ILLINOIS POLLUTION CONTROL BOARD March 20, 2008

IN THE MATTER OF:)	
)	
RCRA SUBTITLE C UPDATE, USEPA)	R07-5
AMENDMENTS (January 1, 2006 through)	(Identical-in-Substance
June 30, 2006))	Rulemaking - Land)
IN THE MATTER OF:)	
)	
RCRA SUBTITLE C UPDATE, USEPA)	R07-14
AMENDMENTS (July 1, 2006 through)	(Identical-in-Substance
December 31, 2006))	Rulemaking - Land)
)	(Consolidated)

Proposed Rule. Proposal for Public Comment.

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

The Board today proposes amendments to the Illinois regulations that are "identical in substance" to hazardous waste regulations adopted by the United States Environmental Protection Agency (USEPA). The USEPA rules implement Sections 3001, 3002, 3003, 3004, and 3005 of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6921-6925 (2005)). The Board also extends the deadline for final adoption of amendments based on this proposal until July 18, 2008, as is explained in the accompanying opinion also adopted today.

The consolidated R07-5 docket includes federal RCRA Subtitle C amendments that USEPA adopted in the period January 1, 2006 though June 30, 2006, and the R07-14 docket includes federal RCRA Subtitle C amendments that USEPA adopted in the period July 1, 2006 though December 31, 2006. The amendments incorporate into the Illinois regulations three sets of federal amendments that occurred during these two periods: the April 4, 2006 regulatory burden reduction initiative amendments, the July 14, 2006 corrective amendments, and the July 28, 2006 amendments excluding certain used cathode ray tubes from the definition of solid waste. The amendments also complete amendment of the Illinois rules in response to the March 5, 2005 amendments to the hazardous waste manifest system by removing obsolete provisions from the Illinois regulations. The amendments further make a limited number of corrections to the text of the rules.

Sections 7.2 and 22.4(a) of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 22.4(a) (2006)) provide for quick adoption by the Board of regulations that are identical in substance to federal regulations that USEPA adopts to implement Sections 3001, 3002, 3003, 3004, and 3005 of the federal RCRA. Section 22.4(a) also provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) (5 ILCS 100/5-35 and 5-40 (2006)) do not apply to the Board's adoption of identical-in-substance regulations. The federal RCRA Subtitle

C hazardous waste regulations are found at 40 C.F.R. 260 through 268, 270 through 273, and 279.

This order is supported by an opinion that the Board also adopts today. The Board will cause the proposed amendments to be published in the *Illinois Register* and will hold the docket open to receive public comments for 45 days after the date of publication. The Board will then adopt and file the final rules, taking into account the public comments received. The rules will be adopted and filed no later than July 18, 2008, pursuant to the extension of the deadline adopted by the Board in this opinion and order pursuant to Section 7.2(b) of the Act (415 ILCS 5/7.2(b) (2006)).

The Board finds that an extension of the due date for final action to adopt amendments based on the present proposal is necessary until July 18, 2008. The Clerk is directed to cause the filing of the following proposed amendments with the Office of the Secretary of State for their publication in the *Illinois Register*:

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

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

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

R03-7 at 27 Ill. Reg. 3496, effective February 14, 2003; amended in R03-18 at 27 Ill. Reg.
12683, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 5966, effective April 13, 2005
amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 2845, effective February 23, 2006; amended in
R06-16/R06-17/R06-18 at 31 Ill. Reg. 487, effective December 20, 2006; amended in R07-
5/R07-14 at 32 Ill. Reg, effective

SUBPART D: APPLICATIONS

Section 703.182 Contents of Part B

Part B information requirements presented in Sections 703.183 et seq. reflect the standards promulgated in 35 Ill. Adm. Code 724. These information requirements are necessary in order for the Agency to determine compliance with the 35 Ill. Adm. Code 724 standards. If an owner or operator of a HWM facility can demonstrate that the information prescribed in Part B cannot be provided to the extent required, the Agency may make allowance for submission of such information on a case by case basis. Information required in Part B must be submitted to the Agency and signed in accordance with the requirements in 35 Ill. Adm. Code 702.126. Certain technical data, such as design drawings and specifications and engineering studies, must be certified by a registered professional engineer qualified Professional Engineer. For post-closure care permits, only the information specified in Section 703.214 is required in Part B of the permit application. Part B of the RCRA application includes the following:

- a) General information (Section 703.183);
- b) Facility location information (Section 703.184);
- c) Groundwater protection information (Section 703.185);
- d) Exposure information (Section 703.186); and
- e) Specific information (Section 703.200 et seq.).

BOARD NOTE: Derived from 40 CFR 270.14(a) (2002) (2007).

(Source: Amended at 32 Ill. Reg. _____, effective _____

Section 703.202 Tank Systems

Except as otherwise provided in 35 Ill. Adm. Code 724.290, the owner or operator of a facility that uses tanks to store or treat hazardous waste must provide the following additional information:

a) A written assessment that is reviewed and certified by an independent, a qualified, registered professional engineer Professional Engineer as to the structural integrity and suitability for handling hazardous waste of each tank system, as required under 35 Ill. Adm. Code 724.291 and 724.292;

- b) Dimensions and capacity of each tank;
- c) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);
- d) A diagram of piping, instrumentation, and process flow for each tank system;
- e) A description of materials and equipment used to provide external corrosion protection, as required under 35 Ill. Adm. Code 724.292(a)(3)(B);
- f) For new tank systems, a detailed descriptions of how the tank systems will be installed in compliance with 35 Ill. Adm. Code 724.292(b), (c), (d), and (e);
- g) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of 35 Ill. Adm. Code 724.293(a), (b), (c), (d), (e), and (f);
- h) For tank systems for which alternative design and operating practices are sought pursuant to 35 Ill. Adm. Code 724.293(g), the following:
 - Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water during the life of the facility,
 - 2) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment, or
 - A copy of the petition for alternative design and operating practices or, if such have already been granted, a copy of the Board order granting alternative design and operating practices;
- i) Description of controls and practices to prevent spills and overflows, as required under 35 Ill. Adm. Code 724.294(b);
- j) For tank systems in which ignitable, reactive or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of 35 Ill. Adm. Code 724.298 and 724.299; and
- k) Information on air emission control equipment, as required in Section 703.213.

BOARD NOTE: Derived from 40 CFR 270.16 (2002) (2007).

(Source: Amended a	t 32 Ill. Reg.	, effective)
Section 703.212	Drip Pads		

Except as otherwise provided by 35 Ill. Adm. Code 724.101, the owner or operator of a hazardous waste treatment, storage, or disposal facility that collects, stores, or treats hazardous waste on drip pads must provide the following additional information:

- a) A list of hazardous wastes placed or to be placed on each drip pad.
- b) If an exemption is sought to Subpart F of 35 Ill. Adm. Code 724, as provided by 35 Ill. Adm. Code 724.190, detailed plans and an engineering report describing how the requirements of 35 Ill. Adm. Code 724.190(b)(2) will be met.
- c) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated, and maintained to meet the requirements of 35 Ill. Adm. Code 724.673, including the as-built drawings and specifications. This submission must address the following items, as specified in 35 Ill. Adm. Code 724.671:
 - 1) The design characteristics of the drip pad;
 - 2) The liner system;
 - 3) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any releases of hazardous waste or accumulated liquid at the earliest practicable time;
 - 4) Practices designed to maintain drip pads;
 - 5) The associated collection system;
 - 6) Control of run-on to the drip pad;
 - 7) Control of run-off from the drip pad;
 - 8) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;
 - 9) Cleaning procedures and documentation:
 - A) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or

other materials, including, but not limited to: rinsing, washing with detergents or other appropriate solvents, or steam cleaning; and

- B) Provisions for documenting the date, time, and cleaning procedure used each time the pad is cleaned;
- Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;
- 11) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and non-pressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;
- 12) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;
- 13) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals;
- A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of 35 Ill. Adm. Code 724.673. This information must be included in the inspection plan submitted under Section 703.183(e);
- A certification signed by an independent, <u>a</u> qualified, <u>registered</u> professional engineer <u>Professional Engineer</u>, stating that the drip pad design meets the requirements of 35 Ill. Adm. Code 724.673(a) through (f); and
- 16) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under 35 Ill. Adm. Code 724.675(a). For any waste not to be removed from the drip pad upon closure, the owner or operator must submit detailed plans and an engineering report describing how 35 Ill. Adm. Code 724.410(a) and (b) will be complied with. This information must be included in the closure plan and, where applicable, the post-closure plan submitted under Section 703.183(m).

BOARD NOTE:	Derived from 40 CFI	R 270.26 (2002) <u>(2007)</u> .	
(Source: Amende	ed at 32 Ill. Reg.	, effective	

40 CED 270 26 (2002) (2007)

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

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

- a) Documentation for each floating roof cover installed on a tank subject to 35 Ill. Adm. Code 724.984(d)(1) or (d)(2) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications, as listed in 35 Ill. Adm. Code 725.991(e)(1) or (f)(1).
- b) Identification of each container area subject to the requirements of Subpart CC of 35 Ill. Adm. Code 724 and certification by the owner or operator that the requirements of this Subpart D are met.
- c) Documentation for each enclosure used to control air pollutant emissions from containers in accordance with the requirements of 35 Ill. Adm. Code 724.984(d)(5) or 724.986(e)(1)(ii) that includes records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure, as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- d) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of 35 Ill. Adm. Code 724.985(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in 35 Ill. Adm. Code 724.985(c)(1).
- e) Documentation for each closed-vent system and control device installed in accordance with the requirements of 35 Ill. Adm. Code 724.987 that includes design and performance information, as specified in Section 703.124(c) and (d).
- f) An emission monitoring plan for both Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and control device monitoring methods. This plan must include the following information: monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting-exceedences exceedances, and procedures for mitigating noncompliances.

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

BOARD NOTE: Derived from 40 CFR 270.27(a)-(2005) (2007).	
(Source: Amended at 32 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 of this Part, 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 must provide the Agency with the necessary information to support the requested classification.
 - 2) The Agency must make the determination described in subsection (d)(1) of this Section as promptly as practicable. In determining the appropriate class for a specific modification, the Agency must consider the similarity of the modification to other modifications codified in Appendix A of this Part and the following criteria:
 - A) Class 1 modifications 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 adequately 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 any of the following:
 - 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 must, without prior public notice and comment, grant the permittee a temporary authorization in accordance with this subsection (e). Temporary authorizations have a term of not more than 180 days.
 - 2) Procedures.
 - A) The permittee may request a temporary authorization for the following:
 - i) Any Class 2 modification meeting the criteria in subsection (e)(3)(B) of this Section; and
 - ii) Any Class 3 modification that meets the criteria in subsection (e)(3)(B)(i) of this Section or that meets the criteria in subsections (e)(3)(B)(iii) through (e)(3)(B)(v) of this Section and provides improved management or treatment of a hazardous waste already listed in the facility permit.
 - B) The temporary authorization request must include the following:
 - 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 must 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 must approve or deny the temporary authorization as quickly as practical. To issue a temporary authorization, the Agency must find as follows:
 - A) That the authorized activities are in compliance with the standards of 35 Ill. Adm. Code 724.
 - B) That 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, containers, or containment buildings, 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 adequately protect human health and the environment.
- 4) A temporary authorization must 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 either of the following is true:
 - 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 III. Adm. Code 703.283 are conducted.

- f) Public notice and appeals of permit modification decisions.
 - The Agency must notify persons on the facility mailing list and appropriate units of State and local government within 10 days after any decision to grant or deny a Class 2 or 3 permit modification request. The Agency must also notify such persons within 10 days after an automatic authorization for a Class 2 modification goes into effect pursuant to 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.
 - An automatic authorization that goes into effect pursuant to 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 regulated wastes and units.
 - The permittee is authorized to continue to manage wastes listed or identified as hazardous pursuant to 35 Ill. Adm. Code 721, or to continue to manage hazardous waste in units newly regulated as hazardous waste management units, if each of the following is true:
 - A) 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) The permittee submits a Class 1 modification request on or before the date on which the waste becomes subject to the new requirements;
 - C) The permittee is in compliance with the applicable standards of 35 Ill. Adm. Code 725 and 726;
 - D) The permittee also submits a complete 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 pursuant to 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 certify compliance with all these requirements, the owner or operator loses authority to operate pursuant to this Section.
- 2) New wastes or units added to a facility's permit pursuant to this subsection (g) do not constitute expansions for the purpose of the 25 percent capacity expansion limit for Class 2 modifications.
- h) Military hazardous waste munitions treatment and disposal. The permittee is authorized to continue to accept waste military munitions notwithstanding any permit conditions barring the permittee from accepting off-site wastes, if each of the following is true:
 - 1) The facility was in existence as a hazardous waste facility and the facility was already permitted to handle the waste military munitions on the date when the waste military munitions became subject to hazardous waste regulatory requirements;
 - On or before the date when the waste military munitions become subject to hazardous waste regulatory requirements, the permittee submits a Class 1 modification request to remove or amend the permit provision restricting the receipt of off-site waste munitions; and
 - 3) The permittee submits a complete Class 2 modification request within 180 days after the date when the waste military munitions became subject to hazardous waste regulatory requirements.
- i) Permit modification list. The Agency must maintain a list of all approved permit modifications and must publish a notice once a year in a State-wide newspaper that an updated list is available for review.
- j) Combustion facility changes to meet federal 40 CFR 63 MACT standards. The following procedures apply to hazardous waste combustion facility permit modifications requested pursuant to Appendix A, paragraph L(9) of this Part.
 - 1) A facility owner or operator must have complied with the federal notification of intent to comply (NIC) requirements of 40 CFR 63.1210 that was in effect prior to October 11, 2000, (see subpart EEE of 40 CFR 63 (2000), incorporated by reference in 35 Ill. Adm. Code 720.111(b)) in order to request a permit modification pursuant to this Section for the

- purpose of technology changes needed to meet the standards of 40 CFR 63.1203, 63.1204, and 63.1205, incorporated by reference in 35 III. Adm. Code 720.111(b).
- If the Agency does not act to either approve or deny the request within 90 days of receiving it, the request must be deemed approved. The Agency may, at its discretion, extend this 90-day deadline one time for up to 30 days by notifying the facility owner or operator in writing before the 90 days has expired. A facility owner or operator must comply with the NIC requirements of 40 CFR 63.1210(b) and 63.1212(a) before a permit modification can be requested under this Section for the purpose of technology changes needed to meet the 40 CFR 63.1215, 63.1216, 63.1217, 63.1218, 63.1219, 63.1220, and 63.1221 standards as added on October 12, 2005, incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- k) Waiver of RCRA permit conditions in support of transition to the federal 40 CFR 63 MACT standards.
 - The facility owner or operator may request to have specific RCRA operating and emissions limits waived by submitting a Class 1 permit modification request under Appendix A of this Part, paragraph L.10. The owner or operator must provide the information described in subsections (k)(1)(A) though (k)(1)(C) of this Section, with Agency review subject to the conditions of subsection (k)(1)(D) of this Section:
 - A) It must identify the specific RCRA permit operating and emissions limits that the owner or operator is requesting to waive;
 - B) It must provide an explanation of why the changes are necessary in order to minimize or eliminate conflicts between the RCRA permit and MACT compliance; and
 - C) It must discuss how the revised provisions will be sufficiently protective.
 - D) The Agency must approve or deny the request within 30 days after receipt of the request. The Agency may, at its discretion, extend this 30-day deadline one time for up to 30 days by notifying the facility owner or operator in writing.
 - To request this modification in conjunction with MACT performance testing, where permit limits may only be waived during actual test events and pretesting, as defined under 40 CFR 63.1207(h)(2)(i) and (h)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for an aggregate time not to exceed 720 hours of operation (renewable at the

discretion of the Agency) the owner or operator must fulfill the conditions of subsection (k)(2)(A) of this Section, subject to the conditions of subsection (k)(2)(B) of this Section:

- A) It must submit its modification request to the Agency at the same time it submits its test plans to the Agency.
- B) The Agency may elect to approve or deny the request contingent upon approval of the test plans.
- l) Performance Track member facilities. The following procedures apply to the owners and operators of a Performance Track member facility that requests a permit modification under paragraph O.1. in Appendix A to this Part.
 - 1) The owner or operator of a Performance Track member facility must have complied with the requirements of 35 Ill. Adm. Code 724.115(b)(5) in order to request a permit modification under this Section.
 - The owner or operator of the Performance Track member facility should consider the request for permit modification approved if the Agency does not, in writing, within 60 days after receiving an application, either deny the request for permit modification or notify the owner or operator of the Performance Track member facility that the Agency has extended the 60-day deadline. During an extension of the 60-day deadline, the owner or operator of the Performance Track member facility must adhere to the revised inspection schedule outlined in its request for permit modification, and it must maintain a copy of the application in the facility's operating record.

BOARD NOTE: Derived from 40 CFR 270.42(d) through (k) (2005), as amended at 70 Fed. Reg. 59402 (Oct. 12, 2005) (1) (2007).

(Source: Amended a	t 32 Ill. Reg	_, effective	`
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SUBPART J: RCRA STANDARDIZED PERMITS FOR STORAGE AND TREATMENT UNITS

Section 703.350 General Information About RCRA Standardized Permits

a) RCRA standardized permit. A RCRA standardized permit (RCRA) is a special type of permit that authorizes the owner or operator of a facility to manage hazardous waste. A RCRA standardized permit is issued pursuant to Subpart G of 35 Ill. Adm. Code 705 and this Subpart J.

BOARD NOTE: Subsection (a) of this Section is derived from 40 CFR 270.250, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- b) Eligibility for a RCRA standardized permit.
 - 1) The facility owner or operator may be eligible for a RCRA standardized permit if the following conditions are fulfilled:
 - A) The facility generates hazardous waste and then stores or nonthermally treats the hazardous waste on-site in containers, tanks, or containment buildings; or
 - B) The facility receives hazardous waste generated off-site by a generator under the same ownership as the receiving facility, and the facility stores or non-thermally treats the hazardous waste in containers, tanks, or containment buildings.
 - C) The Agency must inform the facility owner or operator of its eligibility for a RCRA standardized permit when the Agency makes a decision on its permit application.
 - 2) This subsection (b)(2) corresponds with 40 CFR 270.255(b), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules.

BOARD NOTE: Subsection (b) of this Section is derived from 40 CFR 270.255, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- c) Permit requirements applicable to a RCRA standardized permit. The following provisions of this Part and 35 Ill. Adm. Code 702 apply to a RCRA standardized permit:
 - 1) General Information: All provisions derived from subpart A of 40 CFR 270 apply: Sections <u>703.110</u>, 703.121 through 703.124, 703.158 through <u>703.159</u>, <u>703.160</u>, and <u>703.161</u>(a) and <u>35 Ill. Adm. Code <u>702.104</u>, 702.110, 702.181, and <u>720.111</u>.</u>
 - 2) Permit Application: All provisions derived from 40 CFR 270.10, 270.11, 270.12, 270.13, and 270.29 in subpart B of 40 CFR 270 apply: Sections 703.125, 703.126, 703.150 though 703.152, 703.157, 703.181, 703.186, 703.188, and 703.240 and 35 Ill. Adm. Code 702.103, 702.120 through 702.124, and 702.126.
 - 3) Permit Conditions: All provisions derived from subpart C of 40 CFR 270 apply: Sections 703.241 through 703.248 and 35 Ill. Adm. Code 702.140 through 702.152, 702.160, and 702.162 through 702.164.
 - 4) Changes to Permit: All provisions derived from 40 CFR 270.40, 270.41,

- and 270.43 in subpart D of 40 CFR 270 apply: Sections 703.260 and 703.270 though 703.273 and 35 Ill. Adm. Code 702.186.
- 5) Expiration and Continuation of Permits: All provisions derived from subpart E of 40 CFR 270 apply: 35 Ill. Adm. Code 702.125 and 702.161.
- 6) Special Forms of Permits: The provision derived from 40 CFR 270.67 in subpart F of 40 CFR 270 apply: Section 703.238.
- 7) Interim Status: All provisions derived from subpart G of 40 CFR 270 apply: Sections 703.153 through 703.157.
- 8) Remedial Action Plans: No provisions derived from subpart H of 40 CFR 270 apply: no provisions of Subpart H of 35 Ill. Adm. Code 703 apply.
- 9) RCRA Standardized Permits: All provisions derived from subpart J of 40 CFR 270 apply: this Subpart J.

BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 270.260, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

(Source:	Amended at 32 Ill. Reg.	, effective	

Section 703.352 Information That Must Be Kept at the Facility

- a) General types of information to be maintained at the facility. The facility owner or operator must keep the following information at its facility:
 - 1) A general description of the facility;
 - 2) Results of chemical and physical analyses of the hazardous waste and hazardous debris handled at the facility. At a minimum, these results of analyses must contain all the information that the owner or operator must know to treat or store the wastes properly pursuant to 35 Ill. Adm. Code 727;
 - 3) A copy of the waste analysis plan required by 35 Ill. Adm. Code 727.110(d)(2);
 - A description of the security procedures and equipment required by 35 Ill. Adm. Code 727.110(e);
 - A copy of the general inspection schedule required by 35 III. Adm. Code 727.110(f)(2). The owner or operator must include in the inspection schedule applicable requirements of 35 III. Adm. Code 724.933, 724.952, 724.953, 724.958, 724.988, 727.270(e), and 727.290(d) and (f);

- A justification of any modification of the preparedness and prevention requirements of 35 Ill. Adm. Code 727.130(a) through (f);
- 7) A copy of the contingency plan required by 35 Ill. Adm. Code 727.150;
- 8) A description of procedures, structures, or equipment used at the facility to accomplish each of the following:
 - A) Prevent hazards in unloading operations (for example, use ramps, special forklifts);
 - B) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, with berms, dikes, trenches, etc.);
 - C) Prevent contamination of water supplies;
 - D) Mitigate effects of equipment failure and power outages;
 - E) Prevent undue exposure of personnel to hazardous waste (for example, requiring protective clothing); and
 - F) Prevent releases to atmosphere;
- 9) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes as required by 35 Ill. Adm. Code 727.110(h);
- 10) The traffic pattern, estimated volume (number, types of vehicles) and control (for example, show turns across traffic lanes, and stacking lanes; describe access road surfacing and load bearing capacity; show traffic control signals, etc.);
- This subsection (a)(11) corresponds with 40 CFR 270.290(k), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules;
- An outline of both the introductory and continuing training programs that the owner or operator will use to prepare employees to operate or maintain its facility safely as required by 35 Ill. Adm. Code 727.110(g). A brief description of how training will be designed to meet actual job tasks pursuant to 35 Ill. Adm. Code 727.110(g)(1)(B) requirements;
- 13) A copy of the closure plan required by 35 Ill. Adm. Code 727.210(c). Include, where applicable, as part of the plans, specific requirements in 35

- Ill. Adm. Code 727.270(g), 727.290(l), and 727.900(i);
- 14) This subsection (a)(14) corresponds with 40 CFR 270.290(n), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules;
- The most recent closure cost estimate for the facility prepared pursuant to 35 Ill. Adm. Code 727.240(c) and a copy of the documentation required to demonstrate financial assurance pursuant to 35 Ill. Adm. Code 727.240(d). For a new facility, the owner or operator may gather the required documentation 60 days before the initial receipt of hazardous wastes;
- This subsection (a)(16) corresponds with 40 CFR 270.290(p), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules;
- Where applicable, a copy of the insurance policy or other documentation that complies with the liability requirements of 35 Ill. Adm. Code 727.240(h). For a new facility, documentation showing the amount of insurance meeting the specification of 35 Ill. Adm. Code 727.240(h)(1) that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment or storage;
- Where appropriate, proof of coverage by a State financial mechanism, as required by 35 Ill. Adm. Code 727.240(j) or 727.240(k);
- A topographic map showing a distance of 1,000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). The map must show elevation contours. The contour interval must show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). If the facility is in a mountainous area, the owner or operator should use large contour intervals to adequately show topographic profiles of the facility. The map must clearly show each of the following:
 - A) The map scale and date;
 - B) Any 100-year flood plain area;
 - C) All surface waters including intermittent streams;
 - D) The surrounding land uses (residential, commercial, agricultural, recreational, etc.);

- E) A wind rose (*i.e.*, prevailing windspeed and direction);
- F) The orientation of the map (north arrow);
- G) Legal boundaries of the facility site;
- H) Facility access control (fences, gates);
- I) All injection and withdrawal wells both on-site and off-site;
- J) All buildings; treatment, storage, or disposal operations; and other structures (recreation areas, runoff control systems, access and internal roads, storm, sanitary, and process sewerage systems, loading and unloading areas, fire control facilities, etc.);
- K) Barriers for drainage or flood control; and
- L) The location of operational units within the facility where hazardous waste is (or will be) treated or stored (including equipment cleanup areas).

