Toluene	108-88-3	*	0.028	*	~~3328~~. A
			Xylenes (Total)		*	0.032	NA	33. A
			Lead	7439-92-1	*	0.037		NA
U052	Cresols (Cresylic acid)	NA	o-Cresol	95-48-7	*	0.11 B	*	5.6 A
			Cresols (m- and p-isomers)		*	0.77 B	*	3.2 A
U057	Cyclohexanone	Table D	Cyclohexanone	108-94-1		0.36		NA
U060	DDD	NA	o,p'-DDD	53-19-0		0.023 B	*	0.087 A
			p,p'-DDD	72-54-8		0.023 B	*	0.087 A
U061	DDT	NA	o,p'-DDT	789-02-6	*	0.0039 B	*	0.087 A
			p,p'-DDT	50-29-3	*	0.0039 B	*	0.087 A
			o,p'-DDD	53-19-0		0.023 B	*	0.087 A
			p,p'-DDD	72-54-8		0.023 B	*	0.087 A
			o,p'-DDE	3424-82-6	*	0.031 B	*	0.087 A
			p,p'-DDE	72-55-9	*	0.031 B	*	0.087 A
U063	Dibenzo(a,h)anthracene	NA	Dibenzo(a,h)-anthracene	53-70-3	*	0.055 B	*	8.2 A
U066	1,2-Dibromo-3-chloropropane	NA	1,2-Dibromo-3-chloropropane	96-12-8	*	0.11 B	*	15. A
U067	1,2-Dibromoethane (Ethylene dibromide)	NA	1,2-Dibromoethane (Ethylene dibromide)	106-93-4	*	0.028 B	*	15. A
U068	Dibromoethane	NA	Dibromoethane	74-95-3	*	0.11 B		15. A

U069	Di-n-butyl phthalate	NA	Di-n-butyl phthalate	84-74-2	*	0.54 A	*	28. A
U070	o-Dichloro-benzene	NA	o-Dichlorobenzene	95-50-1	*	0.088 B	*	6.2 A
U071	m-Dichloro-benzene	NA	m-Dichlorobenzene	541-73-1		0.036		6.2 A
U072	p-Dichloro-benzene	NA	p-Dichlorobenzene	104-46-7	*	0.090 B	*	6.2 A
U075	Dichloro-difluoromethane	NA	Dichlorodifluoro-methane	75-71-8	*	0.23 B	*	7.2 A
U076	1,1-Dichloro-ethane	NA	1,1-Dichloroethane	75-34-3	*	0.059 B		7.2 A
U077	1,2-Dichloro-ethane	NA	1,2-Dichloroethane	107-06-2	*	0.21 B	*	7.2 A
U078	1,1-Dichloro-ethylene	NA	1,1-Dichloro-ethylene	75-35-4	*	0.025 B	*	33. A
U079	1,2-Dichloro-ethylene	NA	trans-1,2-Dichloro-ethylene	156-60-5	*	0.054 B		33. ¥A
U080	Methylene chloride	NA	Methylene chloride	75-08-2		0.089 ¥B		33. ¥A
U081	2,4-Dichloro-phenol	NA	2,4-Dichlorophenol	120-83-2		0.044 ¥B		14. ¥A
U082	2,6-Dichloro-phenol	NA	2,6-Dichlorophenol	87-65-0		0.044 ¥B		14. ¥A
U083	1,2-Dichloro-propane	NA	1,2-Dichloropropane	78-87-5		0.85 ¥B		18. ¥A
U084	1,3-Dichloro-propene	NA	cis-1,3-Dichloro-propylene	10061-01-		0.036 ¥B		18. ¥A
			trans-1,3-Dichloro-propylene	10061-02-		0.036 ¥B		18. ¥A
U088	Diethyl phthalate	NA	Diethyl phthalate	84-8666-2		0.54 ¥B		28. ¥A
U093	p-Dimethylamino-azobenzene	Table D	p-Dimethylaminoazo-benzene	60-11-7		0.13 ¥B		NA
U101	2,4-Dimethyl-phenol	NA	2,4-Dimethylphenol	105-67-9		0.036 ¥B		14. ¥A
U102	Dimethyl phthalate	NA	Dimethyl phthalate	131-11-3		0.54 ¥A		28. ¥A
U105	2,4-Dinitro-toluene	NA	2,4-Dinitrotoluene	121-14-2		0.32 ¥B		140. ¥A
U106	2,6-Dinitro-toluene	NA	2,6-Dinitrotoluene	606-20-2		0.55 ¥B		28. ¥A
U107	Di-n-octyl phthalate	NA	Di-n-octyl phthalate	117-84-0		0.54 ¥A		28. ¥A