BOARD NOTE: Subsection (a) of this Section is derived from 40 CFR 270.290, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- b) Container information to be maintained at the facility. If the facility owner or operator stores or treats hazardous waste in containers, it must keep the following information at its facility:
 - 1) A description of the containment system to demonstrate compliance with the container storage area provisions of 35 Ill. Adm. Code 727.270(d). This description must show the following information:
 - A) The basic design parameters, dimensions, and materials of construction;
 - B) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;
 - C) The capacity of the containment system relative to the number and volume of containers to be stored;
 - D) The provisions for preventing or managing run-on; and
 - E) How accumulated liquids can be analyzed and removed to prevent overflow;

- 2) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with 35 Ill. Adm. Code 727.270(d)(3), including the following:
 - A) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and
 - B) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids;
- 3) Sketches, drawings, or data demonstrating compliance with 35 Ill. Adm. Code 727.270(e) (location of buffer zone (15m or 50ft) and containers holding ignitable or reactive wastes) and 35 Ill. Adm. Code 727.270(f)(3) (location of incompatible wastes in relation to each other), where applicable;
- Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with 35 Ill. Adm. Code 727.270(f)(1) and (f)(2), and 35 Ill. Adm. Code 727.110(h)(2) and (h)(3); and
- 5) Information on air emission control equipment as required by Section 703.352(e).

BOARD NOTE: Subsection (b) of this Section is derived from 40 CFR 270.300, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- c) Tank information to be maintained at the facility. If the facility owner or operator uses tanks to store or treat hazardous waste, it must keep the following information at its facility:
 - 1) A written assessment that is reviewed and certified by an independent, qualified, registered professional engineer on the structural integrity and suitability for handling hazardous waste of each tank system, as required pursuant to 35 Ill. Adm. Code 727.290(b) and (c);
 - 2) The dimensions and capacity of each tank;
 - A description of feed systems, safety cutoff, bypass systems, and pressure controls (*e.g.*, vents);
 - 4) A diagram of piping, instrumentation, and process flow for each tank system;
 - 5) A description of materials and equipment used to provide external

- corrosion protection, as required pursuant to 35 Ill. Adm. Code 727.290(b);
- 6) For new tank systems, a detailed description of how the tank systems will be installed in compliance with 35 Ill. Adm. Code 727.290(c) and (e);
- 7) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed, and operated to meet the requirements of 35 Ill. Adm. Code 727.290(f) and (g);
- 8) This subsection (c)(8) corresponds with 40 CFR 270.305(h), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules;
- 9) A description of controls and practices to prevent spills and overflows, as required pursuant to 35 Ill. Adm. Code 727.290(i);
- 10) For tank systems in which ignitable, reactive, or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with 35 Ill. Adm. Code 727.290(m) and (n); and
- 11) Information on air emission control equipment, as required by Section 703.352(e).

BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 270.305, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- d) Equipment information to be maintained at the facility. If the facility has equipment to which Subpart BB of 35 Ill. Adm. Code 724 applies, the facility owner or operator must keep the following information at its facility:
 - 1) For each piece of equipment to which Subpart BB of 35 Ill. Adm. Code 724 applies, the following:
 - A) The equipment identification number and hazardous waste management unit identification;
 - B) The approximate locations within the facility (e.g., identify the hazardous waste management unit on a facility plot plan);
 - C) The type of equipment (e.g., a pump or a pipeline valve);
 - D) The percent by weight of total organics in the hazardous waste stream at the equipment;

- E) The phase of the hazardous waste at the equipment (e.g., gas or vapor or liquid); and
- F) The method of compliance with the standard (e.g., monthly leak detection and repair, or equipped with dual mechanical seals);
- 2) For a facility that cannot install a closed-vent system and control device to comply with Subpart BB of 35 Ill. Adm. Code 724 on the effective date that the facility becomes subject to the Subpart BB provisions, an implementation schedule as specified in 35 Ill. Adm. Code 724.933(a)(2);
- 3) Documentation that demonstrates compliance with the equipment standards in 35 Ill. Adm. Code 724.952 and 724.959. This documentation must contain the records required pursuant to 35 Ill. Adm. Code 724.964; and
- 4) Documentation to demonstrate compliance with 35 Ill. Adm. Code 724.960, which 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 35 Ill. Adm. Code 724.933(j);
 - C) A design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," USEPA publication number EPA-450/2-81-005, incorporated by reference in 35 Ill. Adm. Code 720.111(a) or other engineering texts acceptable to the Agency that present basic control device design information. The design analysis must address the vent stream characteristics and control device operation parameters, as specified in 35 Ill. Adm. Code 724.935(b)(4)(iii);
 - D) A statement signed and dated by the facility owner or operator that certifies that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous waste management unit is operating at the highest load or capacity level reasonable expected to occur; and
 - E) A statement signed and dated by the facility owner or operator that certifies that the control device is designed to operate at an efficiency of 95 weight percent or greater.

BOARD NOTE: Subsection (d) of this Section is derived from 40 CFR 270.310-

as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- e) Air emissions control information to be maintained at the facility. If the facility owner or operator has air emission control equipment subject to Subpart CC of 35 Ill. Adm. Code 724, it must keep the following information at its facility:
 - Documentation for each floating roof cover installed on a tank subject to 35 Ill. Adm. Code 724.984(d)(1) or (d)(2) that includes information that the owner or operator prepared or the cover manufacturer or vendor provided describing the cover design, and the owner's or operator's certification that the cover meets applicable design specifications listed in 35 Ill. Adm. Code 724.984(e)(1) or (f)(1);
 - 2) Identification of each container area subject to Subpart CC of 35 Ill. Adm. Code 724 and the owner's or operator's certification that the requirements of this Subpart J are met;
 - Documentation for each enclosure used to control air pollutant emissions from tanks or containers pursuant to requirements of 35 Ill. Adm. Code 724.984(d)(5) or 724.986(e)(1)(B). The owner or operator must include records for the most recent set of calculations and measurements that it performed to verify that the enclosure meets the criteria of a permanent total enclosure as specified in appendix B to 40 CFR 52.741 (Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure), incorporated by reference in 35 Ill. Adm. Code 720.111(b);
 - 4) This subsection (e)(4) corresponds with 40 CFR 270.315(d), which USEPA has marked "Reserved." This statement maintains structural consistency with the corresponding federal rules;
 - 5) Documentation for each closed-vent system and control device installed pursuant to 35 Ill. Adm. Code 724.987 that includes design and performance information, as specified in Section 703.210(c) and (d); and
 - An emission monitoring plan for both Method 21 in appendix A to 40 CFR 60 (Determination of Volatile Organic Compound Leaks), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and control device monitoring methods. This plan must include the following information: monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting exceedences exceedances, and procedures for mitigating noncompliances.

BOARD NOTE:	Subsection (e) of thi	s Section is derived:	from 40 CFR 270.315 ,
as added at 70 Fee	d. Reg. 53420 (Sep. 8	3, 2005) (2007).	

(5	Source:	Amended at 32 Ill. Reg.	, effective)

Section 703.Appendix A Classification of Permit Modifications

Class Modifications

1

A. General Permit Provisions

- 1 Administrative and informational changes.
- 1 2. Correction of typographical errors.
- 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:
 - a. To provide for more frequent monitoring, reporting, or maintenance.
- b. Other changes.
 - 5. Schedule of compliance:
- 1* a. Changes in interim compliance dates, with prior approval of the Agency.
- b. Extension of final compliance date.
- 1* 6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the Agency.
- 1* 7. Changes in ownership or operational control of a facility, provided the procedures of Section 703.260(b) are followed.
- 1* 8. Changes to remove permit conditions that are no longer applicable (i.e., because the standards upon which they are based are no longer applicable to the facility).

B. General Facility Standards

- 1. Changes to waste sampling or analysis methods:
- 1 a. To conform with Agency guidance or Board regulations.

1*		b. To incorporate changes associated with F039 (multi-source leachate) sampling or analysis methods.
1*		c. To incorporate changes associated with underlying hazardous constituents in ignitable or corrosive wastes.
2		d. Other changes.
	2.	Changes to analytical quality assurance or quality control plan:
1		a. To conform with agency guidance or regulations.
2		b. Other changes.
1	3.	Changes in procedures for maintaining the operating record.
2	4.	Changes in frequency or content of inspection schedules.
	5.	Changes in the training plan:
2		a. That affect the type or decrease the amount of training given to employees.
1		b. Other changes.
	6.	Contingency plan:
2		a. Changes in emergency procedures (i.e., spill or release response procedures).
1		b. Replacement with functionally equivalent equipment, upgrade, or relocate emergency equipment listed.
2		c. Removal of equipment from emergency equipment list.
1		d. Changes in name, address, or phone number of coordinators or other persons or agencies identified in the plan.
		Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change must be reviewed under the same procedures as the permit modification.
	7.	CQA plan:

1

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

2

b. Other changes.

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

C. Groundwater Protection

1. Changes to wells:

2

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

1

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

1*

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

1*

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

<u>2*</u>

4. Changes in point of compliance.

2

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) 724.198(h), 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) <u>724.198(g)(4)</u> and 724.199.
2			b.	Changes to a compliance monitoring program as required by 35 Ill. Adm. Code 724.199(k) 724.199(j), unless otherwise specified in this Appendix.
		8.	Correc	etive 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 III. Adm. Code 724.200(h), unless otherwise specified in this Appendix.
	D.	Closur	re	
		1.	Chang	es 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).

Creation of a new landfill unit as part of closure.

3

2.

		3.	Addition of the following new units to be used temporarily for closure activities:	
3			a.	Surface impoundments.
3			b.	Incinerators.
3			c.	Waste piles that do not comply with 35 Ill. Adm. Code 724.350(c).
2			d.	Waste piles that comply with 35 Ill. Adm. Code 724.350(c).
2			e.	Tanks or containers (other than specified in paragraph D(3)(f) below).
1*			f.	Tanks used for neutralization, dewatering, phase separation, or component separation, with prior approval of the Agency.
2			g.	Staging piles.
	E.	Post-C	Closure	
1		1.	Chang plan.	ges in name, address, or phone number of contact in post-closure
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.	Conta	ainers	
		1.	Modif	ication or addition of container units:
3			a.	Resulting in greater than 25 percent increase in the facility's container storage capacity, except as provided in $F(1)(c)$ and $F(4)(a)$.
2			b.	Resulting in up to 25 percent increase in the facility's container storage capacity, except as provided in $F(1)(c)$ and $F(4)(a)$.

1

- c. Modification or addition of container units or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards, with prior approval of the Agency. This modification may also involve the addition of new waste codes or narrative description of wastes. It is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028).
- 2. Modification of container units without an increased capacity or alteration of the system:

2

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

1

- b. Addition of a roof to a container unit without alteration of the containment system.
- 3. Storage of different wastes in containers, except as provided in F(4):

3

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

2

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

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

4. Storage or treatment of different wastes in containers:

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

1*

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

Modification of a tank unit, secondary containment system, or treatment

1.

process that increases tank capacity, adds a new tank, or alters treatment, specified as follows: 3 Modification or addition of tank units resulting in greater than a. 25 percent increase in the facility's tank capacity, except as provided in paragraphs G(1)(c), G(1)(d), and G(1)(e). 2 b. Modification or addition of tank units resulting in up to 25 percent increase in the facility's tank capacity, except as provided in paragraphs G(1)(d) and G(1)(e). 2 Addition of a new tank that will operate for more than 90 days c. 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* Modification or addition of tank units or treatment processes e. that are necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards, with prior approval of the Agency. This modification may also involve the addition of new waste codes. It is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028). 2 2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit. 1 3. Replacement of a tank with a tank that meets the same design standards and has a capacity within \pm 10 percent of the replaced tank provided: The capacity difference is no more than 1500 gallons, a. The facility's permitted tank capacity is not increased, and b. The replacement tank meets the same conditions in the permit. c. 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).

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b. That do not require additional or different management practices or tank design, different fire protection specification, or significantly different tank treatment process than authorized in the permit, except as provided in paragraph G(5)(d).

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

1*

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

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

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

H. Surface Impoundments

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

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2. Replacement of a surface impoundment unit.

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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.

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4. Modification of a surface impoundment management practice.

Treatment, storage, or disposal of different wastes in surface

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impoundments: 3 That require additional or different management practices or a. 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 That are wastes restricted from land disposal that meet the c. applicable treatment standards. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028). 1 d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2) (Procedures for Case-by-Case Extensions to an Effective Date), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxincontaining wastes (F020, F021, F022, F023, F026, F027, and F028). 1* 6. Modifications of unconstructed units to comply with 35 Ill. Adm. Code 724.321(c), 724.322, 724.323, and 724.326(d). 7. Changes in response action plan: 3 Increase in action leakage rate. a. 3 b. Change in a specific response reducing its frequency or effectiveness. 2 c. Other changes. Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

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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: Resulting in greater than 25 percent increase in the facility's a. waste pile storage or treatment capacity. Resulting in up to 25 percent increase in the facility's waste pile b. storage or treatment capacity. 2. Modification of waste pile unit without increasing the capacity of the unit. Replacement of a waste pile unit with another waste pile unit of the 3. same design and capacity and meeting all waste pile conditions in the permit. 4. Modification of a waste pile management practice. 5. Storage or treatment of different wastes in waste piles: That require additional or different management practices or a. different design of the unit. That do not require additional or different management practices b. 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. 6. Conversion of an enclosed waste pile to a containment building unit. Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes. Landfills and Unenclosed Waste Piles J. 1. Modification or addition of landfill units that result in increasing the

facility's disposal capacity.

Replacement of a landfill.

3 3. Addition or modification of a liner, leachate collection system, leachate detection system, runoff control, or final cover system. 2 4. Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, runoff control, or final cover system. 2 5. Modification of a landfill management practice. 6. Landfill different wastes: 3 That require additional or different management practices, a. 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 That are wastes restricted from land disposal that meet the c. applicable treatment standards. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028). 1 d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a landfill unit that meets the minimum technological requirements stated in 40 CFR 268.5(h)(2) (Procedures for Case-by-Case Extensions to an Effective Date), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027, and F028). 1* 7. Modification of unconstructed units to comply with 35 Ill. Adm. Code 724.351(c), 724.352, 724.353, 724.354(c), 724.401(c), 724.402,

724.403(c), and 724.404.

Changes in response action plan:

Increase in action leakage rate.

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a.

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3 b. Change in a specific response reducing its frequency or effectiveness. 2 Other changes. c. Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes. K Land Treatment 3 Lateral expansion of or other modification of a land treatment unit to 1. increase area extent 2 2. Modification of runon control system. 3 3. Modify runoff control system. 2 4. Other modification of land treatment unit component specifications or standards required in permit. 5. Management of different wastes in land treatment units: 3 That require a change in permit operating conditions or unit a. 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 Increase rate or change method of waste application. a. 1 Decrease rate of waste application. b. 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.

- Modification of operating practice due to detection of releases from the land treatment unit pursuant to 35 Ill. Adm. Code 724.378(g)(2).
- Changes in the unsaturated zone monitoring system that result in a change to the location, depth, or number of sampling points or which replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements.
- 2 11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, or number of sampling points or which replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements.
- 2 12. Changes in background values for hazardous constituents in soil and soil-pore liquid.
- 2 13. Changes in sampling, analysis, or statistical procedure.
- 2 14. Changes in land treatment demonstration program prior to or during the demonstration.
- 1* 15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the Agency's prior approval has been received.
- 1*
 16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the Agency.
- Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration.
- 2 18. Changes in vegetative cover requirements for closure.
 - L. Incinerators, Boilers and Industrial Furnaces

- 3
- 1. Changes to increase by more than 25 percent any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

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2. Changes to increase by up to 25 percent any of the following limits authorized in the permit: A thermal feed rate limit, a feedstream feed rate limit, a chlorine/chloride feed rate limit, a metal feed rate limit, or an ash feed rate limit. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

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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/Cl₂, metals, or particulate from the combustion gases; or by changing other features of the incinerator, boiler, or industrial furnace that could affect its capability to meet the regulatory performance standards. The Agency must require a new trial burn to substantiate compliance with the regulatory performance standards, unless this demonstration can be made through other means.

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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:

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

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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.

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

6. Burning different wastes:

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

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

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

7. Shakedown and trial burn:

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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.

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

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

1*

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

1 8. Substitution of an alternative type of non-hazardous waste fuel that is not specified in the permit. 1* 9. Technology changes needed to meet standards under federal subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), provided the procedures of Section 703.280(i) are followed. 1* 10. Changes to RCRA Permit provisions needed to support transition to federal subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), provided the procedures of Section 703.280(k) are followed. M. Containment Buildings 1 Modification or addition of containment building units: 3 a. Resulting in greater than 25 percent increase in the facility's containment building storage or treatment capacity. 2 b. Resulting in up to 25 percent increase in the facility's containment building storage or treatment capacity. 2 2. Modification of a containment building unit or secondary containment system without increasing the capacity of the unit. 3. Replacement of a containment building with a containment building that meets the same design standards provided: 1 The unit capacity is not increased. a. 1 b. The replacement containment building meets the same conditions in the permit. 2 4. Modification of a containment building management practice. 5. Storage or treatment of different wastes in containment buildings:

That require additional or different management practices.

That do not require additional or different management

N. Corrective Action

a.

b.

practices.

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3	1.	Approval of a corrective action management unit pursuant to 35 III. Adm. Code 724.652.	
2	2.	Approval of a temporary unit or time extension pursuant to 35 Ill. Adm Code 724.653.	
2	3.	Approval of a staging pile or staging pile operating term extension pursuant to 35 Ill. Adm. Code 724.654.	
<u>O.</u>	Burc	den Reduction	
	<u>1.</u>	Approval of reduced inspection frequency for a Performance Track member facility for one of the following:	
<u>1</u>		a. A tank system pursuant to 35 Ill. Adm. Code 724.295.	
<u>1</u>		b. A container pursuant to 35 Ill. Adm. Code 724.274.	
<u>1</u>		c. A containment building pursuant to 35 Ill. Adm. Code 724.1101(c)(4).	
<u>1</u>		d. An area subject to spills pursuant to 35 Ill. Adm. Code 724.115(b)(4).	
<u>1</u>	2.	Development of one contingency plan based on Integrated Contingency Plan Guidance pursuant to 35 Ill. Adm. Code 724.152(b).	
<u>1</u>	3.	A change to recordkeeping and reporting requirements pursuant to any of the following: 35 Ill. Adm. Code 724.156(i), 724.443(a)(2), 724.961(b)(1),(d), 724.962(a)(2), 724.296(f), 724.200(g), or 724.213(e)(5).	
<u>1</u>	4.	A change to inspection frequency for a tank system pursuant to 35 Ill. Adm. Code 724.295(b).	
<u>1</u>	<u>5.</u>	A change to detection and compliance monitoring program pursuant to 35 Ill. Adm. Code 724.198(d), (g)(2), or (g)(3) or 724.199(f) or (g).	
Not	te: * ind	icates modifications requiring prior Agency approval.	
BOARD NO	DTE: De	erived from appendix I to 40 CFR 270.42-(2005) (2007).	
(Source: An	nended a	t 32 Ill. Reg, effective)	

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

PART 720 HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

Section

Section	
720.101	Purpose, Scope, and Applicability
720.102	Availability of Information; Confidentiality of Information
720.103	Use of Number and Gender
720.104	Electronic Reporting
	SUBPART B: DEFINITIONS AND REFERENCES
Section	
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	Case-by-Case Basis
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	A

720.Appendix A Overview of Federal RCRA Subtitle C (Hazardous Waste) Regulations

Activities

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-19 at 7 Ill. Reg. 14015, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11819, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6017, effective March 24, 1987; amended

in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective Nov. 12, 1987; amended in R87-26 at 12 III. Reg. 2450, effective January 15, 1988; amended in R87-39 at 12 III. 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 Nov. 13, 1989; amended in R89-2 at 14 III. 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 Sept. 25, 1990; amended in R90-17 at 15 III. Reg. 7934, effective May 9, 1991; amended in R90-11 at 15 III. Reg. 9323, effective June 17, 1991; amended in R91-1 at 15 III. Reg. 14446, effective Sept. 30, 1991; amended in R91-13 at 16 Ill. Reg. 9489, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17636, effective Nov. 6, 1992; amended in R92-10 at 17 Ill. Reg. 5625, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20545, effective Nov. 22, 1993; amended in R93-16 at 18 Ill. Reg. 6720, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12160, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17480, effective Nov. 23, 1994; amended in R95-6 at 19 III. Reg. 9508, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10929, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 256, effective December 16, 1997; amended in R98-12 at 22 III. Reg. 7590, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17496, effective Sept. 28, 1998; amended in R98-21/R99-2/R99-7 at 23 III. Reg. 1704, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9094, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1063, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9443, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1266, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9168, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6550, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3712, effective February 14, 2003; amended in R03-18 at 27 III. Reg. 12713, effective July 17, 2003; amended in R05-8 at 29 Ill. Reg. 5974, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6290, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 2930, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 730, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. , effective

SUBPART B: DEFINITIONS AND REFERENCES

Section 720.110 Definitions

When used in 35 Ill. Adm. Code 720 through 728, 733, 738, and 739 only, the following terms have the meanings given below:

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

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

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

closed portion. (See also "closed portion" and "inactive portion.")

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

"Agency" means the Illinois Environmental Protection Agency.

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

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

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

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

"Board" means the Illinois Pollution Control Board.

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

Boiler physical characteristics.

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and the unit's combustion chamber and primary energy recovery sections must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery sections (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery sections are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy

recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream) and fluidized bed combustion units; and

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

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

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

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

"Cathode ray tube" or "CRT" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A "used, intact CRT" means a CRT whose vacuum has not been released. A "used, broken CRT" means glass removed from its housing or casing whose vacuum has been released.

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

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

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

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

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

"Containment building" means a hazardous waste management unit that is used to

store or treat hazardous waste pursuant to the provisions of Subpart DD of 35 Ill. Adm. Code 724 and Subpart DD of 35 Ill. Adm. Code 725.

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

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

"CRT collector" means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

"CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

"CRT processing" means conducting all of the following activities:

Receiving broken or intact CRTs;

<u>Intentionally breaking intact CRTs or further breaking or separating</u> broken CRTs; and

Sorting or otherwise managing glass removed from CRT monitors.

"Designated facility" means either of the following entities:

A hazardous waste treatment, storage, or disposal facility that has been designated on the manifest by the generator, pursuant to 35 Ill. Adm. Code 722.120, of which any of the following is true:

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

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

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

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

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

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

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

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

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

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

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

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

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

"Drip pad" means an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back

or drippage from treated wood, precipitation and surface water runon to an associated collection system at wood preserving plants.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Region IX: California, Nevada, Arizona, Hawaii, Guam, American

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Samoa, and Commonwealth of the Northern Mariana Islands.

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

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

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

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

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

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

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

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

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

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

require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

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

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

"Facility" means the following:

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

For the purpose of implementing corrective action pursuant to 35 Ill. Adm. Code 724.201 or 35 Ill. Adm. Code 727.201, all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA. This definition also applies to facilities implementing corrective action pursuant to RCRA section 3008(h).

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

"Federal agency" means any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal

government, including any government corporation and the Government Printing Office.

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

"Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities pursuant to 35 Ill. Adm. Code 724 and 725 are no longer conducted at the facility unless subject to the provisions of 35 Ill. Adm. Code 722 134

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

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

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

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

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

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

"Hazardous waste constituent" means a constituent that caused the hazardous waste to be listed in Subpart D of 35 Ill. Adm. Code 721, or a constituent listed in 35 Ill. Adm. Code 721.124.

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

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

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

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

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

The facility is not listed as an industrial furnace; or

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

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

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

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

(See <u>Appendix E to 35 Ill. Adm. Code 724 and Appendix E to 35 Ill. Adm. Code 725 for references that list examples.)</u>

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

Cement kilns;
Lime kilns;
Aggregate kilns;
Phosphate kilns;
Coke ovens;
Blast furnaces;

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

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Titanium dioxide chloride process oxidation reactors;

Methane reforming furnaces;

Pulping liquor recovery furnaces;

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

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

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

The design and use of the device primarily to accomplish recovery of material products;

The use of the device to burn or reduce raw materials to make a material product;

The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product;

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

Other relevant factors.

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

"Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using

controlled flame combustion and which is not listed as an industrial furnace.

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

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

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

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

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

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

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

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

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

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

"LDS" means leak detection system.

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

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

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

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

"Manifest" means the shipping document USEPA Form 8700-22 (including, if necessary, USEPA Form 8700-22A) originated and signed by the generator or offeror that contains the information required by Subpart B of 35 Ill. Adm. Code 722 and the applicable requirements of 35 Ill. Adm. Code 722 through 727.

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

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

"Mercury-containing equipment" means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.

"Military munitions" means all ammunition products and components produced or used by or for the United States Department of Defense or the United States Armed Services for national defense and security, including military munitions under the control of the United States Department of Defense (USDOD), the United States Coast Guard, the United States Department of Energy (USDOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by USDOD components, including

bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components of these items and devices. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components of these items and devices. However, the term does include non-nuclear components of nuclear devices, managed under USDOE's nuclear weapons program after all sanitization operations required under the Atomic Energy Act of 1954 (42 USC 2014 et seq.), as amended, have been completed.

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

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

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

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

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

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

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

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

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Control of combustion air to maintain adequate temperature for efficient combustion;

Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

Control of emission of the gaseous combustion products.

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

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

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

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

"Performance Track member facility" means a facility that has been accepted by USEPA for membership in the National Environmental Performance Track Program (Program) and which is still a member of that Program. The National Environmental Performance Track Program is a voluntary, facility-based, program for top environmental performers. Program members must demonstrate a good record of compliance, past success in achieving environmental goals, and commit to future specific quantified environmental goals, environmental management systems, local community outreach, and annual reporting of measurable results.

BOARD NOTE: The National Environmental Performance Track program is operated exclusively by USEPA. USEPA established the program in 2000 (see 65 Fed. Reg. 41655 (July 6, 2000)) and amended it in 2004 (see 69 Fed. Reg. 27922 (May 17, 2004)). USEPA confers membership in the program on application of interested and eligible entities. Information about the program is available from a website maintained by USEPA: www.epa.gov/performancetrack.

"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 35 Ill. Adm. Code 724 or 725.

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

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

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

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

BOARD NOTE: The second exception of corresponding 40 CFR 260.10 reads as follows: "Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug." This is very similar to the language of section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA; 7 USC 136(u)). The three exceptions, taken together, appear intended not to include as pesticide any material within the scope of federal Food and Drug Administration regulation. The Board codified this provision with the intent of retaining the same meaning as its federal counterpart while adding the definiteness required under Illinois law.

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

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

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

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

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

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

"RCRA standardized permit" means a RCRA permit issued pursuant to Subpart J of 35 Ill. Adm. Code 703 and Subpart G of 35 Ill. Adm. Code 702 that authorizes management of hazardous waste. The RCRA standardized permit may have two parts: a uniform portion issued in all cases and a supplemental portion issued at the discretion of the Agency.

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

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

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

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

- "Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) that can be expected to exhibit the average properties of the universe or whole.
- "Runoff" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.
- "Runon" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.
- "SIC code" means "Standard Industrial Classification code," as assigned to a site by the United States Department of Transportation, Federal Highway Administration, based on the particular activities that occur on the site, as set forth in its publication "Standard Industrial Classification Manual," incorporated by reference in Section 720.111(a).
- "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.
- "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and which has a total thermal input, excluding the heating value of the sludge itself, of 2,500 Btu/lb or less of sludge treated on a wet-weight basis.
- "Small quantity generator" means a generator that generates less than 1,000 kg of hazardous waste in a calendar month.
- "Solid waste" means a solid waste as defined in 35 Ill. Adm. Code 721.102.
- "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. "Sorb" means to either adsorb or absorb, or both.
- "Staging pile" means an accumulation of solid, non-flowing "remediation waste" (as defined in this Section) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the Agency according to 35 Ill. Adm. Code 724.654.
- "State" means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

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

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

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

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

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

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

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

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

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

"Transfer facility" means any transportation related facility, including loading docks,

parking areas, storage areas, and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

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

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

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

"Treatability study" means the following:

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

Whether the waste is amenable to the treatment process;

What pretreatment (if any) is required;

The optimal process conditions needed to achieve the desired treatment;

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

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

Also included in this definition for the purpose of 35 Ill. Adm. Code 721.104(e) and (f) exemptions are liner compatibility, corrosion and other material compatibility studies, and toxicological and health effects studies. A treatability study is not a means to commercially treat or dispose of hazardous waste.

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

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

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

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

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

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

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

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

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

Mercury-containing equipment, as described in 35 Ill. Adm. Code 733.104; and

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

"Universal waste handler" means either of the following:

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

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

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

A person that treats (except under the provisions of Section 733.113(a) or (c) or 733.133(a) or (c)), disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer

facility.

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

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

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

"USDOT" or "Department of Transportation" means the United States Department of Transportation.

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

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

"Vessel" includes every description of watercraft used or capable of being used as a means of transportation on the water.

"Wastewater treatment unit" means a device of which the following is true:

It is part of a wastewater treatment facility that has an NPDES permit pursuant to 35 Ill. Adm. Code 309 or a pretreatment permit or authorization to discharge pursuant to 35 Ill. Adm. Code 310;

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

It meets the definition of tank or tank system in this Section.

"Water (bulk shipment)" means the bulk transportation of hazardous waste that is loaded or carried on board a vessel without containers or labels.

"Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

"Well injection" (See "underground injection.")

"Zone of engineering control" means an area under the control of the owner or operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to groundwater or surface water.

(Source: Amended at	t 32 Ill. Reg	, effective)
Section 720 111	References		

The following documents are incorporated by reference for the purposes of this Part and 35 Ill. Adm. Code 702 through 705, 721 through 728, 730, 733, 738, and 739:

a) Non-Regulatory Government Publications and Publications of Recognized Organizations and Associations:

ACI. Available from the American Concrete Institute, Box 19150, Redford Station, Detroit, Michigan 48219:

ACI 318-83: "Building Code Requirements for Reinforced Concrete," adopted Sept. 1983, referenced in 35 Ill. Adm. Code 724.673 and 725.543.

ANSI. Available from the American National Standards Institute, 1430 Broadway, New York, New York 10018, 212-354-3300:

See ASME/ANSI B31.3 and B31.4 and supplements below in this subsection (a) under ASME.

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

"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, Second Edition, December 1987, referenced in 35 Ill. Adm. Code 724.292, 724.295, 725.292, and 725.295.

"Evaporative Loss from External Floating-Roof Tanks," API publication 2517, Third Edition, February 1989, USEPA-approved for 35 Ill. Adm. Code 725.984.

"Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low Pressure Storage Tanks," 4th Edition, 1981, reaffirmed December 1987, referenced in 35 Ill. Adm. Code 724.291, 724.293, 725.291, and 725.292.

"Installation of Underground Petroleum Storage Systems," API

Recommended Practice 1615, Fourth Edition, Nov. 1987, referenced in 35 Ill. Adm. Code 724.292.

ASME. Available from the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017, 212-705-7722:

"Chemical Plant and Petroleum Refinery Piping," ASME/ANSI B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, referenced in 35 Ill. Adm. Code 724.292 and 725.292. Also available from ANSI.

"Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI B31.4-1986, as supplemented by B31.4a-1987, referenced in 35 Ill. Adm. Code 724.292 and 725.292. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, 610-832-9585:

ASTM C 94-90, "Standard Specification for Ready-Mixed Concrete," approved March 30, 1990, referenced in 35 Ill. Adm. Code 724.673 and 725.543.

ASTM D 88-87, "Standard Test Method for Saybolt Viscosity," approved April 24, 1981, reapproved January 1987, referenced in 35 Ill. Adm. Code 726.200.

ASTM D 93-85, "Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," approved October 25, 1985, USEPA-approved for 35 Ill. Adm. Code 721.121.

ASTM D 140-70, "Standard Practice for Sampling Bituminous Materials," approved 1970, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 346-75, "Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis," approved 1975, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 420–69, "Guide to Site Characterization for Engineering, Design, and Construction Purposes," approved 1969, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 1452–65, "Standard Practice for Soil Investigation and Sampling by Auger Borings," approved 1965, referenced in

Appendix A to 35 Ill. Adm. Code 721.

ASTM D 1946-90, "Standard Practice for Analysis of Reformed Gas by Gas Chromatography," approved March 30, 1990, USEPA-approved for 35 Ill. Adm. Code 724.933 and 725.933.

ASTM D 2161-87, "Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity," March 27, 1987, referenced in 35 Ill. Adm. Code 726.200.

ASTM D 2234-76, "Standard Practice for Collection of a Gross Sample of Coal," approved 1976, referenced in Appendix A to 35 Ill. Adm. Code 721.

ASTM D 2267-88, "Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography," approved Nov. 17, 1988, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM D 2382-88, "Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method)," approved October 31, 1988, USEPA-approved for 35 Ill. Adm. Code 724.933 and 725.933.

ASTM D 2879-92, "Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," approved 1992, USEPA-approved for 35 Ill. Adm. Code 725.984, referenced in 35 Ill. Adm. Code 724.963 and 725.963.

ASTM D 3828-87, "Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," approved December 14, 1988, USEPA-approved for 35 Ill. Adm. Code 721.121(a).

ASTM E 168-88, "Standard Practices for General Techniques of Infrared Quantitative Analysis," approved May 27, 1988, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM E 169-87, "Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," approved February 1, 1987, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM E 260-85, "Standard Practice for Packed Column Gas Chromatography," approved June 28, 1985, USEPA-approved for 35 Ill. Adm. Code 724.963.

ASTM G 21-70 (1984a), "Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi.", referenced in 35 Ill. Adm. Code 724.414 and 725.414.

ASTM G 22-76 (1984b), "Standard Practice for Determining Resistance of Plastics to Bacteria.", referenced in 35 Ill. Adm. Code 724.414 and 725.414.

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, 202-512-1800:

Standard Industrial Classification Manual (1972), and 1977 Supplement, republished in 1983, referenced in 35 Ill. Adm. Code 702.110 and Section 720.110.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 (Third Edition, Nov. 1986), as amended by Updates I (July 1992), II (Sept. 1994), IIA (August, 1993), IIB (January 1995), III (December 1996), IIIA (April 1998), and IIIB (Nov. 2004) (document number 955-001-00000-1). See below in this subsection (a) under NTIS.

NACE. Available from the National Association of Corrosion Engineers, 1400 South Creek Dr., Houston, TX 77084, 713-492-0535:

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85, approved March 1985, referenced in 35 Ill. Adm. Code 724.292, 724.295, 725.292, and 725.295.

NFPA. Available from the National Fire Protection Association, 1 Batterymarch Park, Boston, MA 02269, 617-770-3000 or 800-344-3555:

"Flammable and Combustible Liquids Code," NFPA 30, issued July 18, 2003, as supplemented by TIA 03-1, issued July 15, 2004, and corrected by Errata 30-03-01, issued August 13, 2004, USEPA-approved for 35 Ill. Adm. Code 724.298, 725.298, and 727.290, referenced in 35 Ill. Adm. Code 725.301 and 726.211.

NTIS. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, 703-605-6000 or 800-553-6847 (Internet address: www.ntis.gov):

"APTI Course 415: Control of Gaseous Emissions," December 1981, USEPA publication number EPA-450/2-81-005, NTIS document number PB80-208895, USEPA-approved for 35 Ill. Adm. Code 703.210, 703.211, 703.352, 724.935, and 725.935. BOARD NOTE: "APTI" denotes USEPA's "Air Pollution Training Institute" (Internet address: www.epa.gov/air/oaqps/eog/).

"Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," USEPA publication number EPA-530/SW-87-011, March 15, 1987, NTIS document number PB88-170766, referenced in 35 Ill. Adm. Code 728.106.

"Method 1664, Revision A, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry," USEPA publication number EPA-821/R-98-002, NTIS document number PB99-121949, USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

BOARD NOTE: EPA-821/R-98-002 is also available on the Internet for free download as a PDF document from the USEPA website at: www.epa.gov/waterscience/methods/16640514.pdf.

"Methods for Chemical Analysis of Water and Wastes," Third Edition, March 1983, USEPA document number EPA-600/4-79-020, NTIS document number PB84-128677, referenced in 35 Ill. Adm. Code 725.192.

BOARD NOTE: EPA-600/4-79-020 is also available on the Internet as a viewable/printable HTML document from the USEPA website at: www.epa.gov/clariton/clhtml/pubtitleORD.html as document 600479002.

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities," August 1977, EPA-530/SW-611, NTIS document number PB84-174820, referenced in 35 Ill. Adm. Code 725.192.

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources," October 1992, USEPA publication number EPA-454/R-92-019, NTIS document number 93-219095, referenced in 35 Ill. Adm. Code 726.204 and 726.206. BOARD NOTE: EPA-454/R-92-019 is also available on the Internet for free download as a WordPerfect document from the USEPA website at the following Internet address: www.epa.gov/scram001/guidance/guide/scrng.wpd.

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846 (Third Edition, Nov. 1986; Revision 6, January 2005), as amended by Updates I (July 1992), II (Sept. 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998), and IIIB (Nov. 2004) (document number 955-001-00000-1), generally referenced in Appendices A and I to 35 III. Adm. Code 721 and 35 III. Adm. Code 726.200, 726.206, 726.212, and 728.106 (in addition to the references cited below for specific methods):

Method 0010 (Sept. 1986) (Modified Method 5 Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0011 (December 1996) (Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and for Appendix I to 35 Ill. Adm. Code 726.

Method 0020 (Sept. 1986) (Source Assessment Sampling System), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0023A (December 1996) (Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.204.

Method 0030 (Sept. 1986) (Volatile Organic Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0031 (December 1996) (Sampling Method for Volatile Organic Compounds (SMVOC)), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0040 (December 1996) (Sampling of Principal Organic Hazardous Constituents from Combustion Sources Using Tedlar® Bags), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 0050 (December 1996) (Isokinetic HCl/Cl2 Emission Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm.

Code 726, and 35 Ill. Adm. Code 726.207.

Method 0051 (December 1996) (Midget Impinger HCl/Cl2 Emission Sampling Train), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.207.

Method 0060 (December 1996) (Determination of Metals in Stack Emissions), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, Appendix I to 35 Ill. Adm. Code 726, and 35 Ill. Adm. Code 726.206.

Method 0061 (December 1996) (Determination of Hexavalent Chromium Emissions from Stationary Sources), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721, 35 Ill. Adm. Code 726.206, and Appendix I to 35 Ill. Adm. Code 726.

Method 1010A (Nov. 2004) (Test Methods for Flash Point by Pensky-Martens Closed Cup Tester), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1020B (Nov. 2004) (Standard Test Methods for Flash Point by Setaflash (Small Scale) Closed-cup Apparatus), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1110A (Nov. 2004) (Corrosivity Toward Steel), USEPA-approved for 35 Ill. Adm. Code 721.122 and Appendix I to 35 Ill. Adm. Code 721.

Method 1310B (Nov. 2004) (Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and referenced in Appendix I to 35 Ill. Adm. Code 728.

Method 1311 (Sept. 1992) (Toxicity Characteristic Leaching Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721; for 35 Ill. Adm. Code 721.124, 728.107, and 728.140; and for Table T to 35 Ill. Adm. Code 728.

Method 1312 (Sept. 1994) (Synthetic Precipitation Leaching Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721. Method 1320 (Sept. 1986) (Multiple Extraction Procedure), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 1330A (Sept. 1992) (Extraction Procedure for Oily Wastes), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9010C (Nov. 2004) (Total and Amenable Cyanide: Distillation), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 728.140, 728.144, and 728.148, referenced in Table H to 35 Ill. Adm. Code 728.

Method 9012B (Nov. 2004) (Total and Amenable Cyanide (Automated Colorimetric, with Off-Line Distillation)), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 728.140, 728.144, and 728.148, referenced in Table H to 35 Ill. Adm. Code 728.

Method 9040C (Nov. 2004) (pH Electrometric Measurement), USEPA-approved for 35 Ill. Adm. Code 721.122 and Appendix I to 35 Ill. Adm. Code 721.

Method 9045D (Nov. 2004) (Soil and Waste pH), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9060A (Nov. 2004) (Total Organic Carbon), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 724.934, 724.963, 725.934, and 725.963.

Method 9070A (Nov. 2004) (n-Hexane Extractable Material (HEM) for Aqueous Samples), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9071B (April 1998) (n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721.

Method 9095B (Nov. 2004) (Paint Filter Liquids Test), USEPA-approved for Appendix I to 35 Ill. Adm. Code 721 and 35 Ill. Adm. Code 724.290, 724.414, 725.290, 725.414, 725.981, 727.290, and 728.132.

BOARD NOTE: EPA-530/SW-846 is also available on the Internet for free download in segments in PDF format from the

USEPA website at: www.epa.gov/SW-846.

OECD. Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France (www.oecd.org), also OECD Washington Center, 2001 L Street, NW, Suite 650, Washington, DC 20036-4922, 202-785-6323 or 800-456-6323 (www.oecdwash.org):

OECD "Amber List of Wastes," Appendix 4 to the OECD Council Decision C(92)39/Final (March 30, 1992, revised May 1993) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations), USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Amber Tier," Section IV of the annex to the OECD Council Decision C(92)39/Final (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

Annex to OECD Council Decision C(88)90/Final, as amended by C(94)152/Final (revised July 1994), referenced in 35 Ill. Adm. Code 722.187.

OECD "Green List of Wastes," Appendix 3 to the OECD Council Decision C(92)39/Final (March 30, 1992, revised May 1994) (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations), USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Green Tier," Section III of the annex to the OECD Council Decision C(92)39/Final (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

OECD Guideline for Testing of Chemicals, "Ready Biodegradability," Method 301B (July 17, 1992), "CO2 Evolution (Modified Sturm Test)," referenced in 35 Ill. Adm. Code 724.414.

OECD "Red List of Wastes," Appendix 5 to the OECD Council Decision C(92)39/Final (March 30, 1992, revised May 1993), USEPA-approved for 35 Ill. Adm. Code 722.189, referenced in 35 Ill. Adm. Code 722.181.

OECD "Red Tier," Section V of the annex to the OECD Council

Decision C(92)39/Final (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (revised May 1993), referenced in 35 Ill. Adm. Code 722.181.

Table 2.B of the Annex of OECD Council Decision C(88)90(Final) (May 27, 1988), amended by C(94)152/Final (July 28, 1994), "Decision of the Council on Transfrontier Movements of Hazardous Wastes," referenced in 35 Ill. Adm. Code 722.181 and 722.187.

STI. Available from the Steel Tank Institute, 728 Anthony Trail, Northbrook, IL 60062, 708-498-1980:

"Standard for Dual Wall Underground Steel Storage Tanks" (1986), referenced in 35 Ill. Adm. Code 724.293.

USDOD. Available from the United States Department of Defense:

"DOD Ammunition and Explosives Safety Standards" (DOD 6055.9-STD), as in effect in July 1999 October 5, 2004, referenced in 35 Ill. Adm. Code 726.305.

"The Motor Vehicle Inspection Report" (DD Form 626, MAR 2007), as in effect on Nov. 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"Requisition Tracking Form" (DD Form 1348), as in effect on Nov. 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"The Signature and Tally Record" (DD Form 1907, NOV 2006), as in effect on Nov. 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

"Special Instructions for Motor Vehicle Drivers" (DD Form 836, OCT 2006), as in effect on Nov. 8, 1995, referenced in 35 Ill. Adm. Code 726.303.

BOARD NOTE: DOD 6055.9-STD is available on-line for download in pdf format from http://www.ddesb.pentagon.mil. DD Form 1348, DD Form 1907, NOV 2006, and DD Form 836, OCT 2006 are available online for download in pdf format from http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm.

USEPA, Office of Ground Water and Drinking Water. Available from United States Environmental Protection Agency, Office of Drinking Water, State Programs Division, WH 550 E, Washington, D.C. 20460:

"Inventory of Injection Wells," USEPA Form 7520-16 (Revised 8-01), referenced in 35 Ill. Adm. Code 704.148 and 704.283.

"Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells," USEPA publication number EPA-570/9-87-002, August 1987, referenced in 35 Ill. Adm. Code 730.165.

USEPA, Receptor Analysis Branch. Available from Receptor Analysis Branch, USEPA (MD-14), Research Triangle Park, NC 27711:

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, USEPA publication number EPA-450/R-92-019, USEPA-approved for Appendix I to 35 Ill. Adm. Code 726.

BOARD NOTE: EPA-454/R-92-019 is also available for purchase from NTIS (see above) and on the Internet for free download as a WordPerfect document from the USEPA website at following Internet address:

www.epa.gov/scram001/guidance/guide/scrng.wpd.

USEPA Region 6. Available from United States Environmental Protection Agency, Region 6, Multimedia Permitting and Planning Division, 1445 Ross Avenue, Dallas, TX 75202 (phone: 214-665-7430):

"EPA RCRA Delisting Program--Guidance Manual for the Petitioner," March 23, 2000, referenced in Section 720.122.

USGSA. Available from the United States Government Services Administration:

Government Bill of Lading (GBL) (GSA Standard Form 1103, rev 9/2003, supplemented as necessary with GSA Standard Form 1109, rev 09/1998), as in effect on Nov. 8, 1995, referenced in Section 726.303.

BOARD NOTE: Available on-line for download in various formats from www.gsa.gov/forms/forms.htm.

b) Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, 202-783-3238:

10 CFR 20.2006 (2006) (2007) (Transfer for Disposal and Manifests), referenced in 35 III. Adm. Code 702.110, 726.425, and 726.450.

Table II, column 2 in Appendix B to 10 CFR 20 (2006) (2007) (Water

Effluent Concentrations), referenced in 35 Ill. Adm. Code 702.110, 730.103, and 730.151.

Appendix G to 10 CFR 20 (2006) (2007) (Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests), referenced in 35 Ill. Adm. Code 726.440.

10 CFR 71 (2006) (2007) (Packaging and Transportation of Radioactive Material), referenced generally in 35 Ill. Adm. Code 726.430.

10 CFR 71.5 (2006) (2007) (Transportation of Licensed Material), referenced in 35 Ill. Adm. Code 726.425.

33 CFR 153.203 (2005), as amended at 70 Fed. Reg. 74669 (Dec. 16, 2005) (2007) (Procedure for the Notice of Discharge), referenced in 35 III. Adm. Code 723.130 and 739.143.

40 CFR 3.2, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (How Does This Part Provide for Electronic Reporting?), referenced in Section 720.104.

40 CFR 3.3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (What Definitions Are Applicable to This Part?), referenced in Section 720.104.

40 CFR 3.10, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (What Are the Requirements for Electronic Reporting to EPA?), referenced in Section 720.104.

40 CFR 3.2000, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (What Are the Requirements Authorized State, Tribe, and Local Programs' Reporting Systems Must Meet?), referenced in Section 720.104.

40 CFR 51.100(ii) (2005) (2007) (Definitions), referenced in 35 III. Adm. Code 726.200.

Appendix W to 40 CFR 51-(2005), as amended at 70 Fed. Reg. 68218 (Nov. 9, 2005) (2007) (Guideline on Air Quality Models), referenced in 35 Ill. Adm. Code 726.204.

BOARD NOTE: Also available from NTIS (see above for contact information) as "Guideline on Air Quality Models," Revised 1986, USEPA publication number EPA-450/12-78-027R, NTIS document numbers PB86-245248 (Guideline) and PB88-150958 (Supplement).

Appendix B to 40 CFR 52.741 (2005) (2007) (VOM Measurement

Techniques for Capture Efficiency), referenced in 35 Ill. Adm. Code 703.213, 703.352, 724.982, 724.984, 724.986, 724.989, 725.983, 725.985, 725.987, and 725.990.

40 CFR 60 (2005), as amended at 70 Fed. Reg. 51266 (Aug. 30, 2005), 70 Fed. Reg. 55568 (Sep. 22, 2005), 70 Fed. Reg. 59848 (Oct. 13, 2005), 70 Fed. Reg. 73138 (Dec. 9, 2005), 70 Fed. Reg. 74679 (Dec. 16, 2005), and 70 Fed. Reg. 74870 (Dec. 16, 2005) (2007) (Standards of Performance for New Stationary Sources), referenced generally in 35 Ill. Adm. Code 724.964, 724.980, 725.964, and 725.980.

Subpart VV of 40 CFR 60-(2005) (2007) (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), referenced in 35 Ill. Adm. Code 724.989 and 725.990.

Appendix A to 40 CFR 60-(2005) (2007) (Test Methods), referenced generally in 35 Ill. Adm. Code 726.205 (in addition to the references cited below for specific methods):

Method 1 (Sample and Velocity Traverses for Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), referenced in 35 Ill. Adm. Code 724.933, 724.934, 725.933, 725.934, and 726.205.

Method 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2B (Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators), referenced in 35 Ill. Adm. Code 726.205.

Method 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts), referenced in 35 Ill. Adm. Code 724.933, 725.933, and 726.205.

Method 2E (Determination of Landfill Gas Production Flow Rate), referenced in 35 Ill. Adm. Code 726.205.

Method 2F (Determination of Stack Gas Velocity and Volumetric Flow Rate with Three-Dimensional Probes), referenced in 35 Ill. Adm. Code 726.205.

Method 2G (Determination of Stack Gas Velocity and Volumetric Flow Rate with Two-Dimensional Probes), referenced in 35 Ill. Adm. Code 726.205.

Method 2H (Determination of Stack Gas Velocity Taking into Account Velocity Decay Near the Stack Wall), referenced in 35 Ill. Adm. Code 726.205.

Method 3 (Gas Analysis for the Determination of Dry Molecular Weight), referenced in 35 Ill. Adm. Code 724.443 and 726.205.

Method 3A (Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)), referenced in 35 Ill. Adm. Code 726.205.

Method 3B (Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air), referenced in 35 Ill. Adm. Code 726.205.

Method 3C (Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 4 (Determination of Moisture Content in Stack Gases), referenced in 35 Ill. Adm. Code 726.205.

Method 5 (Determination of Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5A (Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry), referenced in 35 Ill. Adm. Code 726.205.

Method 5B (Determination of Nonsulfuric Acid Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5D (Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters), referenced in 35 Ill. Adm. Code 726.205.

Method 5E (Determination of Particulate Matter Emissions from the Wool Fiberglass Insulation Manufacturing Industry), referenced in 35 Ill. Adm. Code 726.205.

Method 5F (Determination of Nonsulfate Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 5G (Determination of Particulate Matter Emissions from Wood Heaters (Dilution Tunnel Sampling Location)), referenced in 35 Ill. Adm. Code 726.205.

Method 5H (Determination of Particulate Emissions from Wood Heaters from a Stack Location), referenced in 35 Ill. Adm. Code 726.205.

Method 5I (Determination of Low Level Particulate Matter Emissions from Stationary Sources), referenced in 35 Ill. Adm. Code 726.205.

Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography), referenced in 35 Ill. Adm. Code 724.933, 724.934, 725.933, and 725.934.

Method 21 (Determination of Volatile Organic Compound Leaks), referenced in 35 Ill. Adm. Code 703.213, 724.934, 724.935, 724.963, 725.934, 725.935, 725.963, and 725.984.

Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares), referenced in 35 Ill. Adm. Code 724.933, 724.1101, 725.933, 725.1101, and 727.900.

Method 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer), referenced in 35 Ill. Adm. Code 724.934 and 725.985.

Method 25D (Determination of the Volatile Organic Concentration of Waste Samples), referenced in 35 Ill. Adm. Code 724.982, 725.983, and 725.984.

Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples), referenced in 35 Ill. Adm. Code 725.984.

Method 27 (Determination of Vapor Tightness of Gasoline

Delivery Tank Using Pressure-Vacuum Test), referenced in 35 Ill. Adm. Code 724.987 and 725.987.

40 CFR 61 (2005), as amended at 70 Fed. Reg. 73138 (Dec. 9, 2005) and 70 Fed. Reg. 73595 (Dec. 13, 2005) (2007) (National Emission Standards for Hazardous Air Pollutants), referenced generally in 35 Ill. Adm. Code 725.933, 725.964, and 725.980.

Subpart V of 40 CFR 61-(2005) (2007) (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), referenced in 35 Ill. Adm. Code 724.989 and 725.990.

Subpart FF of 40 CFR 61 (2005) (2007) (National Emission Standard for Benzene Waste Operations), referenced in 35 Ill. Adm. Code 724.982 and 725.983.

40 CFR 63 (2005), as amended at 70 Fed. Reg. 38554 (July 1, 2005), 70 Fed. Reg. 38780 (July 6, 2005), 70 Fed. Reg. 39426 (July 8, 2005), 70 Fed. Reg. 39662 (July 11, 2005), 70 Fed. Reg. 40672 (July 14, 2005), 70 Fed. Reg. 44285 (Aug. 2, 2005), 70 Fed. Reg. 46684 (Aug. 10, 2005), 70 Fed. Reg. 50118 (Aug. 25, 2005), 70 Fed. Reg. 51269 (Aug. 30, 2005), 70 Fed. Reg. 57513 (Oct. 3, 2005), 70 Fed. Reg. 59402 (Oct. 12, 2005), 70 Fed. Reg. 59848 (Oct. 13, 2005), 70 Fed. Reg. 66280 (Nov. 2, 2005), 70 Fed. Reg. 73138 (Dec. 9, 2005), 70 Fed. Reg. 73595 (Dec. 13, 2005), 70 Fed. Reg. 75042 (Dec. 19, 2005), 70 Fed. Reg. 75047 (Dec. 19, 2005), 70 Fed. Reg. 75320 (Dec. 19, 2005), 70 Fed. Reg. 75924 (Dec. 21, 2005), 70 Fed. Reg. 76918 (Dec. 28, 2005), and 71 Fed. Reg. 14655 (Mar. 23, 2006) (2007) (National Emission Standards for Hazardous Air Pollutants for Source Categories), referenced generally in 35 Ill. Adm. Code 725.933, 725.964, and 725.980.

Subpart RR of 40 CFR 63-(2005) (2007) (National Emission Standards for Individual Drain Systems), referenced in 35 Ill. Adm. Code 724.982, 724.984, 724.985, 725.983, 725.985, and 725.986.

Subpart EEE of 40 CFR 63 (2000) (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), referenced in 35 Ill. Adm. Code 703.280.

Subpart EEE of 40 CFR 63-(2005), as amended at 70 Fed. Reg. 59402 (Oct. 12, 2005), 70 Fed. Reg. 75042 (Dec. 19, 2005), and 71 Fed. Reg. 14655 (Mar. 23, 2006) (2007) (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors) (includes 40 CFR 63.1206 (When and How Must You Comply with the Standards and Operating Requirements?), 63.1215 (What are the Health-Based Compliance Alternatives for Total Chlorine?), 63.1216 (What are the

Standards for Solid-Fuel Boilers that Burn Hazardous Waste?), 63.1217 (What are the Standards for Liquid-Fuel Boilers that Burn Hazardous Waste?), 63.1218 (What are the Standards for Hydrochloric Acid Production Furnaces that Burn Hazardous Waste?), 63.1219 (What are the Replacement Standards for Hazardous Waste Incinerators?), 63.1220 (What are the Replacement Standards for Hazardous Waste-Burning Cement Kilns?), and 63.1221 (What are the Replacement Standards for Hazardous Waste-Burning Lightweight Aggregate Kilns?)), referenced in Appendix A to 35 Ill. Adm. Code 703 and 35 Ill. Adm. Code 703.155, 703.205, 703.208, 703.221, 703.232, 703.320, 703.280, 724.440, 724.701, 724.950, 725.440, and 726.200.

Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63-(2005) (2007) (Test Methods), referenced in 35 Ill. Adm. Code 725.984.

Appendix C to 40 CFR 63-(2005) (2007) (Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit), referenced in 35 Ill. Adm. Code 725.984.

Appendix D to 40 CFR 63-(2005) (2007) (Test Methods), referenced in 35 Ill. Adm. Code 725.984.

40 CFR 136.3 (Identification of Test Procedures) (2005) (2007), referenced in 35 Ill. Adm. Code 702.110, 704.150, 704.187, and 730.103.

40 CFR 144.70-(2005) (2007) (Wording of the Instruments), referenced in 35 Ill. Adm. Code 704.240.

40 CFR 232.2-(2005) (2007) (Definitions), referenced in 35 Ill. Adm. Code 721.104.

40 CFR 257-(2005), as amended at 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (Criteria for Classification of Solid Waste Disposal Facilities and Practices), referenced in 35 Ill. Adm. Code 739.181.

40 CFR 258-(2005), as amended at 70 Fed. Reg. 44150 (Aug. 1, 2005) and 70 Fed. Reg. 59848 (Oct. 13, 2005) (2007) (Criteria for Municipal Solid Waste Landfills), referenced in 35 Ill. Adm. Code 739.181.

40 CFR 260.21-(2005) (2007) (Alternative Equivalent Testing Methods), referenced in Section 720.121.

Appendix I to 40 CFR 260-(2005) (2007) (Overview of Subtitle C Regulations), referenced in Appendix A to 35 Ill. Adm. Code 720.

Appendix III to 40 CFR 261-(2005) (2007) (Chemical Analysis Test Methods), referenced in 35 III. Adm. Code 704.150 and 704.187.

40 CFR 262.53-(2005) (2007) (Notification of Intent to Export), referenced in 35 Ill. Adm. Code 722.153.

40 CFR 262.54-(2005) (2007) (Special Manifest Requirements), and as amended at 70 Fed. Reg. 10776 (March 4, 2005), referenced in 35 Ill. Adm. Code 722.154.

40 CFR 262.55-(2005) (2007) (Exception Reports), referenced in 35 III. Adm. Code 722.155.

40 CFR 262.56-(2005) (2007) (Annual Reports), referenced in 35 III. Adm. Code 722.156.

40 CFR 262.57-(2005) (2007) (Recordkeeping), referenced in 35 Ill. Adm. Code 722.157.

Appendix to 40 CFR 262-(2005) (2007) (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions)), and as amended at 70 Fed. Reg. 10776 (March 4, 2005), referenced in Appendix A to 35 Ill. Adm. Code 722 and 35 Ill. Adm. Code 724.986 and 725.987.

40 CFR 264.151-(2005) (2007) (Wording of the Instruments), referenced in 35 Ill. Adm. Code 724.251 and 727.240.

Appendix I to 40 CFR 264-(2005) (2007) (Recordkeeping Instructions), referenced in Appendix A to 35 Ill. Adm. Code 724.

Appendix IV to 40 CFR 264-(2005) (2007) (Cochran's Approximation to the Behrens-Fisher Students' T-Test), referenced in Appendix D to 35 Ill. Adm. Code 724.

Appendix V to 40 CFR 264-(2005) (2007) (Examples of Potentially Incompatible Waste), referenced in Appendix E to 35 III. Adm. Code 724 and 35 III. Adm. Code 727.270.

Appendix VI to 40 CFR 264-(2005) (2007) (Political Jurisdictions in Which Compliance with § 264.18(a) Must Be Demonstrated), referenced in 35 Ill. Adm. Code 703.306 and 724.118.

Appendix I to 40 CFR 265-(2005) (2007) (Recordkeeping Instructions), referenced in Appendix A to 35 Ill. Adm. Code 725.

Appendix III to 40 CFR 265-(2005) (2007) (EPA Interim Primary Drinking Water Standards), referenced in Appendix C to 35 Ill. Adm. Code 725.

Appendix IV to 40 CFR 265 (2005) (2007) (Tests for Significance), referenced in Appendix D to 35 Ill. Adm. Code 725.

Appendix V to 40 CFR 265-(2005) (2007) (Examples of Potentially Incompatible Waste), referenced in 35 Ill. Adm. Code 725.277, 725.330, 725.357, 725.382, and 725.413 and Appendix E to 35 Ill. Adm. Code 725.

Appendix IX to 40 CFR 266 (2005) (2007) (Methods Manual for Compliance with the BIF Regulations), referenced generally in Appendix I to 35 Ill. Adm. Code 726.

Section 4.0 (Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzo-furan Congeners), referenced in 35 Ill. Adm. Code 726.200 and 726.204.

Section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure), referenced in 35 Ill. Adm. Code 726.204.

Section 7.0 (Statistical Methodology for Bevill Residue Determinations), referenced in 35 Ill. Adm. Code 726.212.

BOARD NOTE: Also available from NTIS (see above for contact information) as "Methods Manual for Compliance with BIF Regulations: Burning Hazardous Waste in Boilers and Industrial Furnaces," December 1990, USEPA publication number EPA-530/SW-91-010, NTIS document number PB91-120006.

40 CFR 270.5 (2005) (2007) (Noncompliance and Program Reporting by the Director), referenced in 35 Ill. Adm. Code 703.305.

40 CFR 761-(2005) (2007) (Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions), referenced generally in 35 Ill. Adm. Code 728.145.

40 CFR 761.3 (2005) (2007) (Definitions), referenced in 35 Ill. Adm. Code 728.102 and 739.110.

40 CFR 761.60-(2005) (2007) (Disposal Requirements), referenced in 35 Ill. Adm. Code 728.142.

40 CFR 761.65 (2005) (2007) (Storage for Disposal), referenced in 35 Ill. Adm. Code 728.150.

- 40 CFR 761.70 (2005) (2007) (Incineration), referenced in 35 III. Adm. Code 728.142.
- Subpart B of 49 CFR 107 (2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Exemptions), referenced generally in 35 III. Adm. Code 724.986 and 725.987.
- 49 CFR 171-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (General Information, Regulations, and Definitions), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 171.3 (2005) (2007) (Hazardous Waste), referenced in 35 Ill. Adm. Code 722.133.
- 49 CFR 171.8 (2005), as amended at 70 Fed. Reg. 20018 (July 28, 2005) and 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Definitions and Abbreviations), referenced in 35 Ill. Adm. Code 733.118, 733.138, 733.152, 733.155, and 739.143.
- 49 CFR 171.15 (2005) (2007) (Immediate Notice of Certain Hazardous Materials Incidents), referenced in 35 Ill. Adm. Code 723.130 and 739.143.
- 49 CFR 171.16-(2005) (2007) (Detailed Hazardous Materials Incident Reports), referenced in 35 III. Adm. Code 723.130 and 739.143.
- 49 CFR 172-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), referenced generally in 35 Ill. Adm. Code 722.131, 722.132, 724.986, 725.987, 733.114, 733.118, 733.134, 733.138, 733.152, 733.155, and 739.143.
- 49 CFR 172.304 (2005) (2007) (Marking Requirements), referenced in 35 Ill. Adm. Code 722.132.
- Subpart F of 49 CFR 172 (2005) (2007) (Placarding), referenced in 35 III. Adm. Code 722.133.
- 49 CFR 173-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Shippers—General Requirements for Shipments and Packages), referenced generally in 35 Ill. Adm. Code 722.130, 724.986, 724.416, 725.987, 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 173.2-(2005) (2007) (Hazardous Materials Classes and Index to

- Hazard Class Definitions), referenced in 35 Ill. Adm. Code 733.152.
- 49 CFR 173.12-(2005) (2007) (Exceptions for Shipments of Waste Materials), referenced in 35 Ill. Adm. Code 724.416, 724.986, and 725.987.
- 49 CFR 173.28-(2005) (2007) (Reuse, Reconditioning, and Remanufacture of Packagings), referenced in 35 Ill. Adm. Code 725.273.
- 49 CFR 173.50-(2005) (2007) (Class 1—Definitions), referenced in 35 III. Adm. Code 721.124.
- 49 CFR 173.54 (2005) (2006) (Forbidden Explosives), referenced in 35 Ill. Adm. Code 721.124.
- 49 CFR 173.115-(2005) (2007) (Class 2, Divisions 2.1, 2.2, and 2.3—Definitions), referenced in 35 Ill. Adm. Code 721.121.
- 49 CFR 173.127 (2005) (Class 5, Division 5.1—Definition and Assignment of Packaging Groups), referenced in 35 Ill. Adm. Code 721.121.
- 49 CFR 174 (2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Carriage by Rail), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 175-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Carriage by Aircraft), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 176 (2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Carriage by Vessel), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 177-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Carriage by Public Highway), referenced generally in 35 Ill. Adm. Code 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 178 (2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Specifications for Packagings), referenced generally in 35 III. Adm. Code 722.130, 724.416, 724.986, 725.416, 725.987, 733.118, 733.138, 733.152, and 739.143.
- 49 CFR 179-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2007) (Specifications for Tank Cars), referenced in 35 Ill. Adm. Code 722.130, 724.416, 724.986, 725.416, 725.987, 733.118, 733.138, 733.152,

and 739.143.

49 CFR 180-(2005), as amended at 70 Fed. Reg. 73156 (Dec. 9, 2005) (2006) (Continuing Qualification and Maintenance of Packagings), referenced generally in 35 Ill. Adm. Code 724.986, 725.987, 733.118, 733.138, 733.152, and 739.143.

c) Federal Statutes:

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Section 11 of the Atomic Energy Act of 1954 (42 USC 2014), as amended through <u>January 23, 2000 January 3, 2005</u>, referenced in 35 Ill. Adm. Code 721.104 and 726.310.

Sections 201(v), 201(w), and 512(j) of the Federal Food, Drug, and Cosmetic Act (FFDCA; 21 USC 321(v), 321(w), and 360b(j)), as amended through January 2, 2001 January 3, 2005, referenced in Section 720.110 and 35 Ill. Adm. Code 733.109.

Section 1412 of the Department of Defense Authorization Act of 1986, Pub. L. 99-145 (50 USC 1521(j)(1)), as amended through January 23, 2000 January 3, 2005, referenced in 35 Ill. Adm. Code 726.301.

u _,	i) This Section incorporates no later editions of amendments.	
(Source:	Amended at 32 III. Reg, effective)	
	SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURE	ES

This Castian incorporates no later aditions or amandments

Section 720.131 Solid Waste Determinations

- a) The Board will determine that those materials that are accumulated speculatively without sufficient amounts being recycled are not solid wastes if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. Such a determination is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. This determination will be based on the following criteria:
 - The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material or contractual arrangements for recycling);
 - 2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

- 3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;
- 4) The extent to which the material is handled to minimize loss; and
- 5) Other relevant factors.
- b) The Board will determine that those materials that are reclaimed and then reused as feedstock within the original production process in which the materials were generated are not solid wastes if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:
 - 1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;
 - 2) The prevalence of the practice on an industry-wide basis;
 - 32) The extent to which the material is handled before reclamation to minimize loss;
 - 4<u>3</u>) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;
 - 54) The location of the reclamation operation in relation to the production process;
 - 65) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;
 - 76) Whether the person that generates the material also reclaims it; and
 - 87) Other relevant factors.
- c) The Board will determine that those materials that have been reclaimed but must be reclaimed further before recovery is completed are not solid wastes if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following criteria:
 - 1) The degree of processing the material has undergone and the degree of further processing that is required;
 - 2) The value of the material after it has been reclaimed;

	3)	The degree to which the reclaimed material is like an analogous raw material;
	4)	The extent to which an end market for the reclaimed material is guaranteed;
	5)	The extent to which the reclaimed material is handled to minimize loss; and
	6)	Other relevant factors.
Source: Ame	ended a	t 32 Ill. Reg, effective)
Section 720.1	40	Additional Regulation of Certain Hazardous Waste Recycling Activities on a Case-by-Case Basis
a)	storing 721.10 and (c) 726. T stored because	gency may decide on a case-by-case basis that persons accumulating or the recyclable materials described in 35 Ill. Adm. Code 721.106(a)(2)(D) 06(a)(2)(C) should be regulated pursuant to 35 Ill. Adm. Code 721.106(b) rather than pursuant to the provisions of Subpart F of 35 Ill. Adm. Code The basis for this decision is that the materials are being accumulated or in a manner that does not protect human health and the environment se the materials or their toxic constituents have not been adequately ned, or because the materials being accumulated or stored together are patible. In making this decision, the Agency must consider the following stored.
	1)	The types of materials accumulated or stored and the amounts accumulated or stored;
	2)	The method of accumulation or storage;
	3)	The length of time the materials have been accumulated or stored before being reclaimed;
	4)	Whether any contaminants are being released into the environment, or are likely to be so released; and
	5)	Other relevant factors.
b)	The pr	rocedures for this decision are set forth in Section 720.141.
Source: Ame	ended a	t 32 III. Reg, effective)

Section 720.141 Procedures for Case-by-Case Regulation of Hazardous Waste Recycling Activities

The Agency must use the following procedures when determining whether to regulate hazardous waste recycling activities described in 35 Ill. Adm. Code 721.106(a)(2)(D) 721.106(a)(2)(C) under the provisions of 35 Ill Adm. Code 721.106(b) and (c) rather than under the provisions of Subpart F of 35 Ill. Adm. Code 726.

- a) If a generator is accumulating the waste, the Agency must issue a notice setting forth the factual basis for the decision and stating that the person must comply with the applicable requirements of Subparts A, C, D and E of 35 Ill. Adm. Code 722. The notice will become final within 30 days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the Agency must hold a public hearing. The Agency must provide notice of the hearing to the public and allow public participation at the hearing. The Agency must issue a final written memorandum of decision after the hearing stating whether or not compliance with 35 Ill. Adm. Code 722 is required, and setting forth the reasons for the Agency's decision, including all findings of fact and conclusions of law. Such memorandum of decision will constitute a final administrative action, and may be appealed to the Board. The decision becomes effective 35 days after service of the decision unless the Agency specifies a later date or unless an appeal has been filed with the Board. The decision may be appealed to the Board by any person who participated in the hearing. Proceedings before the Board must be in general accordance with the rules set forth in 35 Ill. Adm. Code 105.
- b) If the person is accumulating the recyclable material as a storage facility, the notice must state that the person must obtain a permit in accordance with all applicable provisions of 35 Ill. Adm. Code 702, 703, and 705. The owner or operator of the facility must apply for a permit within no less than 60 days and no more than six months of notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the Agency's decision, it may do so in its permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reasons for the Agency's determination. The question of whether the Agency's decision was proper will remain open for consideration during the public comment period discussed under Subparts D and E of 35 Ill. Adm. Code 705, and in any subsequent hearing.

(Source:	Amended at 32 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 A. GENERAL PROVISIONS	
Section		
721.101	Purpose and Scope	
721.102	-	
721.103	Definition of Hazardous Waste	
721.104	Exclusions	
721.105	Special Requirements for Hazardous Waste Generated by Small Quantity	
	Generators	
721.106	Requirements for Recyclable Materials	
721.107	Residues of Hazardous Waste in Empty Containers	
721.108	PCB Wastes Regulated under TSCA	
721.109	Requirements for Universal Waste	
SU	BPART B: CRITERIA FOR IDENTIFYING THE CHARACTERISTICS OF HAZARDOUS WASTE AND FOR LISTING HAZARDOUS WASTES	
Section		
721.110	Criteria for Identifying the Characteristics of Hazardous Waste	
721.111	Criteria for Listing Hazardous Waste	
	SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE	
Section		
721.120	General	
721.121	Characteristic of Ignitability	
721.122	Characteristic of Corrosivity	
721.123	Characteristic of Reactivity	
721.124	Toxicity Characteristic	
	SUBPART D: LISTS OF HAZARDOUS WASTE	
Section		
721.130	General	
721.131	Hazardous Wastes from Nonspecific Sources	
721.132	Hazardous Waste from Specific Sources	
721.133	Discarded Commercial Chemical Products, Off-Specification Species, Container	
	Residues, and Spill Residues Thereof	
721.135	Wood Preserving Wastes	
	SUBPART E: EXCLUSIONS AND EXEMPTIONS	
Section		
721.138	Comparable or Syngas Fuel Exclusion	
721.139	Conditional Exclusion for Used, Broken CRTs and Processed CRT Glass	
	Undergoing Recycling	
721.140	Conditional Exclusion for Used, Intact CRTs Exported for Recycling	
721.141	Notification and Recordkeeping for Used, Intact CRTs Exported for Reuse	

721.Appendix A	Representative Sampling Methods			
721.Appendix B	Method 1311 Toxicity Characteristic Leaching Procedure (TCLP)			
721.Appendix C	Chemical Analysis Test Methods			
Table A	Analytical Characteristics of Organic Chemicals (Repealed)			
Table B	Analytical Characteristics of Inorganic Species (Repealed)			
Table C	Sample Preparation/Sample Introduction Techniques (Repealed)			
721.Appendix G	Basis for Listing Hazardous Wastes			
721.Appendix H	Hazardous Constituents			
721.Appendix I	Wastes Excluded by Administrative Action			
Table A	Wastes Excluded by USEPA pursuant to 40 CFR 260.20 and 260.22 from			
	Non-Specific Sources			
Table B	Wastes Excluded by USEPA pursuant to 40 CFR 260.20 and 260.22 from			
	Specific Sources			
Table C	Wastes Excluded by USEPA pursuant to 40 CFR 260.20 and 260.22 from			
	Commercial Chemical Products, Off-Specification Species, Container			
	Residues, and Soil Residues Thereof			
Table D	Wastes Excluded by the Board by Adjusted Standard			
721.Appendix J	Method of Analysis for Chlorinated Dibenzo-p-Dioxins and			
	Dibenzofurans (Repealed)			
721.Appendix Y	Table to Section 721.138			
721.Appendix Z	Table to Section 721.102			

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 at 8 III. 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 III. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 III. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 III. 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 III. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective Sept. 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective Nov. 12, 1987; amended in R87-26 at 12 III. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 III. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 III. 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 Nov. 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 Sept. 25, 1990; amended in R90-17 at 15 III. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 III. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 III. Reg. 14473, effective Sept. 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective

Nov. 6, 1992; amended in R92-10 at 17 III. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective Nov. 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 III. Reg. 17490, effective Nov. 23, 1994; amended in R95-6 at 19 III. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 III. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 III. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17531, effective Sept. 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1281, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9108, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 III. Reg. 6584, effective April 22, 2002; amended in R03-18 at 27 III. Reg. 12760, effective July 17, 2003; amended in R04-16 at 28 Ill. Reg. 10693, effective July 19, 2004; amended in R05-8 at 29 Ill. Reg. 6003, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 2992, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 791, effective December 20, 2006; amended in R07-5/R07-14 at 32 III. Reg. , effective

SUBPART A: GENERAL PROVISIONS

Section 721.103 Definition of Hazardous Waste

- a) A solid waste, as defined in Section 721.102, is a hazardous waste if the following is true of the waste:
 - 1) It is not excluded from regulation as a hazardous waste pursuant to Section 721.104(b); and
 - 2) It meets any of the following criteria:
 - A) It exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded pursuant to Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste pursuant to Subpart C of this Part is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if the mixture continues to exhibit any of the characteristics exhibited by the nonexcluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Section 721.124 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to

mixture.