U108	1,4-Dioxane	NA	1,4-Dioxane	123-91-1	0.12 ¥B	170. ¥A
U111	Di-n-propyl-nitrosoamine	NA	Di-n-propylnitroso-amine	621-64-7	0.40 ¥B	14. ¥A
U112	Ethyl acetate	NA	Ethyl acetate	141-78-6	0.34 ¥B	33. ¥A
U117	Ethyl ether	NA	Ethyl ether	60-29-7	0.12 ¥B	160. ¥A
U118	Ethyl meth-acrylate	NA	Ethyl methacrylate	97-63-2	0.14 ¥B	160. ¥A
U120	Fluoranthene	NA	Fluoranthene	206-44-0	0.068 ¥B	8.2 ¥A
U121	Trichloro-monofluoro-methane	NA	Trichloro-monofluoromethane	75-69-4	0.020 ¥B	33. ¥A
U127	Hexachloro-benzene	NA	Hexachlorobenzene	118-74-1	0.055 ¥B	37. ¥A
U128	Hexachlorobuta-diene	NA	Hexachlorobutadiene	87-68-3	0.055 ¥B	28. ¥A
U129	Lindane	NA	alpha-BHC beta-BHC Delta-BHC gamma-BHC (Lindane)	319-84-6 319-85-7 319-86-8 58-89-9	0.00014 ¥B 0.00014 B 0.023 B 0.0017 B	0.06666 ¥A 0.06666 ¥A 0.06666 ¥A 0.06666 ¥A
U130	Hexachlorocyclo-pentadiene	NA	Hexachlorocyclo-pentadiene	77-47-7	0.057 ¥ B	3.6 ¥A
U131	Hexachloroethane	NA	Hexachloroethane	67-72-1	0.055 ¥ B	28. ¥A
U134	Hydrogen fluoride	Table D	Fluoride	16964-48-8	35.	NA
U136	Cacodylic acid	Table A	Arsenic	7440-38-2	0.79	NA
U137	Indeno(1,2,3-c,d)pyrene	NA	Indeno(1,2,3-c,d)-pyrene	193-39-5	0.0055 ¥B	8.2 ¥A
U138	Iodomethane	NA	Iodomethane	74-88-4	0.19 ¥B	65. ¥A
U140	Isobutyl alcohol	NA	Isobutyl alcohol	78-83-1	5.6	170. ¥A
U141	Isosafrole	NA	Isosafrole	120-58-1	0.081	2.6 ¥A
U142	Kepone	NA	Kepone	143-50-8	0.0011	0.13 ¥A
U144	Lead acetate	Table A	Lead	7439-92-1	0.040	NA
U145	Lead phosphate	Table A	Lead	7439-92-1	0.040	NA
U146	Lead subacetate	Table A	Lead	7439-92-1	0.040	NA
U151	Mercury	Tables A & D	Mercury	7439-97-6	0.030	NA
U152	Methacrylo-nitrile	NA	Methacrylonitrile	126-98-7	0.24 ¥B	84. ¥A
U154	Methanol	NA	Methanol	67-56-1	5.6	NA
U155	Methapyrilene	NA	Methapyrilene	91-80-5	0.081	1.5 ¥A