- B) It is listed in Subpart D of this Part and has not been excluded from the lists in Subpart D of this Part pursuant to 35 Ill. Adm. Code 720.120 and 720.122.
- C) This subsection (a)(2)(B) corresponds with 40 CFR 261.3(a)(2)(iii), which USEPA removed and marked as "reserved" at 66 Fed. Reg. 27266 (May 16, 2001). This statement maintains structural consistency with the federal regulations.
- D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this Part and has not been excluded from this subsection (a)(2) pursuant to 35 Ill. Adm. Code 720.120 and 720.122, subsection (g) of this Section, or subsection (h) of this Section; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D of this Part are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this Section) if the generator demonstrates that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities that have eliminated the discharge of wastewater) and the following is true of the waste:
 - It is one or more of the following solvents listed in Section i) 721.131: benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary

clarification in the wastewater treatment system. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(i) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected:

It is one or more of the following spent solvents listed in ii) 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 chlorofluorocarbon solvents, 2- ethoxyethanol, or the scrubber waters derivedfrom the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 25 parts per million on an average weekly basis. A facility that chooses to measure concentration

levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(ii) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected;

- iii) It is one of the following wastes listed in Section 721.132, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation: heat exchanger bundle cleaning sludge from the petroleum refining industry (USEPA hazardous waste no. K050), crude oil storage tank sediment from petroleum refining operations (USEPA hazardous waste number K169), clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations (USEPA hazardous waste number K170), spent hydrotreating catalyst (USEPA hazardous waste number K171), and spent hydrorefining catalyst (USEPA hazardous waste number K172);
- iv) It is a discarded hazardous waste, commercial chemical product or chemical intermediate listed in Section 721.121, 721.132, or 721.133 arising from de minimis losses of these materials. For purposes of this subsection (a)(2)(D)(iv), "de minimis" losses are inadvertent releases to a wastewater treatment system, including 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. Any manufacturing facility that claims an exemption for de minimis quantities of a waste listed in Section 721.131 or 721.132, or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in Subpart D of this Part, must either have eliminated the discharge of wastewaters or have included in its federal Clean Water Act (33 USC 1251 et seq.) permit application or wastewater pretreatment submission to the Agency or the wastewater pretreatment Control Authority pursuant to 35 Ill. Adm. Code 307 of the constituents for which each waste was listed (in Appendix G of this Part); and the constituents in Table T to 35 Ill. Adm. Code 728 for which each waste has a treatment standard (i.e., land disposal restriction constituents). A facility is eligible to claim the exemption once the Agency or Control Authority has been notified of possible de minimis releases via the Clean Water Act permit application or the wastewater pretreatment submission. A copy of the Clean Water Act permit application or the wastewater pretreatment submission must be placed in the facility's on-site files;

- v) It is wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D of this Part, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system or provided that the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation;
- vi) It is one or more of the following wastes listed in Section 721.132: wastewaters from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be

demonstrated to be reacted in the process, destroyed through treatment, or recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight, or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 5 parts per million on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(vi) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

vii) It is wastewater derived from the treatment of one or more of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K156), provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system

does not exceed a total of 5 milligrams per liter, or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 5 milligrams per liter on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(vii) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

- E) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of this Part. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of this Part).
 - i) The rebuttable presumption does not apply to a metalworking oil or fluid containing chlorinated paraffins if it is processed through a tolling arrangement, as described in 35 Ill. Adm. Code 739.124(c), to reclaim metalworking

- oils or fluids. The presumption does apply to a metalworking oil or fluid if such an oil or fluid is recycled in any other manner, or disposed of.
- ii) The rebuttable presumption does not apply to a used oil contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to a used oil contaminated with CFCs that have been mixed with used oil from a source other than a refrigeration unit.
- b) A solid waste that is not excluded from regulation pursuant to subsection (a)(1) of this Section becomes a hazardous waste when any of the following events occur:
 - 1) In the case of a waste listed in Subpart D of this Part, when the waste first meets the listing description set forth in Subpart D of this Part.
 - 2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D of this Part is first added to the solid waste.
 - 3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C of this Part.
- c) Unless and until it meets the criteria of subsection (d) of this Section, a hazardous waste will remain a hazardous waste.
 - BOARD NOTE: This subsection (c) corresponds with 40 CFR 261.3(c)(1). The Board has codified 40 CFR 261.3(c)(2) at subsection (e) of this Section.
- d) Any solid waste described in subsection (e) of this Section is not a hazardous waste if it meets the following criteria:
 - In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C of this Part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to 35 Ill. Adm. Code 728, even if they no longer exhibit a characteristic at the point of land disposal.)
 - In the case of a waste that is a listed waste pursuant to Subpart D of this Part, a waste that contains a waste listed pursuant to Subpart D of this Part, or a waste that is derived from a waste listed in Subpart D of this Part, it also has been excluded from subsection (e) of this Section pursuant to 35 Ill. Adm. Code 720.120 and 720.122.
- e) Specific inclusions and exclusions.

- 1) Except as otherwise provided in subsection (e)(2), (g), or (h) of this Section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)
- 2) The following solid wastes are not hazardous even though they are generated from the treatment, storage, or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:
 - A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).
 - B) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(C) and (a)(3)(D).
 - C) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061, K062, or F006 waste in the units identified in this subsection (e)(2) that are disposed of in non-hazardous waste units, provided that these residues meet the generic exclusion levels identified in the tables in this subsection (e)(2)(C) for all constituents and the residues exhibit no characteristics of hazardous waste. The types of units identified are rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations, or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces: smelting. melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces); and other furnaces designated by the Agency pursuant to that definition.
 - i) Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and when the process or operation generating the waste changes.
 - ii) Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing

evidence that the material meets all of the exclusion requirements. The generic exclusion levels are the following:

Generic exclusion levels for K061 and K062 nonwastewater HTMR residues:

Constituent	Maximum for any single	
	composite sample (mg/ ℓ)	
Antimony	0.10	
Arsenic	0.50	
Barium	7.6	
Beryllium	0.010	
Cadmium	0.050	
Chromium (total)	0.33	
Lead	0.15	
Mercury	0.009	
Nickel	1.0	
Selenium	0.16	
Silver	0.30	
Thallium	0.020	
Vanadium	1.26	
Zinc	70	

Generic exclusion levels for F006 nonwastewater HTMR residues:

Constituent	Maximum for any single
	composite sample (mg/ ℓ)
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Cyanide (total) (mg/kg)	1.8
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Zinc	70

iii) A one-time notification and certification must be placed in the facility's files and sent to the Agency (or, for out-of-

State shipments, to the appropriate Regional Administrator of USEPA or the state agency authorized to implement federal 40 CFR 268 requirements) for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents, which do not exhibit any characteristics, and which are sent to RCRA Subtitle D (municipal solid waste landfill) units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes or if the RCRA Subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Agency on an annual basis if such changes occur. Such notification and certification should be sent to the Agency by the end of the calendar year, but no later than December 31. The notification must include the following information: the name and address of the non-hazardous waste management unit receiving the waste shipment; the USEPA hazardous waste number and treatability group at the initial point of generation; and the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows:

"I certify under penalty of law that the generic exclusion levels for all constituents have been met without impermissible dilution and that no characteristic of hazardous waste is exhibited. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

- D) Biological treatment sludge from the treatment of one of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K156) and wastewaters from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K157).
- E) Catalyst inert support media separated from one of the following wastes listed in Section 721.132: spent hydrotreating catalyst (USEPA hazardous waste number K171) and spent hydrorefining catalyst (USEPA hazardous waste number K172).

BOARD NOTE: This subsection (e) would normally correspond with 40 CFR 261.3(e), a subsection that has been deleted and marked "reserved" by USEPA.

- Rather, this subsection (e) corresponds with 40 CFR 261.3(c)(2), which the Board codified here to comport with codification requirements and to enhance clarity.
- f) Notwithstanding subsections (a) through (e) of this Section and provided the debris, as defined in 35 Ill. Adm. Code 728.102, does not exhibit a characteristic identified at Subpart C of this Part, the following materials are not subject to regulation under 35 Ill. Adm. Code 702, 703, 720, 721 to 726, or 728:
 - 1) Hazardous debris as defined in 35 Ill. Adm. Code 728.102 that has been treated using one of the required extraction or destruction technologies specified in Table F to 35 Ill. Adm. Code 728; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or
 - 2) Debris, as defined in 35 Ill. Adm. Code 728.102, that the Agency, considering the extent of contamination, has determined is no longer contaminated with hazardous waste
- g) Exclusion of certain wastes listed in Subpart D of this Part solely because they exhibit a characteristic of ignitability, corrosivity, or reactivity.
 - A hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more characteristics of ignitability, as defined under Section 721.121; corrosivity, as defined under Section 721.122; or reactivity, as defined under Section 721.123 is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste identified in Subpart C of this Part.
 - 2) The exclusion described in subsection (g)(1) of this Section also pertains to the following:
 - A) Any mixture of a solid waste and a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D) of this Section; and
 - B) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (e)(1) of this Section.
 - Wastes excluded pursuant to this subsection (g) are subject to 35 Ill. Adm. Code 728 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

- h) Eligible radioactive mixed waste.
 - 1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of Subpart N of 35 Ill. Adm. Code 726 (i.e., it is "eligible radioactive mixed waste").
 - 2) The exemption described in subsection (h)(1) of this Section also pertains to the following:
 - A) Any mixture of a solid waste and an eligible radioactive mixed waste; and
 - B) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.
 - Waste exempted pursuant to this subsection (h) must meet the eligibility criteria and specified conditions in 35 Ill. Adm. Code 726.325 and 726.330 (for storage and treatment) and in 35 Ill. Adm. Code 726.410 and 726.415 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

(Source:	Amended at 32 Ill. Reg.	, effective)
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Section 721.104 Exclusions

- a) Materials that are not solid wastes. The following materials are not solid wastes for the purpose of this Part:
 - 1) Sewage.
 - A) Domestic sewage (untreated sanitary wastes that pass through a sewer system); and
 - B) Any mixture of domestic sewage and other waste that passes through a sewer system to publicly-owned treatment works for treatment.
 - 2) Industrial wastewater discharges that are point source discharges with National Pollutant Discharge Elimination System (NPDES) permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection Act [415 ILCS 5/12(f)] and 35 Ill. Adm. Code 309.

BOARD NOTE: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored, or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

- 3) Irrigation return flows.
- 4) Source, by-product, or special nuclear material, as defined by section 11 of the Atomic Energy Act of 1954, as amended (42 USC 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- 5) Materials subjected to in-situ mining techniques that are not removed from the ground as part of the extraction process.
- Pulping liquors (i.e., black liquors) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless it is accumulated speculatively, as defined in Section 721.101(c).
- 7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively, as defined in Section 721.101(c).
- 8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated, where they are reused in the production process, provided that the following is true:
 - A) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
 - B) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators);
 - C) The secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and
 - D) The reclaimed material is not used to produce a fuel or used to produce products that are used in a manner constituting disposal.
- 9) Wood preserving wastes.
 - A) Spent wood preserving solutions that have been used and which are reclaimed and reused for their original intended purpose;
 - B) Wastewaters from the wood preserving process that have been reclaimed and which are reused to treat wood; and
 - C) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in subsections (a)(9)(A) and (a)(9)(B) of this Section, so long as they meet all of the following conditions:

- The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water-borne plants in the production process for their original intended purpose;
- ii) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;
- iii) Any unit used to manage wastewaters or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;
- iv) Any drip pad used to manage the wastewaters or spent wood preserving solutions prior to reuse complies with the standards in Subpart W of 35 Ill. Adm. Code 725, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and
- Prior to operating pursuant to this exclusion, the plant v) owner or operator submits-prepares a one-time notification to the Agency stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice until closure of the facility. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Agency for reinstatement. The Agency must reinstate the exclusion in writing if it finds that the plant has returned to compliance with all conditions and that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. The applicant under this subsection (a)(9)(C)(v) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

- Hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the toxicity characteristic specified in Section 721.124, when subsequent to generation these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the waste from the point it is generated to the point it is recycled to coke ovens, to tar recovery, to the tar refining processes, or prior to when it is mixed with coal.
- Nonwastewater splash condenser dross residue from the treatment of hazardous waste number K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.
- 12) Certain oil-bearing hazardous secondary materials and recovered oil, as follows:
 - A) Oil-bearing hazardous secondary materials (i.e., sludges, byproducts, or spent materials) that are generated at a petroleum refinery (standard industrial classification (SIC) code 2911) and are inserted into the petroleum refining process (SIC code 2911: including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)), unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this subsection (a)(12), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in subsection (a)(12)(B) of this Section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this Section. Residuals generated from processing or recycling materials excluded under this subsection (a)(12)(A), where such materials as generated would have otherwise met a listing under Subpart D of this Part, are designated as USEPA hazardous waste number F037 listed wastes when disposed of or intended for disposal.
 - B) Recovered oil that is recycled in the same manner and with the same conditions as described in subsection (a)(12)(A) of this Section. Recovered oil is oil that has been reclaimed from

secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oilbearing hazardous wastes listed in Subpart D of this Part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil, as defined in 35 Ill. Adm. Code 739.100.

- Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.
- 14) Shredded circuit boards being recycled, provided that they meet the following conditions:
 - A) The circuit boards are stored in containers sufficient to prevent a release to the environment prior to recovery; and
 - B) The circuit boards are free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries.
- 15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with federal Clean Air Act regulation 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.
- 16) Comparable fuels or comparable syngas fuels (i.e., comparable or syngas fuels) that meet the requirements of Section 721.138.
- 17) Spent materials (as defined in Section 721.101) (other than hazardous wastes listed in Subpart D of this Part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by benefication, provided that the following is true:
 - A) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values;
 - B) The spent material is not accumulated speculatively;
 - C) Except as provided in subsection (a)(17)(D) of this Section, the spent material is stored in tanks, containers, or buildings that meet the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except

that smelter buildings may have partially earthen floors, provided that the spent material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 35 Ill. Adm. Code 720.110), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If a tank or container contains any particulate that may be subject to wind dispersal, the owner or operator must operate the unit in a manner that controls fugitive dust. A tank, container, or building must be designed, constructed, and operated to prevent significant releases to the environment of these materials.

- D) The Agency must allow by permit that solid mineral processing spent materials only may be placed on pads, rather than in tanks, containers, or buildings if the facility owner or operator can demonstrate the following: the solid mineral processing secondary materials do not contain any free liquid; the pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment; and the pads provide the same degree of containment afforded by the non-RCRA tanks, containers, and buildings eligible for exclusion.
 - i) The Agency must also consider whether storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, and air exposure pathways must include the following: the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.
 - ii) Pads must meet the following minimum standards: they must be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material; they must be capable of withstanding physical stresses associated with placement and removal; they must have runon and runoff controls; they must be operated in a manner that controls fugitive dust; and they must have integrity assurance through inspections and maintenance programs.

iii) Before making a determination under this subsection (a)(17)(D), the Agency must provide notice and the opportunity for comment to all persons potentially interested in the determination. This can be accomplished by placing notice of this action in major local newspapers, or broadcasting notice over local radio stations.

BOARD NOTE: See Subpart D of 35 Ill. Adm. Code 703 for the RCRA Subtitle C permit public notice requirements.

- E) The owner or operator provides a notice to the Agency, providing the following information: the types of materials to be recycled, the type and location of the storage units and recycling processes, and the annual quantities expected to be placed in non-land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.
- F) For purposes of subsection (b)(7) of this Section, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.
- Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided that both of the following conditions are true of the oil:
 - A) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in Section 721.121) or toxicity for benzene (Section 721.124, USEPA hazardous waste code D018);
 - B) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility for which all of the following is true: its primary SIC code is 2869, but its operations may also include SIC codes 2821, 2822, and 2865; it is physically co-located with a petroleum refinery; and the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been

reclaimed from secondary materials (i.e., sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

- 19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid, unless the material is placed on the land or accumulated speculatively, as defined in Section 721.101(c).
- 20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions are satisfied:
 - A) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in Section 721.101(c)(8).
 - B) A generator or intermediate handler of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must fulfill the following conditions:
 - i) It must submit a one-time notice to the Agency that contains the name, address, and USEPA identification number of the generator or intermediate handler facility, that provides a brief description of the secondary material that will be subject to the exclusion, and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).
 - ii) It must store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of nonearthen materials that provide structural support, and it must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. A tank used for this purpose must be structurally sound and, if outdoors, it must have a roof or cover that prevents contact with wind and rain. A container used for this purpose must be kept closed, except when it is necessary to add or remove material, and it must be in sound condition. Containers that are stored outdoors must be managed within storage areas that fulfill the conditions of subsection (a)(20)(F) of this Section:

- iii) With each off-site shipment of excluded hazardous secondary materials, it must provide written notice to the receiving facility that the material is subject to the conditions of this subsection (a)(20).
- iv) It must maintain records at the generator's or intermediate handler's facility for no less than three years of all shipments of excluded hazardous secondary materials. For each shipment these records must, at a minimum, contain the information specified in subsection (a)(20)(G) of this Section.
- C) A manufacturer of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must fulfill the following conditions:
 - i) It must store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subsection (a)(20)(B)(ii) of this Section.
 - ii) It must submit a one-time notification to the Agency that, at a minimum, specifies the name, address, and USEPA identification number of the manufacturing facility and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).
 - iii) It must maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, the name of transporter, and the date on which the materials were received, the quantity received, and a brief description of the industrial process that generated the material.
 - iv) It must submit an annual report to the Agency that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial processes from which the hazardous secondary materials were generated.

- D) Nothing in this Section preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person who generates a solid waste to determine if that waste is a hazardous waste.
- E) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in subsection (a)(20)(B)(i) of this Section, and that afterward will be used only to store hazardous secondary materials excluded under this subsection (a)(20), are not subject to the closure requirements of 35 Ill. Adm. Code 724 and 725.
- F) A container used to store excluded secondary material must fulfill the following conditions:
 - i) It must have containment structures or systems sufficiently impervious to contain leaks, spills, and accumulated precipitation;
 - ii) It must provide for effective drainage and removal of leaks, spills, and accumulated precipitation; and
 - iii) It must prevent run-on into the containment system.

BOARD NOTE: Subsections (a)(20)(F)(i) through (a)(20)(F)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(B)(I) through (a)(20)(ii)(B)(S). The Board added the preamble to these federal paragraphs as subsection (a)(20)(F) to comport with Illinois Administrative Code codification requirements.

- G) Required records of shipments of excluded hazardous secondary materials must, at a minimum, contain the following information:
 - i) The name of the transporter and date of the shipment;
 - ii) The name and address of the facility that received the excluded material, along with documentation confirming receipt of the shipment; and
 - iii) The type and quantity of excluded secondary material in each shipment.

BOARD NOTE: Subsections (a)(20)(G)(i) through (a)(20)(G)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(D)(1) through

(a)(20)(ii)(D)(3). The Board added the preamble to these federal paragraphs as subsection (a)(20)(G) to comport with Illinois Administrative Code codification requirements.

- Zinc fertilizers made from hazardous wastes or hazardous secondary materials that are excluded under subsection (a)(20) of this Section, provided that the following conditions are fulfilled:
 - A) The fertilizers meet the following contaminant limits:
 - i) For metal contaminants:

Constituent	Maximum Allowable Total Concentration
	in Fertilizer, per Unit (1%) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

- ii) For dioxin contaminants, the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).
- B) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less frequently than once every six months, and for dioxins no less frequently than once every 12 months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the products introduced into commerce.
- C) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with subsection (a)(21)(B) of this Section. Such records must at a minimum include the following:
 - i) The dates and times product samples were taken, and the dates the samples were analyzed;

- ii) The names and qualifications of the persons taking the samples;
- iii) A description of the methods and equipment used to take the samples;
- iv) The name and address of the laboratory facility at which analyses of the samples were performed;
- v) A description of the analytical methods used, including any cleanup and sample preparation methods; and
- vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (a)(21).

22) Used CRTs.

- A) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste within the United States, unless they are disposed of or speculatively accumulated, as defined in Section 721.101(c)(8), by a CRT collector or glass processor.
- B) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste when exported for recycling, provided that they meet the requirements of Section 721.140.
- C) Used, broken CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste, provided that they meet the requirements of Section 721.139.
- D) Glass removed from CRTs is not a solid waste provided that it meets the requirements of Section 721.139(c).
- b) Solid wastes that are not hazardous wastes. The following solid wastes are not hazardous wastes:
 - 1) Household waste, including household waste that has been collected, transported, stored, treated, disposed of, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste must not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of

regulation under this Part, if the following describe the facility:

- A) The facility receives and burns only the following waste:
 - i) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); or
 - ii) Solid waste from commercial or industrial sources that does not contain hazardous waste; and
- B) The facility does not accept hazardous waste and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

BOARD NOTE: The U.S. Supreme Court determined, in City of Chicago v. Environmental Defense Fund, Inc., 511 U.S. 328, 114 S. Ct. 1588, 128 L. Ed. 2d 302 (1994), that this exclusion and RCRA section 3001(i) (42 USC 6921(i)) do not exclude the ash from facilities covered by this subsection (b)(1) from regulation as a hazardous waste. At 59 Fed. Reg. 29372 (June 7, 1994), USEPA granted facilities managing ash from such facilities that is determined a hazardous waste under Subpart C of this Part until December 7, 1994 to file a Part A permit application pursuant to 35 Ill. Adm. Code 703.181. At 60 Fed. Reg. 6666 (Feb. 3, 1995), USEPA stated that it interpreted that the point at which ash becomes subject to RCRA Subtitle C regulation is when that material leaves the combustion building (including connected air pollution control equipment).

- 2) Solid wastes generated by any of the following that are returned to the soil as fertilizers:
 - A) The growing and harvesting of agricultural crops, or
 - B) The raising of animals, including animal manures.
- 3) Mining overburden returned to the mine site.
- 4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, except as provided in 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.
- 5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

- 6) Chromium wastes.
 - A) Wastes that fail the test for the toxicity characteristic (Section 721.124 and Appendix B to this Part) because chromium is present or which are listed in Subpart D of this Part due to the presence of chromium, that do not fail the test for the toxicity characteristic for any other constituent or which are not listed due to the presence of any other constituent, and that do not fail the test for any other characteristic, if the waste generator shows the following:
 - i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium;
 - ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
 - iii) The waste is typically and frequently managed in non-oxidizing environments.
 - B) The following are specific wastes that meet the standard in subsection (b)(6)(A) of this Section (so long as they do not fail the test for the toxicity characteristic for any other constituent and do not exhibit any other characteristic):
 - i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
 - ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
 - iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue;
 - iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome

- tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
- v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
- vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;
- vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; and
- viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.
- 7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.
 - A) For purposes of this subsection (b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting; autoclaving or chlorination in preparation for leaching (except where the roasting (or autoclaving or chlorination) and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; floatation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat tank, and in situ leaching.
 - B) For the purposes of this subsection (b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:
 - i) Slag from primary copper processing;

- ii) Slag from primary lead processing;
- iii) Red and brown muds from bauxite refining;
- iv) Phosphogypsum from phosphoric acid production;
- v) Slag from elemental phosphorus production;
- vi) Gasifier ash from coal gasification;
- vii) Process wastewater from coal gasification;
- viii) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
- ix) Slag tailings from primary copper processing;
- x) Fluorogypsum from hydrofluoric acid production;
- xi) Process wastewater from hydrofluoric acid production;
- xii) Air pollution control dust or sludge from iron blast furnaces;
- xiii) Iron blast furnace slag;
- xiv) Treated residue from roasting and leaching of chrome ore;
- xv) Process wastewater from primary magnesium processing by the anhydrous process;
- xvi) Process wastewater from phosphoric acid production;
- xvii) Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production;
- xviii) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
- xix) Chloride processing waste solids from titanium tetrachloride production; and
- xx) Slag from primary zinc production.
- C) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or

with normal mineral processing raw materials remains excluded under this subsection (b) if the following conditions are fulfilled:

- i) The owner or operator processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and
- ii) The owner or operator legitimately reclaims the secondary mineral processing materials.
- 8) Cement kiln dust waste, except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.
- 9) Solid waste that consists of discarded arsenical-treated wood or wood products that fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons that utilize the arsenical-treated wood and wood products for these materials' intended end use.
- 10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of Section 721.124 (hazardous waste codes D018 through D043 only) and which are subject to corrective action regulations under 35 Ill. Adm. Code 731.
- 11) This subsection (b)(11) corresponds with 40 CFR 261.4(b)(11), which expired by its own terms on January 25, 1993. This statement maintains structural parity with USEPA regulations.
- 12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems, that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this Part, if these oil filters have been gravity hot-drained using one of the following methods:
 - A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;
 - B) Hot-draining and crushing;
 - C) Dismantling and hot-draining; or

- D) Any other equivalent hot-draining method that will remove used oil.
- 14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- Leachate or gas condensate collected from landfills where certain solid wastes have been disposed of, under the following circumstances:
 - A) The following conditions must be fulfilled:
 - i) The solid wastes disposed of would meet one or more of the listing descriptions for the following USEPA hazardous waste numbers that are generated after the effective date listed for the waste:

USEPA Hazardous Waste Numbers	Listing Effective Date
K169, K170, K171, and K172	February 8, 1999
K174 and K175	May 7, 2001
K176, K177, and K178	May 20, 2002
K181	August 23, 2005

- ii) The solid wastes described in subsection (b)(15)(A)(i) of this Section were disposed of prior to the effective date of the listing (as set forth in that subsection);
- iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor is derived from any other listed hazardous waste; and
- iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under section 307(b) or 402 of the federal Clean Water Act.
- B) Leachate or gas condensate derived from K169, K170, K171, K172, K176, K177, or K178 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from

K181 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subsection (b)(15) after the emergency ends.

c) Hazardous wastes that are exempted from certain regulations. A hazardous waste that is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit, or an associated non-waste-treatment manufacturing unit, is not subject to regulation under 35 Ill. Adm. Code 702, 703, and 722 through 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.

- Except as provided in subsection (d)(2) of this Section, a sample of solid waste or a sample of water, soil, or air that is collected for the sole purpose of testing to determine its characteristics or composition is not subject to any requirements of this Part or 35 Ill. Adm. Code 702, 703, and 722 through 728. The sample qualifies when it fulfills one of the following conditions:
 - A) The sample is being transported to a laboratory for the purpose of testing;
 - B) The sample is being transported back to the sample collector after testing;
 - C) The sample is being stored by the sample collector before transport to a laboratory for testing;
 - D) The sample is being stored in a laboratory before testing:
 - E) The sample is being stored in a laboratory for testing but before it is returned to the sample collector; or
 - F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a

- court case or enforcement action where further testing of the sample may be necessary).
- 2) In order to qualify for the exemption in subsection (d)(1)(A) or (d)(1)(B) of this Section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must do the following:
 - A) Comply with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
 - B) Comply with the following requirements if the sample collector determines that USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
 - i) Assure that the following information accompanies the sample: The sample collector's name, mailing address, and telephone number; the laboratory's name, mailing address, and telephone number; the quantity of the sample; the date of the shipment; and a description of the sample; and
 - ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1) of this Section.
- e) Treatability study samples.
 - Except as is provided in subsection (e)(2) of this Section, a person that generates or collects samples for the purpose of conducting treatability studies, as defined in 35 Ill. Adm. Code 720.110, are not subject to any requirement of 35 Ill. Adm. Code 721 through 723 or to the notification requirements of section 3010 of the Resource Conservation and Recovery Act. Nor are such samples included in the quantity determinations of Section 721.105 and 35 Ill. Adm. Code 722.134(d) when:
 - A) The sample is being collected and prepared for transportation by the generator or sample collector;
 - B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or
 - C) The sample is being transported to the laboratory or testing facility

for the purpose of conducting a treatability study.

- 2) The exemption in subsection (e)(1) of this Section is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that the following conditions are fulfilled:
 - A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1,000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, or 2,500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;
 - B) The mass of each shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of hazardous waste, and 1 kg of acute hazardous waste;
 - C) The sample must be packaged so that it does not leak, spill, or vaporize from its packaging during shipment and the requirements of subsection (e)(2)(C)(i) or (e)(2)(C)(ii) of this Section are met.
 - i) The transportation of each sample shipment complies with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
 - ii) If the USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number;
 - D) The sample is shipped to a laboratory or testing facility that is exempt under subsection (f) of this Section, or has an appropriate RCRA permit or interim status;
 - E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

- i) Copies of the shipping documents;
- ii) A copy of the contract with the facility conducting the treatability study; and
- iii) Documentation showing the following: The amount of waste shipped under this exemption; the name, address, and USEPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and whether or not unused samples and residues were returned to the generator; and
- F) The generator reports the information required in subsection (e)(2)(E)(iii) of this Section in its report under 35 Ill. Adm. Code 722.141.
- 3) The Agency may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsections (e)(2)(A), (e)(2)(B), and (f)(4) of this Section, for up to an additional 5,000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, and 1 kg of acute hazardous waste under the circumstances set forth in either subsection (e)(3)(A) or (e)(3)(B) of this Section, subject to the limitations of subsection (e)(3)(C) of this Section:
 - A) In response to requests for authorization to ship, store, and conduct further treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), the size of the unit undergoing testing (particularly in relation to scale-up considerations), the time or quantity of material required to reach steady-state operating conditions, or test design considerations, such as mass balance calculations.
 - B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies when the following occurs: There has been an equipment or mechanical failure during the conduct of the treatability study, there is need to verify the results of a previously-conducted treatability study, there is a need to study and analyze alternative techniques within a previously-evaluated treatment process, or there is a need to do further

- evaluation of an ongoing treatability study to determine final specifications for treatment.
- C) The additional quantities allowed and timeframes allowed in subsections (e)(3)(A) and (e)(3)(B) of this Section are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (e)(2)(F) of this Section. The generator or sample collector must apply to the Agency and provide in writing the following information:
 - The reason why the generator or sample collector requires additional time or quantity of sample for the treatability study evaluation and the additional time or quantity needed;
 - ii) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies, including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;
 - iii) A description of the technical modifications or change in specifications that will be evaluated and the expected results;
 - iv) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and
 - v) Such other information as the Agency determines is necessary.
- 4) Final Agency determinations pursuant to this subsection (e) may be appealed to the Board.
- Samples undergoing treatability studies at laboratories or testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 722 through 726, and 728 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act, provided that the requirements of subsections (f)(1) through (f)(11) of this Section

are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11) of this Section. Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11) of this Section apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

- 1) No less than 45 days before conducting treatability studies, the facility notifies the Agency in writing that it intends to conduct treatability studies under this subsection (f).
- 2) The laboratory or testing facility conducting the treatability study has a USEPA identification number.
- No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.
- The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including non-hazardous solid waste) added to "as received" hazardous waste.
- 5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.
- 6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- 7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

- A) The name, address, and USEPA identification number of the generator or sample collector of each waste sample;
- B) The date the shipment was received;
- C) The quantity of waste accepted;
- D) The quantity of "as received" waste in storage each day;
- E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
- F) The date the treatability study was concluded;
- G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.
- 8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.
- 9) The facility prepares and submits a report to the Agency, by March 15 of each year, that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
 - A) The name, address, and USEPA identification number of the facility conducting the treatability studies;
 - B) The types (by process) of treatability studies conducted;
 - C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);
 - D) The total quantity of waste in storage each day;
 - E) The quantity and types of waste subjected to treatability studies;
 - F) When each treatability study was conducted; and
 - G) The final disposition of residues and unused sample from each treatability study.

- 10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703, and 721 through 728, unless the residues and unused samples are returned to the sample originator under the exemption of subsection (e) of this Section.
- 11) The facility notifies the Agency by letter when the facility is no longer planning to conduct any treatability studies at the site.
- g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under section 404 of the Federal Water Pollution Control Act (33 USC 1344) is not a hazardous waste. For the purposes of this subsection (g), the following definitions apply:

"Dredged material" has the meaning ascribed it in 40 CFR 232.2 (Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"Permit" means any of the following:

A permit issued by the U.S. Army Corps of Engineers (Army Corps) under section 404 of the Federal Water Pollution Control Act (33 USC 1344);

A permit issued by the Army Corps under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 USC 1413); or

In the case of Army Corps civil works projects, the administrative equivalent of the permits referred to in the preceding two paragraphs of this definition, as provided for in Army Corps regulations (for example, see 33 CFR 336.1, 336.2, and 337.6).

(Source:	Amended at 32 Ill. Reg.	, effective	
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SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

Section 721.121 Characteristic of Ignitability

- a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:
 - 1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTMD 93-85 (Standard Test Methods for Flash

Point by Pensky-Martens Closed Tester), or a Setaflash Closed Cup Tester, using the test method specified in ASTM D 3828-87, (Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).

- 2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.
- 3) It is a flammable gas, as defined in federal 49 CFR 173.115 (Class 2, Divisions 2.1, 2.2, and 2.3--Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and as determined by the test methods described in that regulation or equivalent test methods approved by the Board (35 Ill. Adm. Code 720.120).
 - BOARD NOTE: Corresponding 40 CFR 261.21(a)(3) eites to 49 CFR 173.300 for a definition of uses "ignitable compressed gas" based on the outmoded USDOT hazard class "ignitable flammable compressed gas-," and it replicates the text from former 49 C.F.R. 173.300(b) (1980) for the definition. That provision has been removed by In 1990, USDOT, and it is marked "reserved." replaced that former hazard class with "flammable gas", as defined at 49 CFR 173.115 now defines a "flammable gas" as a Division 2.1 material. See 55 Fed. Reg. 52402, 53433 (Dec. 21, 1990) (USDOT rulemaking replacing the old hazard class with the new one). The Board has chosen to avoid major problems inherent to USEPA's approach (the use of obsolete methods and USDOT regulatory mechanisms for the outmoded hazard class). The Board has instead updated the Illinois provision to correspond with the current USDOT regulations and use the "flammable gas" hazard class, together with its associated current methods.
- 4) It is an oxidizer, as defined in federal 49 CFR 173.127 (Class 5, Division 5.1--Definition and Assignment of Packaging Groups), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

BOARD NOTE: Corresponding 40 CFR 261.21(a)(4) cites to 49 CFR 173.151 for a definition of uses "oxidizer.," and it replicates the text from former 49 C.F.R. 173.151 (1980) for the definition. Further, corresponding 40 CFR 261.21(a)(4) adds the definition of "organic peroxide from former 49 C.F.R. 173.151a to the definition of "oxidizer." In 1990, USDOT replaced that former definition of the hazard class with a new definition at 49 CFR 173.127, which classifies an oxidizer as a Division 5.1 material. See 55 Fed. Reg. 52402, 53433 (Dec. 21, 1990) (USDOT rulemaking replacing the old hazard class with the new one). The Board has chosen to avoid major problems inherent to USEPA's approach (the use of obsolete methods and USDOT regulatory mechanisms for the outmoded hazard class). The Board has instead updated the Illinois

provision to correspond with the current USDOT regulations, use the "oxidizer" hazard class, together with its associated current methods, and omit the addition of "organic peroxide" to the definition.

b)		e that exhibits the characteristic of ignitability has the USEI aste number of D001.	PA
Source: Am	ended at 32 III	. Reg, effective)	
	SUB	PART D: LISTS OF HAZARDOUS WASTE	
Section 721.1	31 Hazar	rdous Wastes from Nonspecific Sources	
a)	unless they a	g solid wastes are listed hazardous wastes from non-specific re excluded under 35 Ill. Adm. Code 720.120 and 720.122 I of this Part.	
	USEPA 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: tetrachloro-ethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-tri-fluoroethane, orthodichlorobenzene, trichloro-fluoromethane, 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	(T)

mixtures.

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.

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.

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.

F006

Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

F007

Spent cyanide plating bath solutions from electroplating (R, T) operations.

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)

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.)

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 in Section 721.132.)

F025 Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.

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.

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.)

F032

Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026, and F027.

(T)

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 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.

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

Wastewaters, (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use 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.

F037

Petroleum refinery primary oil/water/solids separation sludge -- Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludge generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludge generated in aggressive biological treatment units as defined in subsection (b)(2) of this Section (including sludge 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. This listing does include residuals generated from processing or recycling oil-bearing hazardous secondary materials excluded under Section 721.104(a)(12)(A) if those residuals are to be disposed of.

(T)

F038

Petroleum refinery secondary (emulsified) (T) 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 the following types of units: induced air floatation (IAF) units, tanks and impoundments, and all sludges generated in dissolved air flotation (DAF) units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from noncontact 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) of this Section (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.

F039 Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste number(s): F020, F021, F022, 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. "(I, T)" should be used to specify ixtures that are ignitable and contain toxic constituents.

- 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, the following apply:
 - A) "Aggressive biological treatment units" are defined as units that 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 the following is true:
 - i) The units employ a minimum of six horsepower per million gallons of treatment volume; and either
 - ii) The hydraulic retention time of the unit is no longer than five 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 must maintain, in their operating or other on site records, documents and data sufficient to prove the following:

- 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 the designated waste, the "time of generation" is defined as follows:
 - A) For 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) For the F038 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; and
 - ii) Floats are considered to be generated at the moment they are formed in the top of the unit.

(Source: Amended at 32 Ill. Reg, effective)
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Section 721.133 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof

The following materials or items are hazardous wastes if and when they are discarded or intended to be discarded, as described in Section 721.102(a)(2)(A); when they are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment; when they are otherwise applied to the land in lieu of their original intended use or when they are contained in products that are applied to land in lieu of their original intended use; or when, in lieu of their original intended use, they are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

- a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) of this Section.
- b) Any off-specification commercial chemical product or manufacturing chemical intermediate that, if it met specifications, would have the generic name listed in subsection (e) or (f) of this Section.
- c) Any residue remaining in a container or inner liner removed from a container that has held any commercial chemical product or manufacturing chemical

intermediate having the generic name listed in subsection (e) or (f) of this Section, unless the container is empty, as defined in Section 721.107(b)(3).

BOARD NOTE: Unless the residue is being beneficially used or reused; legitimately recycled or reclaimed; or accumulated, stored, transported, or treated prior to such use, reuse, recycling, or reclamation, the Board considers the residue to be intended for discard, and thus a hazardous waste. An example of a legitimate reuse of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate it previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner that reconditions the drum but discards the residue.

d) Any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) of this Section or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill into or on any land or water of any off-specification chemical product or manufacturing chemical intermediate that, if it met specifications, would have the generic name listed in subsection (e) or (f) of this Section.

BOARD NOTE: The phrase "commercial chemical product or manufacturing chemical intermediate having the generic name listed in ..." refers to a chemical substance that is manufactured or formulated for commercial or manufacturing use that consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in subsection (e) or (f) of this Section. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in subsection (e) or (f) of this Section, such waste will be listed in either Sections 721.131 or 721.132 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this Part.

e) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products or manufacturing chemical intermediates referred to in subsections (a) through (d) of this Section are identified as acute hazardous waste (H) and are subject to the small quantity exclusion defined in Section 721.105(e). These wastes and their corresponding USEPA hazardous waste numbers are the following:

BOARD NOTE: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), and R (Reactivity). The absence of a letter indicates that the compound is only listed for acute toxicity. Wastes are first listed in alphabetical

order by substance and then listed again in numerical order by USEPA hazardous waste number.

USEPA Hazardous	Chemical Abstracts No.	
Waste No.	(CAS No.)	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H ₃ AsO ₄
P012	1327-53-3	Arsenic oxide As ₂ O ₃
P011	1303-28-2	Arsenic oxide As ₂ O ₅
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-
P046	122-09-8	Benzeneethanamine, α , α -dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aScis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-pyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)

P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-
		phenylbutyl)-, and salts, when present at
		concentrations greater than 0.3 percent
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-6	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-
		((methylamino)carbonyl) oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P189	55285-14-8	Carbamic acid, ((dibutylamino)- thio)methyl-,
		2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)-
1171	011 01 1	carbonyl)-5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methyl-
11/2	117 50 0	ethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P022	75-15-0	Carbon disulfide
		Carbonic dichloride
P095	75-44-5	
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise
		specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
	20,002	hexachloro-1,4,4a,5,8,8a-hexahydro-,
		$(1\alpha,4\alpha,4\alpha\beta,5\alpha,8\alpha,8\alpha\beta)$ -
		$(1\omega, \pi\omega, \pi\mu\rho, \omega\omega, \omega\mu\rho)^{-}$

P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
D00-	60 4	$(1\alpha,4\alpha,4a\beta,5\beta,8\beta,8a\beta)$ -
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene,
		3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
	*	octahydro-, $(1a\alpha,2\beta,2a\alpha,3\beta,6\beta,6a\alpha,7\beta,7a\alpha)$ -
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene,
		3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
		octahydro-, $(1a\alpha,2\beta,2a\beta,3\alpha,6\alpha,6a\beta,7\beta,7a\alpha)$ -,
B 044	60.51.5	and metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	α,α-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol and salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,
		O-((methylamino)- carbonyl)oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioc Ethanimidothioic acid, 2-(di-
		methylamino)-N-(((methylamino)carbonyl)oxy)-
		2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-(((methylamino)-
		carbonyl)oxy)-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethylenimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury (2+) salt (R, T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid

P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin
P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl-N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-
		S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R, T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-83-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis(chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-
		(((methylamino)-carbonyl)oxy]phenyl)-,
		monohydrochloride
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-
		4-(((methylamino)carbonyl)oxy)phenyl)-
P199	2032-65-7	Methiocarb
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen,
		6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexa-
		hydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hepta-
		chloro-3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methyllactonitrile
P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P129	315-8-4	Mexacarbate
P072	86-88-4	α-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	54-11-5*	Nicotine, and salts
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	10102-43-9	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)

P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramide
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic
		acid
P194	23135-22-0	Oxamyl
P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-,
		methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methyl-
		carbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl
		carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethyl-
D004	200.02.2	thio)ethyl) ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethyl-
DO 4.4	60.51.5	thio)methyl) ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-
DO 42	55.01.4	(methylamino)-2-oxoethyl)ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-
D040	207.07.2	nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)-
1097	32-63-7	sulfonyl))phenyl) O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-
10/1	270 00 0	nitrophenyl) ester
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
1070	131 30 0	1 Omobianii Oyaniao

P098	151-50-8	Potassium cyanide KCN
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-
		((methylamino)carbonyl) oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methyl-
		amino)carbonyl)oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate- (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and
10,0		salts
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexa-
1201	37 17 0	hydro-1,3a,8-trimethyl-, methylcarbamate
		(ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium (1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide AgCN
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide NaCN
P108	57-24-9*	Strychnidin-10-one, and salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	57-24-9*	Strychnine and salts
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P1110	107-49-3	Tetraethylpyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl ₂ O ₃
P114	12039-52-0	Thallium (I) selenite
P115	7446-18-6 3689-24-5	Thallium (I) sulfate Thiodiphosphoria acid, tatracthyl aster
P109		Thiodiphosphoric acid, tetraethyl ester Thiofanox
P045 P049	39196-18-4 541-52-7	
T U47	541-53-7	Thioimidodicarbonic diamide ((H ₂ N)C(S)) ₂ NH

P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P123	8001-35-2	Toxaphene
P185	26419-73-8	Tirpate
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	81-81-2*	Warfarin, and salts, when present at
		concentrations greater than 0.3 percent
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at
		concentrations greater than 10 percent (R, T)
P205	137-30-4	Ziram

Numerical Listing

<u>USEPA</u> <u>Hazardous</u>	<u>Chemical</u> <u>Abstracts No.</u>	
Waste No.	(CAS No.)	Substance
<u>P001</u>	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at
<u>P001</u>	81-81-2*	Warfarin, and salts, when present at concentrations greater than 0.3 percent
<u>P002</u>	<u>591-08-2</u>	Acetamide, N-(aminothioxomethyl)
<u>P002</u>	<u>591-08-2</u>	1-Acetyl-2-thiourea
<u>P003</u>	<u>107-02-8</u>	Acrolein
<u>P003</u>	<u>107-02-8</u>	2-Propenal
<u>P004</u>	<u>309-00-2</u>	<u>Aldrin</u>
<u>P004</u>	<u>309-00-2</u>	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
		$(1\alpha,4\alpha,4a\beta,5\alpha,8\alpha,8a\beta)$ -
<u>P005</u>	<u>107-18-6</u>	Allyl alcohol
<u>P005</u>	<u>107-18-6</u>	2-Propen-1-ol
<u>P006</u>	<u>20859-73-8</u>	<u>Aluminum phosphide (R, T)</u>
<u>P007</u>	<u>2763-96-4</u>	5-(Aminomethyl)-3-isoxazolol
<u>P007</u>	<u>2763-96-4</u>	3(2H)-Isoxazolone, 5-(aminomethyl)-
<u>P008</u>	<u>504-24-5</u>	4-Aminopyridine

DOOR	504 24 5	4 Draidinamina
<u>P008</u>	<u>504-24-5</u>	4-Pyridinamine
<u>P009</u>	<u>131-74-8</u>	Ammonium picrate (R)
<u>P009</u>	<u>131-74-8</u>	Phenol, 2,4,6-trinitro-, ammonium salt (R)
<u>P010</u>	<u>7778-39-4</u>	Arsenic acid H ₃ AsO ₄
<u>P011</u>	<u>1303-28-2</u>	Arsenic oxide As ₂ O ₅
<u>P011</u>	<u>1303-28-2</u>	<u>Arsenic pentoxide</u>
<u>P012</u>	<u>1327-53-3</u>	Arsenic oxide As ₂ O ₃
<u>P012</u>	<u>1327-53-3</u>	Arsenic trioxide
<u>P013</u>	<u>542-62-1</u>	Barium cyanide
<u>P014</u>	<u>108-98-5</u>	<u>Benzenethiol</u>
<u>P014</u>	108-98-5	<u>Thiophenol</u>
P015	<u>7440-41-7</u>	Beryllium powder
P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis(chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	<u>357-57-3</u>	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) ₂
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	<u>Chloroacetaldehyde</u>
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
<u>P028</u>	100-44-7	Benzene, (chloromethyl)-
P028	$\frac{100-11-7}{100-44-7}$	Benzyl chloride
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P030	544-72-5	Cyanides (soluble cyanide salts), not otherwise
1030		specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
		_
<u>P033</u>	<u>506-77-4</u>	Cyanogen chloride CNCl
<u>P034</u>	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
<u>P034</u>	131-89-5 606 28 6	Phenol, 2-cyclohexyl-4,6-dinitro-
<u>P036</u>	<u>696-28-6</u>	Arsonous dichloride, phenyl-
<u>P036</u>	<u>696-28-6</u>	<u>Dichlorophenylarsine</u>
<u>P037</u>	<u>60-57-1</u>	<u>Dieldrin</u>

<u>P037</u>	<u>60-57-1</u>	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
		octahydro-, $(1a\alpha,2\beta,2a\alpha,3\beta,6\beta,6a\alpha,7\beta,7a\alpha)$ -
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethyl-
1037	<u> 270 01 1</u>	thio)ethyl) ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl
		ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methyl-
		amino)ethyl)-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-
		(methylamino)-2-oxoethyl)ester
<u>P045</u>	<u>39196-18-6</u>	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-
		((methylamino)carbonyl) oxime
<u>P045</u>	<u>39196-18-4</u>	Thiofanox
<u>P046</u>	122-09-8	Benzeneethanamine, α, α -dimethyl-
P046	122-09-8	α, α -Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol and salts
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide ((H ₂ N)C(S)) ₂ NH
P050	115-29-7	Endosulfan
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen,
		6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexa-
		hydro-, 3-oxide
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene,
		3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-
		octahydro-, $(1a\alpha,2\beta,2a\beta,3\alpha,6\alpha,6a\beta,7\beta,7a\alpha)$ -,
		and metabolites
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P054	151-56-4	Aziridine
P054	151-56-4	Ethylenimine
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-

P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P058	62-74-8	Fluoroacetic acid, sodium salt
P059	76-44-8	Heptachlor
P059	76-44-8 76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-hepta-
1037	<u>/0-44-0</u>	chloro-3a,4,7,7a-tetrahydro-
<u>P060</u>	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
1000	403-73-0	hexachloro-1,4,4a,5,8,8a-hexahydro-,
		$(1\alpha,4\alpha,4\alpha\beta,5\beta,8\beta,8\alpha\beta)$ -
D060	165 72 6	(10,40,4ap,5p,8p,8ap)- Isodrin
<u>P060</u>	<u>465-73-6</u>	
<u>P062</u>	757-58-4	Hexaethyl tetraphosphate
<u>P062</u>	<u>757-58-4</u>	Tetraphosphoric acid, hexaethyl ester
<u>P063</u>	<u>74-90-8</u>	Hydrocyanic acid
<u>P063</u>	<u>74-90-8</u>	Hydrogen cyanide
<u>P064</u>	<u>624-83-9</u>	Methane, isocyanato-
<u>P064</u>	<u>624-83-9</u>	Methyl isocyanate
<u>P065</u>	<u>628-86-4</u>	Fulminic acid, mercury (2+) salt (R, T)
<u>P065</u>	<u>628-86-4</u>	Mercury fulminate (R, T)
<u>P066</u>	<u>16752-77-5</u>	Ethanimidothioic acid, N-(((methylamino)-
		carbonyl)oxy)-, methyl ester
<u>P066</u>	<u>16752-77-5</u>	Methomyl
<u>P067</u>	<u>75-55-8</u>	Aziridine, 2-methyl
<u>P067</u>	<u>75-55-8</u>	1,2-Propylenimine
<u>P068</u>	<u>60-34-4</u>	<u>Hydrazine, methyl-</u>
<u>P068</u>	<u>60-34-4</u>	Methyl hydrazine
<u>P069</u>	<u>75-86-5</u>	2-Methyllactonitrile
<u>P069</u>	<u>75-86-5</u>	Propanenitrile, 2-hydroxy-2-methyl-
<u>P070</u>	<u>116-06-3</u>	<u>Aldicarb</u>
<u>P070</u>	<u>116-06-3</u>	Propanal, 2-methyl-2-(methylthio)-, O-((methyl-
		amino)carbonyl)oxime
<u>P071</u>	<u>298-00-0</u>	Methyl parathion
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-
		nitrophenyl) ester
P072	86-88-4	α-Naphthylthiourea
P072	86-88-4	Thiourea, 1-naphthalenyl-
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	54-11-5 [*]	Nicotine, and salts
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and
1075	<u>5 i ii 5</u>	salts
<u>P076</u>	10102-43-9	Nitric oxide
P076	10102-43-9	Nitrogen oxide NO
P077	100-01-6	Benzenamine, 4-nitro-
P077	100-01-6	p-Nitroaniline
<u> </u>	100-01-0	p-muoannine

<u>P078</u>	10102-44-0	Nitrogen dioxide
P078	10102-44-0	Nitrogen oxide NO ₂
	55-63-0	
P081		Nitroglycerine (R)
<u>P081</u>	<u>55-63-0</u>	1,2,3-Propanetriol, trinitrate- (R)
<u>P082</u>	<u>62-75-9</u>	Methanamine, N-methyl-N-nitroso-
<u>P082</u>	<u>62-75-9</u>	N-Nitrosodimethylamine
<u>P084</u>	<u>4549-40-0</u>	N-Nitrosomethylvinylamine
<u>P084</u>	<u>4549-40-0</u>	Vinylamine, N-methyl-N-nitroso-
<u>P085</u>	<u>152-16-9</u>	Diphosphoramide, octamethyl-
<u>P085</u>	<u>152-16-9</u>	Octamethylpyrophosphoramide
<u>P087</u>	<u>20816-12-0</u>	Osmium oxide OsO ₄ , (T-4)-
P087	<u>20816-12-0</u>	Osmium tetroxide
P088	145-73-3	Endothall
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic
		acid
P089	<u>56-38-2</u>	Parathion
P089	56-38-2 56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-
1007	<u> 30 30 2</u>	nitrophenyl) ester
P092	62-38-4	Mercury, (acetato-O)phenyl-
		Phenylmercury acetate
<u>P092</u>	62-38-4 102-85-5	
<u>P093</u>	<u>103-85-5</u>	Phenylthiourea
<u>P093</u>	<u>103-85-5</u>	Thiourea, phenyl-
<u>P094</u>	<u>298-02-2</u>	Phorate
<u>P094</u>	<u>298-02-2</u>	Phosphorodithioic acid, O,O-diethyl S-((ethyl-
		thio)methyl) ester
<u>P095</u>	<u>75-44-5</u>	<u>Carbonic dichloride</u>
<u>P095</u>	<u>75-44-5</u>	<u>Phosgene</u>
<u>P096</u>	<u>7803-51-2</u>	<u>Hydrogen phosphide</u>
<u>P096</u>	<u>7803-51-2</u>	<u>Phosphine</u>
<u>P097</u>	<u>52-85-7</u>	<u>Famphur</u>
<u>P097</u>	<u>52-85-7</u>	Phosphorothioic acid, O-(4-((dimethylamino)-
		sulfonyl))phenyl) O,O-dimethyl ester
P098	<u>151-50-8</u>	Potassium cyanide
P098	151-50-8	Potassium cyanide KCN
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P099	506-61-6	Potassium silver cyanide
P101	107-12-0	Ethyl cyanide
P101	107-12-0	Propanenitrile
P102	107-19-7	Propargyl alcohol
<u>P102</u>	107-19-7	2-Propyn-1-ol
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	<u> </u>
		Silver cyanide AgCN
P105	<u>26628-22-8</u>	Sodium azide
P106	143-33-9 142-22-0	Sodium cyanide Sodium cyanida NaCN
<u>P106</u>	<u>143-33-9</u>	Sodium cyanide NaCN