U157	3-Methylchol-anthrene	NA	3-Methylchol-anthrene	56-49-5	0.0055 B ¥	15. ¥A
U158	4,4'-Methylene-bis(2-chloro-~~4-~~aniline)	NA	Methylenebis(2-chloro-aniline)	101-14-4	0.50 ¥B	35. ¥A
U159	Methyl ethyl ketone	NA	Methyl ethyl ketone	78-93-3	0.28	36. ¥A
U161	Methyl isobutyl ketone	NA	Methyl isobutyl ketone	108-10-1	0.14	33. ¥A
U162	Methyl meth-acrylate	NA	Methyl methacrylate	80-62-6	0.14	160. ¥A
U165	Naphthalene	NA	Naphthalene	91-20-3	0.059 ¥B	3.1 ¥A
U168	2-Naphthylamine	Table D	2-Naphthylamine	91-59-8	0.52 ¥B	NA
U169	Nitrobenzene	NA	Nitrobenzene	98-95-3	0.068 ¥B	14. ¥A
U170	4-Nitrophenol	NA	4-Nitrophenol	100-02-7	0.12 ¥B	29. ¥A
U172	N-Nitrosodi-n-butylamine	NA	N-Nitrosodi-n-butylamine	924-16-3	0.40 ¥B	17. ¥A
U174	N-Nitrosodi-ethylamine	NA	N-Nitrosodiethyl-amine	55-18-5	0.40 ¥B	28. ¥A
U179	N-Nitroso-piperidine	NA	N-Nitrosopiperidine	100-75-4	0.013 ¥B	35. ¥A
U180	N-Nitroso-pyrrolidine	NA	N-Nitroso-pyrrolidine	930-55-2	0.013 ¥B	35. ¥A
U181	5-Nitro-o-toluidine	NA	5-Nitro-o-toluidine	99-55-8	0.32 ¥B	28. ¥A
U183	Pentachloro-benzene	NA	Pentachlorobenzene	608-93-5	0.055 ¥B	37. ¥A
U185	Pentachloro-nitrobenzene	NA	Pentachloronitro-benzene	82-68-8	0.055 ¥B	4.8 ¥A
U187	Phenacetin	NA	Phenacetin	62-44-2	0.081	16. ¥A
U188	Phenol	NA	Phenol	108-95-2	0.039	6.2 ¥A
U190	Phthalic anhydride (measured as Phthalic acid)	NA	Phthalic anhydride (measured as Ph-thalic acid)	85-44-9	0.54 ¥A	28. ¥A
U192	Pronamide	NA	Pronamide	23950-58-5	0.093	1.5 ¥A
U196	Pyridine	NA	Pyridine	110-86-1	0.014 ¥B	16. ¥A
U203	Safrole	NA	Safrole	94-59-7	0.~~061~~081	22. ¥A
U204	Selenium dioxide	Table A	Selenium	7782-49-2	1.0	NA
U205	Selenium sulfide	Table A	Selenium	7782-49-2	1.0	NA

U207	1,2,4,5-Tetrachlorobenzene	NA	1,2,4,5-Tetrachlorobenzene	95-94-3		0.055 ¥B	19. ¥A
U208	1,1,1,2-Tetrachloroethane	NA	1,1,1,2-Tetrachloroethane	630-20-6		0.057	42. ¥A
U209	1,1,2,2-Tetrachloroethane	NA	1,1,2,2-Tetrachloroethane	79-34-5		0.057 ¥B	42. ¥A
U210	Tetrachloroethylene	NA	Tetrachloroethylene	127-18-4		0.056 ¥B	5.6 ¥A
U211	Carbon tetrachloride	NA	Carbon tetrachloride	56-~~53~~23-5		0.057 ¥B	5.6 ¥A
U214	Tallium (I) acetate	Table D	Thallium	7440-28-0		0.14 ¥B	NA
U215	Thallium (I) carbonate	Table D	Thallium	7440-28-0		0.14 ¥B	NA
U216	Thallium (I) chloride	Table D	Thallium	7440-28-0		0.14 ¥B	NA
U217	Thallium (I) nitrate	Table D	Thallium	7440-28-0		0.14 ¥B	NA
U220	Toluene	NA	Toluene	108-88-3		0.080 ¥B	28. ¥A
U225	Tribromomethane (Bromoform)	NA	Tribromomethane (Bromoform)	75-25-2		0.63 ¥B	15. ¥A
U226	1,1,1-Trichloroethane	NA	1,1,1-Trichloroethane	71-55-6		0.054 ¥B	5.6 ¥A
U227	1,1,2-Trichloroethane	NA	1,1,2-Trichloroethane	79-00-5		0.054 ¥B	5.6 ¥A
U228	Trichloroethylene	NA	Trichloroethylene	79-01-6		0.054 ¥B	5.6 ¥A
U235	tris-(2,3-Dibromopropyl)-phosphate	NA	tris-(2,3-Dibromopropyl)-phosphate	126-72-7		0.025	0.10 ¥A
U239	Xylenes	NA	Xylene		e	0.32 ¥B	28. ¥A
U240	2,4-Dichlorophenoxyacetic acid	NA	2,4-Dichlorophenoxyacetic acid	94-75-7		0.72	10. ¥A
U243	Hexachloropropene	NA	Hexachloropropene	~~1988~~1888-71-7	¥B	0.~~095~~035	28.
U247	Methoxychlor	NA	Methoxychlor	72-43-5		0.25 ¥B	0.18 ¥A

¥A Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart ~~O~~O or 725.Subpart ~~O~~O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in Section 728.107.

¥B Based on analysis of composite samples.

~~Z~~C As analyzed using SW-846 Method 9010 or 9012; sample size: ~~0.5-10~~10 g; distillation time: one hour

~~to one hour~~ and fifteen minutes.

D Reserved.