D100	57.24.0*	Ct1: 1: 10 11t-
P108	57-24-9* 57-24-9*	Strychnidin-10-one, and salts
<u>P108</u>		Strychnine and salts
<u>P109</u>	<u>3689-24-5</u>	<u>Tetraethyldithiopyrophosphate</u>
<u>P109</u>	<u>3689-24-5</u>	Thiodiphosphoric acid, tetraethyl ester
<u>P110</u>	<u>78-00-2</u>	Plumbane, tetraethyl-
<u>P110</u>	<u>78-00-2</u>	<u>Tetraethyl lead</u>
<u>P111</u>	<u>107-49-3</u>	Diphosphoric acid, tetraethyl ester
<u>P111</u>	107-49-3	<u>Tetraethylpyrophosphate</u>
P112	509-14-8	Methane, tetranitro- (R)
P112	509-14-8	Tetranitromethane (R)
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl ₂ O ₃
P114	12039-52-0	Selenious acid, dithallium (1+) salt
	12039-52-0	Thallium (I) selenite
P114		
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt
<u>P115</u>	<u>7446-18-6</u>	Thallium (I) sulfate
<u>P116</u>	<u>79-19-6</u>	Hydrazinecarbothioamide
<u>P116</u>	<u>79-19-6</u>	<u>Thiosemicarbazide</u>
<u>P118</u>	<u>75-70-7</u>	Methanethiol, trichloro-
<u>P118</u>	<u>75-70-7</u>	<u>Trichloromethanethiol</u>
<u>P119</u>	<u>7803-55-6</u>	Ammonium vanadate
<u>P119</u>	<u>7803-55-6</u>	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide $Zn(CN)_2$
P122	1314-84-7	Zinc phosphide Zn_3P_2 , when present at
1 122	1311017	concentrations greater than 10 percent (R, T)
D122	8001-35-2	Toxaphene
P123		*
<u>P127</u>	<u>1563-66-2</u>	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,
D107	1562.66.2	methylcarbamate
<u>P127</u>	<u>1563-66-2</u>	Carbofuran
<u>P128</u>	<u>315-18-4</u>	Phenol, 4-(dimethylamino)-3,5-dimethyl-,
		methylcarbamate (ester)
<u>P129</u>	<u>315-8-4</u>	<u>Mexacarbate</u>
<u>P185</u>	<u>26419-73-8</u>	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-,
		O-((methylamino)- carbonyl)oxime
<u>P185</u>	<u>26419-73-8</u>	Tirpate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS-
		cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-
		pyrrolo(2,3-b)indol-5-yl methylcarbamate ester
		(1:1)
<u>P188</u>	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid, ((dibutylamino)- thio)methyl-,
1 107	<u> </u>	
D190	55305 14 0	2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
<u>P189</u>	<u>55285-14-8</u>	<u>Carbosulfan</u>

P190 P190 P191	1129-41-5 1129-41-5 644-64-4	Carbamic acid, methyl-, 3-methylphenyl ester Metolcarb Carbamic acid, dimethyl-, 1-((dimethyl-amino)- carbonyl)-5-methyl-1H-pyrazol-3-yl ester
<u>P191</u> <u>P192</u>	644-64-4 119-38-0	<u>Dimetilan</u> <u>Carbamic acid, dimethyl-, 3-methyl-1-(1-methyl-ethyl)-1H-pyrazol-5-yl ester</u>
<u>P192</u> <u>P194</u>	119-38-0 23135-22-0	Isolan Ethanimidothioic acid, 2-(dimethylamino)-N- (((methylamino)carbonyl)oxy)-2-oxo-, methyl
<u>P194</u> <u>P196</u>	23135-22-0 15339-36-3	ester Oxamyl Manganese, bis(dimethylcarbamodithioato- S,S')-
<u>P196</u> <u>P197</u> <u>P197</u>	15339-36-3 17702-57-7 17702-57-7	Manganese dimethyldithiocarbamate Formparanate Methanimidamide, N,N-dimethyl-N'-(2-methyl-
<u>P198</u> <u>P198</u>	23422-53-9 23422-53-9	4-(((methylamino)carbonyl)oxy)phenyl)- Formetanate hydrochloride Methanimidamide, N,N-dimethyl-N'-[3- (((methylamino)-carbonyl)oxy]phenyl)-,
<u>P199</u> <u>P199</u>	2032-65-7 2032-65-7	monohydrochloride Methiocarb Phenol, (3,5-dimethyl-4-(methylthio)-, methyl- carbamate
<u>P201</u>	<u>2631-37-0</u>	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201 P202 P202 P202 P203 P203	2631-37-0 64-00-6 64-00-6 64-00-6 1646-88-4 1646-88-4	Promecarb m-Cumenyl methylcarbamate 3-Isopropylphenyl-N-methylcarbamate Phenol, 3-(1-methylethyl)-, methyl carbamate Aldicarb sulfone Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-
<u>P204</u> <u>P204</u>	<u>57-47-6</u> <u>57-47-6</u>	((methylamino)carbonyl) oxime Physostigmine Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexa-hydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P205 P205	137-30-4 137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')- Ziram

BOARD NOTE: An asterisk (*) following the CAS number indicates that the CAS number is given for the parent compound only.

f) The commercial chemical products, manufacturing chemical intermediates, or offspecification commercial chemical products referred to in subsections (a) through (d) of this Section, are identified as toxic wastes (T) unless otherwise designated and are subject to the small quantity exclusion defined in Section 721.105(a) and (g). These wastes and their corresponding USEPA hazardous waste numbers are the following:

BOARD NOTE: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). The absence of a letter indicates that the compound is only listed for toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by USEPA hazardous waste number.

Chemical	
(CAS No.)	Substance
30558-43-1	A2213
	Acetaldehyde (I)
	Acetaldehyde, trichloro-
	Acetamide, N-(4-ethoxyphenyl)-
	Acetamide, N-9H-fluoren-2-yl-
	Acetic acid, (2,4-dichlorophenoxy)-, salts and
- , , , , ,	esters
141-78-6	Acetic acid, ethyl ester (I)
301-04-2	Acetic acid, lead (2+) salt
563-68-8	Acetic acid, thallium (1+) salt
93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
67-64-1	Acetone (I)
75-05-8	Acetonitrile (I, T)
98-86-2	Acetophenone
53-96-3	2-Acetylaminofluorene
75-36-5	Acetyl chloride (C, R, T)
79-06-1	Acrylamide
79-10-7	Acrylic acid (I)
107-13-1	Acrylonitrile
	Amitrole
	Aniline (I, T)
	Arsinic acid, dimethyl-
	Auramine
	Azaserine
50-07-7	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione,
	6-amino-8-(((aminocarbonyl)oxy)methyl)-
	1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-
101.07.0	, (1a-S-(1aα,8β,8aα,8bα))-
	Barban
22781-23-3	Bendiocarb
	Abstracts No. (CAS No.) 30558-43-1 75-07-0 75-87-6 62-44-2 53-96-3 P 94-75-7 141-78-6 301-04-2 563-68-8 93-76-5 67-64-1 75-05-8 98-86-2 53-96-3 75-36-5 79-06-1 79-10-7

U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz(c)acridine
U017	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-
0 - 7 -		propynyl)-
U018	56-55-3	Benz(a)anthracene
U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I, T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-di-
0011	1,72 00 0	methyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I, T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chloro-
0030	310 13 0	phenyl)-α-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)-
0033	303-03-3	amino)-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)
0.00		ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-
		chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R, T)
U239	1330-20-7	Benzene, dimethyl- (I, T)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
		, J ,

U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C, R)
U020	98-09-9	Benzenesulfonyl chloride (C, R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-
		chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-
		methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidene Benzidene
U202	P 81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and
0202	1 01 07 2	salts
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl
0278	22/01-23-3	carbamate
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo(rst)pentaphene
U248	P 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-
0240	1 01-01-2	phenylbutyl)-, and salts, when present at
		concentrations of 0.3 percent or less
U022	50-32-8	Benzo(a)pyrene
U197	106-51-4	· /15
U023		p-Benzoquinone
	98-07-7	Benzotrichloride (C, R, T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform
U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I, T)
U160	1338-23-4	2-Butanone, peroxide (R, T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I, T)

U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)-methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl
		ester, $(1S-(1\alpha(Z), 7(2S^*, 3R^*), 7a\alpha))$ -
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl
0372	10003-21-7	ester
U271	17804-35-2	Carbamic acid, (1-((butylamino)carbonyl)-1H-
02/1	17004-33-2	benzimidazol-2-yl)-, methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-
0200	101-27-7	butynyl ester
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, ethyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbono-
0409	23304-03-0	thioyl))bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts
0114	1 111-54-0	and esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-
0002	2505 10 1	dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-
	2000 17 0	(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl)
		ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium (1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I, T)
U033	353-50-4	Carbon oxyfluoride (R, T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, α and γ isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	β-Chloronaphthalene
		1 Tr

U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U050	218-01-9	Chrysene
U051		Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumeme (I)
U246	506-68-3	Cyanogen bromide CNBr
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,
012)		$(1\alpha,2\alpha,3\beta,4\alpha,5\alpha,6\beta)$ -
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	P 94-75-7	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz(a,h)anthracene
U064	189-55-9	Dibenzo(a,i)pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I, T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I, T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
		v 1

U089	56-53-1	Diethylstilbestrol
U090	94-58-6	Dihydrosafrole
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz(a)anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	α , α -Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U404	121-44-8	Ethanamine, N,N-diethyl-
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-
0133)1 00 S	pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-
U117	60-29-7	Ethane, 1,1'-(metryleheois(0xy))ois(2-emoro-
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U218	62-55-5	Ethanethioamide
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U410	59669-26-0	Ethanimidothioic acid, N,N'- (thiobis((methyl-
0410	39009-20-0	imino)carbonyloxy))bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-
0334	JUJJ0-4J-1	hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
	1116-54-7	•
U173	1110-34-/	Ethanol, 2,2'-(nitrosoimino)bis-

U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether
U114	P 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I, T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C, T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro- (I)
U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitroso-
C 2 00	10005 00 1	ureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-
		carbonyl)amino)-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R, T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
	-	

U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C, T)
U134	7664-39-3	Hydrogen fluoride (C, T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno(1,2,3-cd)pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I, T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpene
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-
U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U211	56-23-5	Methane, tetrachloro-
U153	74-93-1	Methanethiol (I, T)
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-
		octachloro-2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one,
		1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor

U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I, T)
U156	79-22-1	Methyl chlorocarbonate (I, T)
U226	71-55-6	Methylchloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide
U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I, T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R, T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I, T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U010	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-
		2,3,6-trideoxy)-α-L-lyxo-hexapyranosyl)oxyl)-
		7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-
		methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-di-
		methyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-
		amino-4-hydroxy)-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	α-Naphthylamine
U168	91-59-8	β-Naphthylamine
U217	10102-45-1	Nitric acid, thallium (1+) salt
U169	98-95-3	Nitrobenzene (I, T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I, T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine

T 11 0 0	020 55 2	37.37%
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-
		chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I, T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol
U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-
U145	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl
0007	3200 30 2	ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U192 U194	107-10-8	1-Propanamine (I, T)
U111		
	621-64-7 142-84-7	1-Propagamine, N-nitroso-N-propyl-
U110		1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibloro
U083	78-87-5	Propane, 1,2-dichloro-
U149	109-77-3	Propanedinitrile

U171	79-46-9	Propane, 2-nitro- (I, T)
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U193	1120-71-4	1,3-Propane sultone
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I, T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I, T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I, T)
U373	122-42-9	Propham
U411	114-26-1	Propoxur
See F027	93-72-1	Propionic acid, 2-(2,4,5-trichlorophenoxy)-
U194	107-10-8	n-Propylamine (I, T)
U083	78-87-5	Propylene dichloride
U387	52888-80-9	Prosulfocarb
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloro-
3_3.		ethyl)amino)-
U164	58-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-
		thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U202	P 81-07-2	Saccharin and salts
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide $SeS_2(R, T)$
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane

U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium (I) acetate
U215	6533-73-9	Thallium (I) carbonate
U216	7791-12-0	Thallium (I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium (I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I, T)
U244	137-26-8	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$,
		tetramethyl-
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R, T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride
U389	2303-17-5	Triallate
U011	61-82-5	1H-1,2,4-Triazol-3-amine
<u>U227</u>	<u>79-00-5</u>	Ethane, 1,1,2-trichloro-
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R, T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	P 81-81-2	Warfarin, and salts, when present at
		concentrations of 0.3 percent or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-
		18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl
		ester, $(3\beta,16\beta,17\alpha,18\beta,20\alpha)$ -

U249	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at
		concentrations of 10 percent or less

Numerical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance
<u>U001</u> <u>U002</u> <u>U002</u> <u>U002</u> <u>U003</u> <u>U004</u>	75-07-0 75-07-0 67-64-1 67-64-1 75-05-8 98-86-2	Acetaldehyde (I) Ethanal (I) Acetone (I) 2-Propanone (I) Acetonitrile (I, T) Acetophenone
<u>U004</u> <u>U005</u> <u>U006</u> <u>U007</u>	98-86-2 53-96-3 53-96-3 75-36-5 79-06-1	Ethanone, 1-phenyl- Acetamide, N-9H-fluoren-2-yl- 2-Acetylaminofluorene Acetyl chloride (C, R, T) Acrylamide 2-Propenamide
U007 U008 U008 U009 U009 U010	79-06-1 79-10-7 79-10-7 107-13-1 107-13-1 50-07-7	Acrylic acid (I) 2-Propenoic acid (I) Acrylonitrile 2-Propenenitrile
<u>U010</u>	<u>50-07-7</u>	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-Mitomycin C
U011 U011 U012 U012 U014	61-82-5 61-82-5 62-53-3 62-53-3 492-80-8	Amitrole 1H-1,2,4-Triazol-3-amine Aniline (I, T) Benzenamine (I, T) Auramine
<u>U014</u> <u>U015</u> <u>U015</u> <u>U016</u>	492-80-8 115-02-6 115-02-6 225-51-4	Benzenamine, 4,4'-carbonimidoylbis(N,N-di- methyl- Azaserine L-Serine, diazoacetate (ester) Benz(c)acridine
U017 U017 U018 U019 U020 U020	98-87-3 98-87-3 56-55-3 71-43-2 98-09-9 98-09-9	Benzal chloride Benzene, (dichloromethyl)- Benz(a)anthracene Benzene (I, T) Benzenesulfonic acid chloride (C, R) Benzenesulfonyl chloride (C, R)

<u>U021</u>	92-87-5	Benzidene
<u>U021</u>	92-87-5	(1,1'-Biphenyl)-4,4'-diamine
U022	50-32-8	Benzo(a)pyrene
<u>U023</u>	98-07-7	Benzene, (trichloromethyl)-
<u>U023</u>	98-07-7	Benzotrichloride (C, R, T)
U024	111-91-1	Dichloromethoxy ethane
<u>U024</u>	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-
<u>U025</u>	111-44-4	Dichloroethyl ether
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-
<u>U026</u>	494-03-1	Chlornaphazin
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-
<u>U027</u>	108-60-1	Dichloroisopropyl ether
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)
<u>0020</u>	117 01 7	ester
U028	117-81-7	Diethylhexyl phthalate
U029	74-83-9	Methane, bromo-
U029	74-83-9	Methyl bromide
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U030	101-55-3	4-Bromophenyl phenyl ether
<u>U031</u>	71-36-3	1-Butanol (I)
<u>U031</u>	71-36-3	n-Butyl alcohol (I)
U032	13765-19-0	Calcium chromate
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
<u>U033</u>	353-50-4	Carbonic difluoride
<u>U033</u>	353-50-4	Carbon oxyfluoride (R, T)
U034	75-87-6	Acetaldehyde, trichloro-
U034	75-87-6	Chloral
<u>U035</u>	$\frac{75.67.6}{305-03-3}$	Benzenebutanoic acid, 4-(bis(2-chloroethyl)-
0033	<u> </u>	amino)-
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, α and γ isomers
U036	<u>57-74-9</u>	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-
0030	<u> </u>	octachloro-2,3,3a,4,7,7a-hexahydro-
U037	108-90-7	Benzene, chloro-
U037	108-90-7	Chlorobenzene
U038	510-15-6	
0038	<u>310-13-0</u>	Benzeneacetic acid, 4-chloro-α-(4-chloro-
11020	510 15 (phenyl)-α-hydroxy-, ethyl ester
<u>U038</u>	<u>510-15-6</u>	<u>Chlorobenzilate</u>
<u>U039</u>	<u>59-50-7</u>	p-Chloro-m-cresol
<u>U039</u>	<u>59-50-7</u>	Phenol, 4-chloro-3-methyl-
<u>U041</u>	106-89-8	Epichlorohydrin
<u>U041</u>	106-89-8	Oxirane, (chloromethyl)-
<u>U042</u>	110-75-8	2-Chloroethyl vinyl ether
<u>U042</u>	110-75-8 75-01-4	Ethene, (2-chloroethoxy)-
<u>U043</u>	<u>75-01-4</u>	Ethene, chloro-

<u>U043</u>	<u>75-01-4</u>	<u>Vinyl chloride</u>		
U044	67-66-3	Chloroform		
U044	67-66-3	Methane, trichloro-		
U045	74-87-3	Methane, chloro- (I, T)		
<u>U045</u>	<u>74-87-3</u>	Methyl chloride (I, T)		
<u>U046</u>	<u>107-30-2</u>	<u>Chloromethyl methyl ether</u>		
U046	107-30-2	Methane, chloromethoxy-		
U047	91-58-7	β-Chloronaphthalene		
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<u>U047</u>	91-58-7	Naphthalene, 2-chloro-		
<u>U048</u>	<u>95-57-8</u>	o-Chlorophenol		
<u>U048</u>	<u>95-57-8</u>	Phenol, 2-chloro-		
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride		
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride		
U050	218-01-9	Chrysene		
U051	210 01)	Creosote		
	1210 77 2			
<u>U052</u>	<u>1319-77-3</u>	Cresol (Cresylic acid)		
<u>U052</u>	<u>1319-77-3</u>	Phenol, methyl-		
<u>U053</u>	<u>4170-30-3</u>	2-Butenal		
U053	4170-30-3	Crotonaldehyde		
U055	98-82-8	Benzene, (1-methylethyl)- (I)		
U055	98-82-8	Cumeme (I)		
<u>U056</u>	<u>110-82-7</u>	Benzene, hexahydro- (I)		
<u>U056</u>	<u>110-82-7</u>	Cyclohexane (I)		
<u>U057</u>	<u>108-94-1</u>	Cyclohexanone (I)		
<u>U058</u>	<u>50-18-0</u>	Cyclophosphamide		
<u>U058</u>	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-		
		chloroethyl)tetrahydro-, 2-oxide		
<u>U059</u>	20830-81-3	Daunomycin		
·	20830-81-3			
<u>U059</u>	<u>20830-81-3</u>	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-		
		$2,3,6$ -trideoxy)- α -L-lyxo-hexapyranosyl)oxyl)-		
		7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-		
		methoxy-, (8S-cis)-		
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-		
		chloro-		
<u>U060</u>	72-54-8	DDD		
·	·			
<u>U061</u>	<u>50-29-3</u>	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-		
		<u>chloro-</u>		
<u>U061</u>	<u>50-29-3</u>	<u>DDT</u>		
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-		
		dichloro-2-propenyl) ester		
U062	2303-16-4	Diallate		
U063	53-70-3	<u>Dibenz(a,h)anthracene</u>		
<u>U064</u>	<u>189-55-9</u>	Benzo(rst)pentaphene		
<u>U064</u>	<u>189-55-9</u>	<u>Dibenzo(a,i)pyrene</u>		
<u>U066</u>	<u>96-12-8</u>	1,2-Dibromo-3-chloropropane		
<u>U066</u>	<u>96-12-8</u>	Propane, 1,2-dibromo-3-chloro-		
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<u>U067</u>	106-93-4	Ethane, 1,2-dibromo-
U067	106-93-4	Ethylene dibromide
U068	74-95-3	Methane, dibromo-
U068	74-95-3	Methylene bromide
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84-74-2	Dibutyl phthalate
<u>U070</u>	95-50-1	Benzene, 1,2-dichloro-
<u>U070</u>	95-50-1	o-Dichlorobenzene
U071	541-73- 1	Benzene, 1,3-dichloro-
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	Benzene, 1,4-dichloro-
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41- 0	2-Butene, 1,4-dichloro- (I, T)
U074	764-41-0	1,4-Dichloro-2-butene (I, T)
U075	75-71-8	Dichlorodifluoromethane
U075	75-71-8	Methane, dichlorodifluoro-
<u>U076</u>	75-34-3	Ethane, 1,1-dichloro-
U076	75-34-3	Ethylidene dichloride
U077	107-06-2	Ethane, 1,2-dichloro-
U077	107-06-2	Ethylene dichloride
U078	75-35-4	1,1-Dichloroethylene
<u>U078</u>	<u>75-35-4</u>	Ethene, 1,1-dichloro-
<u>U079</u>	<u>156-60-5</u>	1,2-Dichloroethylene
<u>U079</u>	<u>156-60-5</u>	Ethene, 1,2-dichloro-, (E)-
<u>U080</u>	<u>75-09-2</u>	Methane, dichloro-
<u>U080</u>	<u>75-09-2</u>	Methylene chloride
<u>U081</u>	<u>120-83-2</u>	2,4-Dichlorophenol
<u>U081</u>	<u>120-83-2</u>	Phenol, 2,4-dichloro-
<u>U082</u>	<u>87-65-0</u>	2,6-Dichlorophenol
<u>U082</u>	<u>87-65-0</u>	Phenol, 2,6-dichloro-
<u>U083</u>	<u>78-87-5</u>	Propane, 1,2-dichloro-
<u>U083</u>	<u>78-87-5</u>	Propylene dichloride
<u>U084</u>	<u>542-75-6</u>	1,3-Dichloropropene
<u>U084</u>	<u>542-75-6</u>	1-Propene, 1,3-dichloro-
<u>U085</u>	<u>1464-53-5</u>	2,2'-Bioxirane
<u>U085</u>	1464-53-5	<u>1,2:3,4-Diepoxybutane (I, T)</u>
<u>U086</u>	<u>1615-80-1</u>	N,N'-Diethylhydrazine
<u>U086</u>	<u>1615-80-1</u>	<u>Hydrazine</u> , 1,2-diethyl-
<u>U087</u>	<u>3288-58-2</u>	O,O-Diethyl S-methyl dithiophosphate
<u>U087</u>	<u>3288-58-2</u>	Phosphorodithioic acid, O,O-diethyl S-methyl
		<u>ester</u>
<u>U088</u>	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
<u>U088</u>	84-66-2	Diethyl phthalate
<u>U089</u>	<u>56-53-1</u>	<u>Diethylstilbestrol</u>