NA Not Applicable.

(Source: Amended at 16 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 values/piping; physical penetration of the container; and/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 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, and/or organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Total Organic Carbon 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) permangantes; and/or

9) other oxidizing 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 Carbon 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; and/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 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.

DEACT Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/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 Nuclear Regulatory Commission.

IMERC Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O. 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 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O.

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/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 2 but less than 12.5 as measured in the aqueous residuals.

NLDBR No land disposal based on recycling.

PRECP Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, ~~flourides~~fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination:

1) Lime (i.e., containing oxides and/or hydroxides of calcium and/or magnesium;

2) caustic (i.e., sodium and/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 floculating, coagulation, or similar reagents/processes that enhance sludge dewatering characteristics are not precluded from use.

RBERY Thermal recovery of Beryllium.

RCGAS Recovery/reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resale; filtering/adsorption of impurities; remixing for direct reuse ~~of~~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; and/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 ultrafiltrat__l) and centrifugation, when used in conjunction with t 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. T retorting or roasting unit (or facility) must be subject to one or more of the following:

a) A National Emissions Standard for Hazardous Air Pollutants (NESHAP) for mercury (40 CFR 61, Subpart

b) A Best Available Control Technology (BACT) or a Low Achievable Emission Rate (LAER) standard for mercur imposed pursuant to a Prevention of Significant Deterioration (PSD) permit (including 35 Ill. Adm. 201 through 203); or

c) A state permit that establishes emission limitation (within meaning of Section 302 of the Clean Air Act for mercury, including a permit issued pursuant to Ill. Adm. Code 201. All wastewater and nonwastewat residues derived from this process must then co ly with the corresponding treatment standards per wast code with consideration of any applicable subcatego (e.g., High or Low Mercury Subcategories).

RMETL Recovery of metals or inorganics utilizing one or m of the following direct physical/removal technologi

1) Ion exchange;

2) resin or solid (i.e., zeolites) adsorption;

3) reverse osmosis;

4) chelation/solvent extraction;

5) freeze crystalization;

6) ultrafiltration; and/or ~~6~~

7) simple precipitation (i.e., crystalization)

Note: this does not preclude the use of other physical p separation or concentration techniques such as decantati filtration (including ultrafiltration), and centrifugati when used in conjunction with the above listed recove 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/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 furnaces".

RZINC Resmelting in high temperature metal recovery units for the purpose of recovery of zinc ~~high temperature metal recovery units~~.

STABL Stabilization with the following reagents (or waste reagents) or combinations of reagents:

1) Portland cement; or

2) lime/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/cure time and/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/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 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/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 D 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.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Table D Technology-Based Standards by RCRA Waste Code

Waste Codes	See Also	CAS No.	Technology Code, Wastewaters	Technology Code, Nonwastewaters	Waste Descriptions and/or Treatment Subcategory
D001	NA	NA	DEACT	NA	Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)-wastewaters
D001	NA	NA	NA	DEACT	Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)-Low TOC Ignitable Liquids Subcategory--Less than 10% total organic carbon
D001	NA	NA	NA	FSUBS; RORGS; or INCIN	Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)-High TOC Ignitable Liquids Subcategory--Greater than or equal to 10% total organic carbon
D001	NA	NA	NA	DEACT** B	Ignitable compressed gases based on 35 Ill. Adm. Code 721.121(a)(3)
D001	NA	NA	NA	DEACT	Ignitable reactives based on 35 Ill. Adm. Code 721.121(a)(2)
D001	NA	NA	DEACT	DEACT	Oxidizers based on 35 Ill. Adm. Code 721.121(a)(4)
D002	NA	NA	DEACT	DEACT	Acid subcategory based on 35 Ill. Adm. Code 721.122(a)(1)

D002	NA	NA	DEACT	DEACT	Alkaline subcategory based on 35 Ill. Adm. Code 721.122(a)(1)
D002	NA	NA	DEACT	DEACT	Other corrosives based on 35 Ill. Adm. Code 721.122(a)(2)
D003	NA	NA	DEACT (may not be diluted)	DEACT (may not be diluted)	Reactive sulfides based on 35 Ill. Adm. Code 721.123(a)(5)
D003	NA	NA	DEACT	DEACT	Explosives based on 35 Ill. Adm. Code 721.123(a)(6), (7) and (8)
D003	NA	NA	NA	DEACT	Water reactives based on 35 Ill. Adm. Code 721.123(a)(2), (3) and (4)
D003	NA	NA	DEACT	DEACT	Other reactives based on 35 Ill. Adm. Code 721.123(a)(1)
D006	NA	7440-43-9	NA	RTHERM	Cadmium-containing batteries
D008	NA	7439-~~82~~97-1	NA	RLEAD	Lead acid batteries (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).)

D009	Tables A & B	7439-~~8~~9~~7~~-6	NA	IMERC; or RMERC	Mercury: (High Mercury Subcategory--grea than or equal to mg/kg total Mercury--contains mercury and organ (and are not inci erator residues))
D009	Tables A & B	7439-~~8~~9~~7~~-6	NA	RMERC	Mercury: (High Mercury Subcategory--grea than or equal to mg/kg total Mercury--inorganic (including incinerator resid and residues from RMERC))
D012	Table B	72-20-8	BIODG; or INCIN	NA	Endrin
D013	Table B	58-89-9	CARBN; or INCIN	NA	Lindane
D014	Table B	72-43-~~6~~5	WETOX; or INCIN	NA	Methoxychlor
D015	Table B	8001-35-1	BIODG; or INCIN	NA	Toxaphene
D016	Table B	94-75-7	CHOXD; BIODG; or INCIN	NA	2,4-D
D017	Table B	93-72-1	CHOXD; or INCIN	NA	2,4,5-TP
F005	Tables A & B	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Nitropropane
F005	Tables A & B	110-80-5	BIODG; or INCIN	INCIN	2-Ethoxyethanol
F024	Tables A & B	NA	INCIN	INCIN	----------

K025	NA	NA	LLEXT fb SSTRIP fb CARBN; or INCIN	INCIN	Distillation bottoms from the production of nitrobenzene by the nitration of benzene
K026	NA	NA	INCIN	INCIN	Stripping still tails from the production of methyl ethyl pyridines
K027	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Centrifuge and distillation residues from toluene diisocyanate production
K039	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Filter cake from the filtration of diethylphosphorodithioc acid in the production of phorate
K044	NA	NA	DEACT	DEACT	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	NA	NA	DEACT	DEACT	Spent carbon from the treatment of wastewater containing explosives
K047	NA	NA	DEACT	DEACT	Pink/red water from TNT operations
~~K061~~	~~Table B~~	~~NA~~	~~NA~~	~~NLDBR~~	~~Emission control dust/sludge from the primary production of steel in electric furnaces (High Zinc Subcategory--greater than or equal to 15% total Zinc)~~

K069	Tables A & B	NA	NA	RLEAD	Emission control dust/sludge from secondary lead smelting: Non-Calcium Sulfate Subcategory
K106	Tables A & B	NA	NA	RMERC	Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory-greater than or equal to 260 mg/kg total mercury)
K113	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K114	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Vicinals from the purification of toluenedi~~ame~~amine in the production of toluenediamine via hydrogenation of dinitrotoluene
K115	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Heavy ends from the purification of toluenedi~~ame~~amine in the production of toluenediamine via hydrogenation of dinitrotoluene
K116	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine

P001	NA	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Warfarin (>0.3%)
P002	NA	591-08-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Acetyl-2-thiourea
P003	NA	107-02-8	~~(WETOX or CHOXD) fb CARBN; or INCIN~~NA	FSUBS; or INCIN	Acrolein
P005	NA	107-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Allyl alcohol
P006	NA	20859-73-8	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Aluminum phosphide
P007	NA	2763-96-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	5-Aminoethyl 3-isoxazolol
P008	NA	504-24-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	4-Aminopyridine
P009	NA	131-74-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Ammonium picrate
P014	NA	108-95-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiophenol (Benzene thiol)
P015	NA	7440-41-7	~~NA~~RMETL or RTHRM	RMETL; or RTHRM	Beryllium dust

P016	NA	542-88-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Bis(chloromethyl)-ether
P017	NA	598-31-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Bromoacetone
P018	NA	357-57-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Brucine
P022	Table B	75-15-0	NA	INCIN	Carbon disulfide
P023	NA	107-20-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chloroacetaldehyde
P026	NA	5344-82-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-(o-Chlorophenyl)-thiourea
P027	NA	542-76-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3-Chloropropio-nitrile
P028	NA	100-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzyl chloride
P031	NA	460-19-5	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen
P033	NA	506-77-4	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen chloride
P034	NA	131-89-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Cyclohexyl-4,6-di-nitrophenol

P040	NA	297-97-2	CARBN; or INCIN	FSUBS; or INCIN	O,O-Diethyl O-pyrazinyl phospho thioate
P041	NA	311-45-5	CARBN; or INCIN	FSUBS; or INCIN	Diethyl-p-nitrophenyl phosphate
P042	NA	51-43-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Epinephrine
P043	NA	55-91-4	CARBN; or INCIN	FSUBS; or INCIN	Diisopropylfluorophosphate (DFP)
P044	NA	60-51-5	CARBN; or INCIN	FSUBS; or INCIN	Dimethoate
P045	NA	39196-18-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiofanox
P046	NA	122-09-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	alpha,alpha-Dimethylphenethylami
P047	NA	534-52-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	4,6-Dinitro-o-cres salts
P049	NA	541-53-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2,4-Dithiobiuret
P054	NA	151-56-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Aziridine
P056	Table B	7782-41-4	NA	ADGAS fb NEUTR	Fluorine
P057	NA	640-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Fluoroacetamide

P058	NA	62-74-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Fluoroacetic aci sodium salt
P062	NA	757-58-4	CARBN; or INCIN	FSUBS or INCIN	Hexaethyltetra-phosphate
P064	NA	624-83-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Isocyanic acid, ethyl ester
P065	Tables A & B	628-86-4	NA	RMERC	Mercury fulminat (High Mercury Su category--greate than or equal to mg/kg total Mercury--either cinerator residu or residues from RMERC)
P065	Tables A & B	628-86-4	NA	IMERC	Mercury fulminat (All nonwastewat that are not incinerator resi or are not resid from RMERC; rega less of Mercury Content)
P066	NA	16752-77-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methomyl
P067	NA	75-55-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Methylaziridine
P068	NA	60-34-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; OR INCIN	Methyl hydrazine

P069	NA	75-86-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methyllactonitrile
P070	NA	116-06-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Aldicarb
P072	NA	86-88-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Naphthyl-2-thio-urea
P075	NA	54-11-5* A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Nicotine and salts
P076	NA	10102-43-9	ADGAS	ADGAS	Nitric oxide
P078	NA	10102-44-0	ADGAS	ADGAS	Nitrogen dioxide
P081	NA	55-63-0	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Nitroglycerin
P082	Table B	~~65~~62-75-9	NA	INCIN	N-Nitrosodimethyl-amine
P084	NA	4549-40-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitrosomethyl-vinylamine
P085	NA	152-16-9	CARBN; or INCIN	FSUBS; or INCIN	Octamethylpyro-phosphoramide
P087	NA	20816-12-0	~~NA~~ RMETL; or RTHRM	RMETL; or RTHRM	Osmium tetroxide
P088	NA	145-73-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Endothall

P092	Tables A & B	62-38-4	NA	RMERC	Phenyl mercury acetate: (High Mercury Sub-category--greater than or equal to 260 mg/kg total Mercury--either in-cinerator residues or residues from RMERC)
P092	Tables A & B	62-38-4	NA	IMERC; or RMERC	Phenyl mercury acetate: (All nonwastewaters that are not incinerator residues and are not residues from RMERC: regardless of Mercury Content)
P093	NA	103-85-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Phenylthiourea
P095	NA	75-44-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Phosgene
P096	NA	7803-51-2	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Phosphine
P102	NA	107-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Propargyl alcohol
P105	NA	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Sodium azide
P108	NA	57-24-9* A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Strychnine and salts

P109	NA	3689-24-5	CARBN; or INCIN	FSUBS; or INCIN	Tetraethyldithio-pyrophosphate
P112	NA	509-14-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Tetranitromethane
P113	Table B	1314-32-5	NA	RTHRM; or STABL	Thallic oxide
P115	Table B	7446-18-6	NA	RTHRM; or STABL	Thallium (I) sulfate
P116	NA	79-19-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiosemicarbazide
P118	NA	75-70-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trichloromethane-thiol
P119	Table B	7803-55-6	NA	STABL	Ammonium vanadate
P120	Table B	1314-62-1	NA	STABL	Vanadium pentoxide
P122	NA	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Zinc Phosphide (≤≥10%)
U001	NA	75-07-0	(WETOX or CHOXD) fb CARBN; or INCIN	~~FSUBS; or~~ INCIN	Acetaldehyde
U003	Table B	75-05-8	NA	INCIN	Acetonitrile
U006	NA	75-36-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Acetyl chloride
U007	NA	79-06-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Acrylamide

U008	NA	79-10-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Acrylic acid
U010	NA	50-07-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Mitomycin C
U011	NA	61-82-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Amitrole
U014	NA	492-80-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Auramine
U015	NA	115-02-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Azaserine
U016	NA	225-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Benz(c)acridine
U017	NA	98-87-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzal chloride
U020	NA	98-09-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzenesulfonyl chloride
U021	NA	92-87-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzidine
U023	NA	98-07-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Benzotrichloride

U026	NA	494-03-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chlornaphazin
U033	NA	353-50-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Carbonyl fluoride
U034	NA	75-87-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trichloro-acetaldehyde (Chloral)
U035	NA	305-03-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chlorambucil
U038	Table B	510-15-6	NA	INCIN	Chlorobenzilate
U041	NA	106-89-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Chloro-2,3-epoxy-propane (Epichloro-hydrin)
U042	Table B	110-75-8	NA	INCIN	2-Chloroethyl vinyl ether
U046	NA	107-30-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chloromethyl methyl ether
U049	NA	3165-93-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	4-Chloro-o-toluidine hydrochloride
U053	NA	4170-30-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Crotonaldehyde
U055	NA	98-82-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Cumene

U056	NA	110-82-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Cyclohexane
U057	Table B	108-94-1	NA	FSUBS; or INCIN	Cyclohexanone
U058	NA	50-18-0	CARBN; or INCIN	FSUBS; or INCIN	Cyclophosphamide
U059	NA	20830-81-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Daunomycin
U062	NA	2303-16-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Diallate
U064	NA	189-55-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,2,7,8-Dibenzo-pyrene
U073	NA	91-94-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dichlorobenz-idine
U074	NA	1476-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	cis-1,4-Dichloro-2-butene; trans-1,4-Dichloro-2-butene
U085	NA	1464-53-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,2:3,4-Diepoxy-butane
U086	NA	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	N,N-Diethylhydrazine
U087	NA	3288-58-2	CARBN; or INCIN	FSUBS; or INCIN	O,O-Diethyl S-methyldithio-phosphate

U089	NA	56-53-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Diethyl stilbestrol
U090	NA	94-58-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Dihydrosafrole
U091	NA	119-90-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dimethoxy-benzidine
U092	NA	124-40-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dimethylamine
U093	Table B	621-90-9	NA	INCIN	p-Dimethylaminoazo-benzene
U094	NA	57-97-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	7,12-Dimethylbenz-(a)anthracene
U095	NA	119-93-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dimethylbenz-idine
U096	NA	80-15-9	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	alpha,alpha-Dimethyl-benzyl hydroperoxide
U097	NA	79-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dimethylcarbamoyl chloride
U098	NA	57-14-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,1-Dimethyl-hydrazine

U099	NA	540-73-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,2-Dimethyl-hydrazine
U103	NA	77-78-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Dimethyl sulfate
U109	NA	122-66-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,2-Diphenyl-hydrazine
U110	NA	142-84-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dipropylamine
U113	NA	140-88-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Ethyl acrylate
U114	NA	111-54-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethylenebisdithio-carbamic acid
U115	NA	75-21-8	(WETOX or CHOXD) fb CARBN; or INCIN	CHOXD; or INCIN	Ethylene oxide
U116	NA	96-45-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethylene thiourea
U119	NA	62-50-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethyl methane-sulfonate

U122	NA	50-00-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Formaldehyde
U123	NA	64-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Formic acid
U124	NA	110-00-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Furan
U125	NA	98-01-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Furfural
U126	NA	765-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Glycidylaldehyde
U132	NA	70-30-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Hexachlorophene
U133	NA	302-01-2	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Hydrazine
U134	Table B	7664-39-3	NA	ADGAS fb NEUTR; or NEUTR	Hydrogen Fluoride
U135	NA	7783-06-4	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Hydrogen Sulfide
U143	NA	303-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Lasiocarpine

U147	NA	108-31-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Maleic anhydride
U148	NA	123-33-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Maleic hydrazide
U149	NA	109-77-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Malononitrile
U150	NA	148-82-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Melphalan
U151	Tables A & B	7439-97-6	NA	RMERC	Mercury: (High Mercury Sub-category--greater than or equal to 26 mg/kg total Mercury
U153	NA	74-93-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methanethiol
U154	NA	67-56-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Methanol
U156	NA	79-22-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methyl chloro-carbonate
U160	NA	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Methyl ethyl ketone peroxide
U163	NA	70-25-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Methyl-N'-nitro-N-Nitrosoguanidine

U164	NA	56-04-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methylthiouracil
U166	NA	130-15-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,4-Naphthoquinone
U167	NA	134-32-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Naphthylamine
U168	Table B	91-59-8	NA	INCIN	2-Naphthylamine
U171	NA	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Nitropropane
U173	NA	1116-54-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-diethanol-amine
U176	NA	759-73-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-ethyl-urea
U177	NA	684-93-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-methyl-urea
U178	NA	615-53-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-methyl-urethane
U182	NA	123-63-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Paraldehyde
U184	NA	76-01-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Pentachloroethane

U186	NA	504-60-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,3-Pentadiene
U189	NA	1314-80-3	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Phosphorus sulfide
U191	NA	109-06-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Picoline
U193	NA	1120-71-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1,3-Propane sultone
U194	NA	107-10-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	n-Propylamine
U197	NA	106-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	p-Benzoquinone
U200	NA	50-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Reserpine
U201	NA	108-46-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Resorcinol
U202	NA	81-07-2* A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Saccharin and salts
U206	NA	18883-66-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Streptozatocin

U213	NA	109-99-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Tetrahydrofuran
U214	Table B	563-68-8	NA	RTHRM; or STABL	Thallium (I) acetate
U215	Table B	6533-73-9	NA	RTHRM; or STABL	Thallium (I) carbonate
U216	Table B	7791-12-0	NA	RTHRM; or STABL	Thallium (I) chloride
U217	Table B	10102-45-1	NA	RTHRM; or STABL	Thallium (I) nitrate
U218	NA	62-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thioacetamide
U219	NA	62-56-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiourea
U221	NA	25376-45-8	CARBN; or INCIN	FSUBS; or INCIN	Toluenediamine
U222	NA	636-21-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	o-Toluidine hydrochloride
U223	NA	26471-62-5	CARBN; or INCIN	FSUBS; or INCIN	Toluene diisocyanate
U234	NA	99-35-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	sym-Trinitrobenzene
U236	NA	72-57-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trypan Blue

U237	NA	66-75-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Uracil mustard
U238	NA	51-79-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethyl carbamate
U240	NA	94-75-7* A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2,4-Dichlorophenoxy-acetic acid (salts and esters)
U244	NA	137-26-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiram
U246	NA	506-68-3	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen bromide
U248	NA	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Warfarin (~~greater than or equal to~~ 3% or less)
U249	NA	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Zinc Phosphide (<10%)

*A CAS Number given for parent compound only.

**B This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.

NA Not Applicable.

BOARD NOTE: 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 this Table 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. When more than one technology (or treatment train) are specified a 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. See Section 728.Table C for a listing of the technology codes and technology-based treatment standards. Derived from 40 CFR 268.42, Table 2~~, as adopted at 54 Fed. Reg. 22694, June 1, 1990~~ (1990), as amended at 56 Fed. Reg. 3876, January 31, 1991.

(Source: Amended at 16 Ill. Reg. , effective)

Section 728.Table E Standards for Radioactive Mixed Waste

~~WASTE CODES~~	~~TECHNOLOGY CODE~~ ~~CAS NO.~~	~~WASTEWATERS~~	~~NON-WASTEWATERS~~	~~WASTE DESCRIPTIONS AND/OR TREATMENT SUBCATEGORY~~
~~D002~~	~~NA~~	~~NA~~	~~HLVIT~~	~~Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~
~~D004~~	~~NA~~	~~NA~~	~~HLVIT~~	~~Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~
~~D005~~	~~NA~~	~~NA~~	~~HLVIT~~	~~Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~
~~D006~~	~~NA~~	~~NA~~	~~HLVIT~~	~~Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~
~~D007~~	~~NA~~	~~NA~~	~~HLVIT~~	~~Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~
~~D008~~	~~7439-92-1~~	~~NA~~	~~MACRO~~	~~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.)~~

~~D008 NA NA HLVIT Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~

~~D009 7439-97-6 NA AMLGM Elemental mercury contaminated with radioactive materials~~

~~D009 7439-97-6 NA INCIN Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory~~

~~D009 NA NA HLVIT Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~

~~D010 NA NA HLVIT Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~

~~D011 NA NA HLVIT Radioactive High Level Wastes Generated During the Reprocessing of Fuel Rods Subcategory~~

~~U151 7439-97-6 NA AMLGM Mercury: Elemental mercury contaminated with radioactive materials~~

~~NA--Not Applicable.~~

			Technology Code	
Waste code	Waste descriptions and/or treatment category	CAS No.	Wastewaters	Nonwastewaters
D002	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT

D004	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D005	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D006	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D007	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D008	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 organolead materials that can be incinerated and stabilized as ash).	7439-92-1	NA	MACRO
D008	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D009	Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM
D009	Hydraulic oil contaminated with mercury; radioactive materials subcategory	7439-97-6	NA	IMERC
D009	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D010	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT

D011	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
U151	Mercury: Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM

Note: NA means Not Applicable.

(Source: Amended at 16 Ill. Reg. , effective)