<u>U089</u>	<u>56-53-1</u>	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
<u>U090</u>	<u>94-58-6</u>	1,3-Benzodioxole, 5-propyl-
<u>U090</u>	94-58-6	Dihydrosafrole
<u>U091</u>	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
<u>U092</u>	124-40-3	Methanamine, N-methyl- (I)
<u>U093</u>	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	60-11-7	p-Dimethylaminoazobenzene
<u>U094</u>	57-97-6	Benz(a)anthracene, 7,12-dimethyl-
<u>U094</u>	57-97-6	7,12-Dimethylbenz(a)anthracene
<u>U095</u>	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
U095	119-93-7	3,3'-Dimethylbenzidine
<u>U096</u>	80-15-9	α , α -Dimethylbenzylhydroperoxide (R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U097	79-44-7	Carbamic chloride, dimethyl-
U097	79-44-7	Dimethylcarbamoyl chloride
<u>U098</u>	57-14-7	1,1-Dimethylhydrazine
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine
<u>U099</u>	540-73-8	Hydrazine, 1,2-dimethyl-
<u>U101</u>	105-67-9	2,4-Dimethylphenol
<u>U101</u>	<u>105-67-9</u>	Phenol, 2,4-dimethyl-
<u>U102</u>	<u>131-11-3</u>	1,2-Benzenedicarboxylic acid, dimethyl ester
<u>U102</u>	<u>131-11-3</u>	Dimethyl phthalate
<u>U103</u>	<u>77-78-1</u>	<u>Dimethyl sulfate</u>
<u>U103</u>	<u>77-78-1</u>	Sulfuric acid, dimethyl ester
<u>U105</u>	<u>121-14-2</u>	Benzene, 1-methyl-2,4-dinitro-
<u>U105</u>	<u>121-14-2</u>	2,4-Dinitrotoluene
<u>U106</u>	<u>606-20-2</u>	Benzene, 2-methyl-1,3-dinitro-
<u>U106</u>	<u>606-20-2</u>	2,6-Dinitrotoluene
<u>U107</u>	<u>117-84-0</u>	1,2-Benzenedicarboxylic acid, dioctyl ester
<u>U107</u>	<u>117-84-0</u>	<u>Di-n-octyl phthalate</u>
<u>U108</u>	<u>123-91-1</u>	1,4-Diethyleneoxide
<u>U108</u>	<u>123-91-1</u>	<u>1,4-Dioxane</u>
<u>U109</u>	<u>122-66-7</u>	1,2-Diphenylhydrazine
<u>U109</u>	<u>122-66-7</u>	<u>Hydrazine</u> , 1,2-diphenyl-
<u>U110</u>	<u>142-84-7</u>	<u>Dipropylamine (I)</u>
<u>U110</u>	<u>142-84-7</u>	1-Propanamine, N-propyl- (I)
<u>U111</u>	<u>621-64-7</u>	<u>Di-n-propylnitrosamine</u>
<u>U111</u>	<u>621-64-7</u>	1-Propanamine, N-nitroso-N-propyl-
<u>U112</u>	<u>141-78-6</u>	Acetic acid, ethyl ester (I)
<u>U112</u>	<u>141-78-6</u>	Ethyl acetate (I)
<u>U113</u>	<u>140-88-5</u>	Ethyl acrylate (I)
<u>U113</u>	<u>140-88-5</u>	2-Propenoic acid, ethyl ester (I)

<u>U114</u>	<u>P 111-54-6</u>	Carbamodithioic acid, 1,2-ethanediylbis-, salts	
		and esters	
<u>U114</u>	<u>P 111-54-6</u>	Ethylenebisdithiocarbamic acid, salts and esters	
<u>U115</u>	<u>75-21-8</u>	Ethylene oxide (I, T)	
U115	75-21-8	Oxirane (I, T)	
U116	96-45-7	Ethylenethiourea	
<u>U116</u>	96-45-7	2-Imidazolidinethione	
U 117	60-29-7	Ethane, 1,1'-oxybis- (I)	
U117	60-29-7	Ethyl ether	
<u>U118</u>	97-63-2	Ethyl methacrylate	
U118	97-63- <u>2</u>	2-Propenoic acid, 2-methyl-, ethyl ester	
U119	<u>62-50-0</u>	Ethyl methanesulfonate	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
<u>U120</u>	206-44-0	Fluoranthene	
<u>U121</u>	75-69- <u>4</u>	Methane, trichlorofluoro-	
U121	75-69-4	Trichloromonofluoromethane	
U122	50-00-0	Formaldehyde	
<u>U122</u> <u>U123</u>	64-18-6	Formic acid (C, T)	
· · · · · · · · · · · · · · · · · · ·	110-00-9		
<u>U124</u>		Furan (I)	
<u>U124</u>	110-00-9	Furfuran (I)	
<u>U125</u>	<u>98-01-1</u>	2-Furancarboxaldehyde (I)	
<u>U125</u>	<u>98-01-1</u>	Furfural (I)	
<u>U126</u>	<u>765-34-4</u>	Glycidylaldehyde	
<u>U126</u>	<u>765-34-4</u>	<u>Oxiranecarboxyaldehyde</u>	
<u>U127</u>	<u>118-74-1</u>	Benzene, hexachloro-	
<u>U127</u>	<u>118-74-1</u>	<u>Hexachlorobenzene</u>	
<u>U128</u>	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
<u>U128</u>	<u>87-68-3</u>	<u>Hexachlorobutadiene</u>	
<u>U129</u>	<u>58-89-9</u>	Cyclohexane, 1,2,3,4,5,6-hexachloro-,	
		$(1\alpha,2\alpha,3\beta,4\alpha,5\alpha,6\beta)$ -	
<u>U129</u>	<u>58-89-9</u>	<u>Lindane</u>	
<u>U130</u>	<u>77-47-4</u>	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	
<u>U130</u>	<u>77-47-4</u>	<u>Hexachlorocyclopentadiene</u>	
<u>U131</u>	<u>67-72-1</u>	Ethane, hexachloro-	
<u>U131</u>	<u>67-72-1</u>	<u>Hexachloroethane</u>	
<u>U132</u>	<u>70-30-4</u>	<u>Hexachlorophene</u>	
<u>U132</u>	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	
<u>U133</u>	<u>302-01-2</u>	Hydrazine (R, T)	
<u>U134</u>	7664-39-3	Hydrofluoric acid (C, T)	
<u>U134</u>	7664-39-3	Hydrogen fluoride (C, T)	
<u>U135</u>	7783-06-4	Hydrogen sulfide	
<u>U135</u>	7783-06-4	Hydrogen sulfide H ₂ S	
<u>U136</u>	75-60-5	Arsinic acid, dimethyl-	
U136	75-60-5	Cacodylic acid	
U 137	193-39-5	Indeno(1,2,3-cd)pyrene	
<u>U138</u>	74-88-4	Methane, iodo-	
	<u> </u>		

<u>U138</u>	74-88-4	Methyl iodide	
U140	78-83-1	Isobutyl alcohol (I, T)	
U140	78-83-1 78-83-1	1-Propanol, 2-methyl- (I, T)	
<u>U141</u>	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone Kepone	
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one,	
0142	143-30-0	1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-	
<u>0143</u>	303-34-4	(1-methoxyethyl)-3-methyl-1-oxobutoxy)-	
		methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl	
11142	202 24 4	ester, $(1S-(1\alpha(Z), 7(2S^*, 3R^*), 7a\alpha))$ -	
<u>U143</u>	<u>303-34-4</u>	Lasiocarpene	
<u>U144</u>	<u>301-04-2</u>	Acetic acid, lead (2+) salt	
<u>U144</u>	<u>301-04-2</u>	Lead acetate	
<u>U145</u>	<u>7446-27-7</u>	Lead phosphate	
<u>U145</u>	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)	
<u>U146</u>	<u>1335-32-6</u>	Lead, bis(acetato-O)tetrahydroxytri-	
<u>U146</u>	1335-32-6	<u>Lead subacetate</u>	
<u>U147</u>	108-31-6	2,5-Furandione	
<u>U147</u>	<u>108-31-6</u>	Maleic anhydride	
<u>U148</u>	123-33-1	Maleic hydrazide	
<u>U148</u>	<u>123-33-1</u>	3,6-Pyridazinedione, 1,2-dihydro-	
<u>U149</u>	<u>109-77-3</u>	<u>Malononitrile</u>	
<u>U149</u>	<u>109-77-3</u>	<u>Propanedinitrile</u>	
<u>U150</u>	<u>148-82-3</u>	<u>Melphalan</u>	
<u>U150</u>	<u>148-82-3</u>	<u>L-Phenylalanine</u> , 4-(bis(2-chloroethyl)amino)-	
<u>U151</u>	<u>7439-97-6</u>	<u>Mercury</u>	
<u>U152</u>	<u>126-98-7</u>	Methacrylonitrile (I, T)	
<u>U152</u>	<u>126-98-7</u>	2-Propenenitrile, 2-methyl- (I, T)	
<u>U153</u>	<u>74-93-1</u>	Methanethiol (I, T)	
<u>U153</u>	<u>74-93-1</u>	<u>Thiomethanol (I, T)</u>	
<u>U154</u>	<u>67-56-1</u>	Methanol (I)	
<u>U154</u>	<u>67-56-1</u>	Methyl alcohol (I)	
<u>U155</u>	<u>91-80-5</u>	1,2-Ethanediamine, N,N-dimethyl-N'-2-	
		pyridinyl-N'-(2-thienylmethyl)-	
<u>U155</u>	<u>91-80-5</u>	<u>Methapyrilene</u>	
<u>U156</u>	<u>79-22-1</u>	Carbonochloridic acid, methyl ester (I, T)	
<u>U156</u>	<u>79-22-1</u>	Methyl chlorocarbonate (I, T)	
<u>U157</u>	<u>56-49-5</u>	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	
<u>U157</u>	56-49-5	3-Methylcholanthrene	
<u>U158</u>	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	
<u>U158</u>	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U159	78-93-3	2-Butanone (I, T)	
U159	78-93-3	Methyl ethyl ketone (MEK) (I, T)	
<u>U160</u>	1338-23-4	2-Butanone, peroxide (R, T)	
			

<u>U160</u>	<u>1338-23-4</u>	Methyl ethyl ketone peroxide (R, T)
U161	108-10-1	Methyl isobutyl ketone (I)
U161	108-10-1	4-Methyl-2-pentanone (I)
U161	108-10-1	Pentanol, 4-methyl-
U162	80-62-6	Methyl methacrylate (I, T)
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I, T)
<u>U163</u>	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U163	70-25-7 70-25-7	MNNG
<u>U164</u>	<u>56-04-2</u>	Methylthiouracil
<u>U164</u>	<u>58-04-2</u>	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-
****	04.00	thioxo-
<u>U165</u>	91-20-3	<u>Naphthalene</u>
<u>U166</u>	<u>130-15-4</u>	1,4-Naphthalenedione
<u>U166</u>	<u>130-15-4</u>	1,4-Naphthoquinone
<u>U167</u>	<u>134-32-7</u>	1-Naphthalenamine
<u>U167</u>	<u>134-32-7</u>	α-Naphthylamine
<u>U168</u>	91-59-8	2-Naphthalenamine
<u>U168</u>	91-59-8	<u>β-Naphthylamine</u>
U169	98-95-3	Benzene, nitro-
U169	98-95-3	Nitrobenzene (I, T)
U170	100-02-7	p-Nitrophenol
<u>U170</u>	$\frac{100 \cdot 02 \cdot 7}{100 - 02 - 7}$	Phenol, 4-nitro-
	79-46-9	2-Nitropropane (I, T)
<u>U171</u>		· · · · · · · · · · · · · · · · · · ·
<u>U171</u>	<u>79-46-9</u>	Propane, 2-nitro- (I, T)
<u>U172</u>	924-16-3	1-Butanamine, N-butyl-N-nitroso-
<u>U172</u>	<u>924-16-3</u>	N-Nitrosodi-n-butylamine
<u>U173</u>	<u>1116-54-7</u>	Ethanol, 2,2'-(nitrosoimino)bis-
<u>U173</u>	<u>1116-54-7</u>	N-Nitrosodiethanolamine
<u>U174</u>	<u>55-18-5</u>	Ethanamine, N-ethyl-N-nitroso-
<u>U174</u>	<u>55-18-5</u>	N-Nitrosodiethylamine
<u>U176</u>	<u>759-73-9</u>	N-Nitroso-N-ethylurea
<u>U176</u>	<u>759-73-9</u>	<u>Urea, N-ethyl-N-nitroso-</u>
<u>U177</u>	<u>684-93-5</u>	N-Nitroso-N-methylurea
<u>U177</u>	<u>684-93-5</u>	Urea, N-methyl-N-nitroso-
<u>U178</u>	<u>615-53-2</u>	Carbamic acid, methylnitroso-, ethyl ester
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
<u>U179</u>	100-75-4	Piperidine, 1-nitroso-
U180	930-55-2	N-Nitrosopyrrolidine
<u>U180</u>	930-55-2	Pyrrolidine, 1-nitroso-
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U181	99-55-8	5-Nitro-o-toluidine
<u>U182</u>	123-63-7	Paraldehyde
<u>U182</u>	<u>123-63-7</u>	1,3,5-Trioxane, 2,4,6-trimethyl-
<u>U183</u>	<u>608-93-5</u>	Benzene, pentachloro-
<u>U183</u>	<u>608-93-5</u>	<u>Pentachlorobenzene</u>

U184	76-01-7	Ethane, pentachloro-
<u>U184</u>	76-01-7	Pentachloroethane
U185	82-68-8	Benzene, pentachloronitro-
U185	82-68-8	Pentachloronitrobenzene (PCNB)
U186	504-60-9	1-Methylbutadiene (I)
U186	504-60-9	1,3-Pentadiene (I)
<u>U187</u>	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
<u>U187</u>	62-44-2	Phenacetin
U188	108-95-2	Phenol
U189	1314-80-3	Phosphorus sulfide (R)
U189	1314-80-3	Sulfur phosphide (R)
U190	85-44-9	1,3-Isobenzofurandione
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U191	109-06-8	Pyridine, 2-methyl-
<u>U192</u>	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-
0192	<u>23930-36-3</u>	propynyl)-
U192	23950-58-5	<u>Pronamide</u>
<u>U192</u> <u>U193</u>	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U193		
	1120-71-4	1,3-Propane sultone
<u>U194</u>	107-10-8	1-Propanamine (I, T)
<u>U194</u>	107-10-8	n-Propylamine (I, T)
<u>U196</u>	110-86-1	Pyridine - Paragraphic and a second
<u>U197</u>	106-51-4	p-Benzoquinone
<u>U197</u>	<u>106-51-4</u>	2,5-Cyclohexadiene-1,4-dione
<u>U200</u>	<u>50-55-5</u>	Reserpine
<u>U200</u>	<u>50-55-5</u>	Yohimban-16-carboxylic acid, 11,17-dimethoxy-
		18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl
X 10.01	100 46 2	ester, $(3\beta, 16\beta, 17\alpha, 18\beta, 20\alpha)$ -
<u>U201</u>	108-46-3	1,3-Benzenediol
<u>U201</u>	108-46-3	Resorcinol
<u>U202</u>	<u>P 81-07-2</u>	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and
		salts
<u>U202</u>	<u>P 81-07-2</u>	Saccharin and salts
<u>U203</u>	<u>94-59-7</u>	1,3-Benzodioxole, 5-(2-propenyl)-
<u>U203</u>	<u>94-59-7</u>	<u>Safrole</u>
<u>U204</u>	<u>7783-00-8</u>	Selenious acid
<u>U204</u>	<u>7783-00-8</u>	Selenium dioxide
<u>U205</u>	<u>7488-56-4</u>	Selenium sulfide
<u>U205</u>	<u>7488-56-4</u>	<u>Selenium sulfide SeS₂ (R, T)</u>
<u>U206</u>	<u>18883-66-4</u>	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitroso-
		ureido)-, D-
<u>U206</u>	<u>18883-66-4</u>	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-
		carbonyl)amino)-
<u>U206</u>	<u>18883-66-4</u>	Streptozotocin
<u>U207</u>	95-94-3	Benzene, 1,2,4,5-tetrachloro-

<u>U207</u>	95-94-3	1,2,4,5-Tetrachlorobenzene
<u>U208</u>	630-20-6	Ethane, 1,1,1,2-tetrachloro-
<u>U208</u>	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U209	79-34-5	1,1,2,2-Tetrachloroethane
<u>U210</u>	127-18-4	Ethene, tetrachloro-
<u>U210</u>	127-18-4	Tetrachloroethylene
U211	56-23-5	Carbon tetrachloride
<u>U211</u>	<u>56-23-5</u>	Methane, tetrachloro-
<u>U213</u>	109-99-9	Furan, tetrahydro- (I)
<u>U213</u>	<u>109-99-9</u>	Tetrahydrofuran (I)
<u>U214</u>	<u>563-68-8</u>	Acetic acid, thallium (1+) salt
<u>U214</u>	<u>563-68-8</u>	Thallium (I) acetate
<u>U215</u>	<u>6533-73-9</u>	Carbonic acid, dithallium (1+) salt
<u>U215</u>	<u>6533-73-9</u>	Thallium (I) carbonate
<u>U216</u>	7791-12-0	Thallium (I) chloride
<u>U216</u>	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Nitric acid, thallium (1+) salt
U217	10102-45-1	Thallium (I) nitrate
U218	62-55-5	Ethanethioamide
<u>U218</u>	62-55-5	Thioacetamide
<u>U219</u>	<u>62-56-6</u>	Thiourea
U220	108-88-3	Benzene, methyl-
<u>U220</u>	108-88-3	Toluene
U221	25376-45-8	Benzenediamine, ar-methyl-
<u>U221</u>	<u>25376-45-8</u>	<u>Toluenediamine</u>
<u>U222</u>	<u>636-21-5</u>	Benzenamine, 2-methyl-, hydrochloride
<u>U222</u>	<u>636-21-5</u>	o-Toluidine hydrochloride
<u>U223</u>	<u>26471-62-5</u>	Benzene, 1,3-diisocyanatomethyl- (R, T)
<u>U223</u>	<u>26471-62-5</u>	Toluene diisocyanate (R, T)
U225	75-25-2	Bromoform
U225	75-25-2	Methane, tribromo-
<u>U226</u>	71-55-6	Ethane, 1,1,1-trichloro-
<u>U226</u>	<u>71-55-6</u>	Methylchloroform
U227	79-00-5	Ethane, 1,1,2-trichloro-
<u>U227</u>	<u>79-00-5</u>	Ethane, 1,1,2-trichloro-
<u>U227</u>	<u>79-00-5</u>	1,1,2-Trichloroethane
<u>U228</u>	<u>79-01-6</u>	Ethene, trichloro-
<u>U228</u>	<u>79-01-6</u>	<u>Trichloroethylene</u>
<u>U234</u>	<u>99-35-4</u>	Benzene, 1,3,5-trinitro-
<u>U234</u>	<u>99-35-4</u>	1,3,5-Trinitrobenzene (R, T)
<u>U235</u>	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
<u>U235</u>	126-72-7	Tris(2,3-dibromopropyl) phosphate
<u>U236</u>	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-di-
		methyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5
		amino-4-hydroxy)-, tetrasodium salt

<u>U236</u> <u>U237</u>	72-57-1 66-75-1	Trypan blue 2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloro-	
11007	66.75.1	ethyl)amino)-	
<u>U237</u>	<u>66-75-1</u>	<u>Uracil mustard</u>	
<u>U238</u>	<u>51-79-6</u>	Carbamic acid, ethyl ester	
<u>U238</u>	<u>51-79-6</u>	Ethyl carbamate (urethane)	
<u>U239</u>	1330-20-7	Benzene, dimethyl- (I, T)	
<u>U239</u>	1330-20-7	Xylene (I)	
<u>U240</u>	<u>P 94-75-7</u>	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U240	P 94-75-7	2,4-D, salts and esters	
<u>U243</u>	1888-71-7	Hexachloropropene	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U244	137-26-8	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$,	
<u> </u>	<u>137 20 0</u>	tetramethyl-	
<u>U244</u>	<u>137-26-8</u>	<u>Thiram</u>	
<u>U246</u>	<u>506-68-3</u>	Cyanogen bromide CNBr	
<u>U247</u>	<u>72-43-5</u>	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-	
		methoxy-	
<u>U247</u>	<u>72-43-5</u>	Methoxychlor	
<u>U248</u>	<u>P 81-81-2</u>	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-	
		phenylbutyl)-, and salts, when present at	
		concentrations of 0.3 percent or less	
<u>U248</u>	<u>P 81-81-2</u>	Warfarin, and salts, when present at	
		concentrations of 0.3 percent or less	
<u>U249</u>	<u>1314-84-7</u>	Zinc phosphide Zn ₃ P ₂ , when present at	
		concentrations of 10 percent or less	
<u>U271</u>	<u>17804-35-2</u>	<u>Benomyl</u>	
<u>U271</u>	<u>17804-35-2</u>	Carbamic acid, (1-((butylamino)carbonyl)-1H-	
		benzimidazol-2-yl)-, methyl ester	
<u>U278</u>	<u>22781-23-3</u>	<u>Bendiocarb</u>	
<u>U278</u>	<u>22781-23-3</u>	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl	
		<u>carbamate</u>	
<u>U279</u>	<u>63-25-2</u>	<u>Carbaryl</u>	
<u>U279</u>	<u>63-25-2</u>	1-Naphthalenol, methylcarbamate	
<u>U280</u>	<u>101-27-9</u>	<u>Barban</u>	
<u>U280</u>	<u>101-27-9</u>	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-	
		butynyl ester	
<u>U328</u>	<u>95-53-4</u>	Benzenamine, 2-methyl-	
<u>U328</u>	<u>95-53-4</u>	<u>o-Toluidine</u>	
<u>U353</u>	<u>106-49-0</u>	Benzenamine, 4-methyl-	
<u>U353</u>	<u>106-49-0</u>	p-Toluidine	
<u>U359</u>	<u>110-80-5</u>	Ethanol, 2-ethoxy-	
<u>U359</u>	110-80-5	Ethylene glycol monoethyl ether	
<u>U364</u>	<u>22961-82-6</u>	Bendiocarb phenol	
<u>U364</u>	<u>22961-82-6</u>	1,3-Benzodioxol-4-ol, 2,2-dimethyl-	

<u>U367</u>	<u>1563-38-8</u>	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
<u>U367</u>	1563-38-8	Carbofuran phenol
<u>U372</u>	<u>10605-21-7</u>	Carbamic acid, 1H-benzimidazol-2-yl, methyl
		<u>ester</u>
<u>U372</u>	<u>10605-21-7</u>	<u>Carbendazim</u>
<u>U373</u>	<u>122-42-9</u>	Carbamic acid, phenyl-, 1-methylethyl ester
<u>U373</u>	<u>122-42-9</u>	<u>Propham</u>
<u>U387</u>	<u>52888-80-9</u>	Carbamothioic acid, dipropyl-, S-(phenylmethyl)
		ester
<u>U387</u>	<u>52888-80-9</u>	<u>Prosulfocarb</u>
<u>U389</u>	<u>2303-17-5</u>	Carbamothioic acid, bis(1-methylethyl)-, S-
		(2,3,3-trichloro-2-propenyl) ester
<u>U389</u>	<u>2303-17-5</u>	<u>Triallate</u>
<u>U394</u>	<u>30558-43-1</u>	<u>A2213</u>
<u>U394</u>	<u>30558-43-1</u>	Ethanimidothioic acid, 2-(dimethylamino)-N-
		<u>hydroxy-2-oxo-, methyl ester</u>
<u>U395</u>	<u>5952-26-1</u>	Diethylene glycol, dicarbamate
<u>U395</u>	<u>5952-26-1</u>	Ethanol, 2,2'-oxybis-, dicarbamate
<u>U404</u>	<u>121-44-8</u>	Ethanamine, N,N-diethyl-
<u>U404</u>	<u>121-44-8</u>	<u>Triethylamine</u>
<u>U409</u>	<u>23564-05-8</u>	Carbamic acid, (1,2-phenylenebis(iminocarbono-
		thioyl))bis-, dimethyl ester
<u>U409</u>	<u>23564-05-8</u>	Thiophanate-methyl
<u>U410</u>	<u>59669-26-0</u>	Ethanimidothioic acid, N,N'- (thiobis((methyl-
		<u>imino</u>)carbonyloxy))bis-, dimethyl ester
<u>U410</u>	<u>59669-26-0</u>	<u>Thiodicarb</u>
<u>U411</u>	<u>114-26-1</u>	Phenol, 2-(1-methylethoxy)-, methylcarbamate
<u>U411</u>	<u>114-26-1</u>	<u>Propoxur</u>

(Source: Amended at 32 Ill. Reg. _____, effective _____)

SUBPART E: EXCLUSIONS AND EXEMPTIONS

Section 721.138 Comparable or Syngas Fuel Exclusion

Wastes that meet the following comparable or syngas fuel requirements are not solid wastes:

- a) Comparable fuel specifications.
 - 1) Physical specifications.
 - A) Heating value. The heating value must exceed 5,000 Btu/lb (11,500 J/g).
 - B) Viscosity. The viscosity must not exceed 50 cs, as fired.

- 2) Constituent specifications. For the compounds listed, the constituent specification levels and minimum required detection limits (where non-detect is the constituent specification) are set forth in the table at subsection (d) of this Section.
- b) Synthesis gas fuel specification. Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must fulfill the following requirements:
 - 1) It must have a minimum Btu value of 100 Btu/Scf;
 - 2) It must contain less than 1 ppmv of total halogen;
 - It must contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N_2) ;
 - 4) It must contain less than 200 ppmv of hydrogen sulfide; and
 - 5) It must contain less than 1 ppmv of each hazardous constituent in the target list of constituents listed in Appendix H of this Part.
- c) Implementation. Waste that meets the comparable or syngas fuel specifications provided by subsection (a) or (b) of this Section (these constituent levels must be achieved by the comparable fuel when generated, or as a result of treatment or blending, as provided in subsection (c)(3) or (c)(4) of this Section) is excluded from the definition of solid waste provided that the following requirements are met:
 - 1) Notices. For purposes of this Section, the person claiming and qualifying for the exclusion is called the comparable or syngas fuel generator and the person burning the comparable or syngas fuel is called the comparable or syngas burner. The person that generates the comparable fuel or syngas fuel must claim and certify to the exclusion.
 - A) Notice to the Agency.
 - i) The generator must submit a one-time notice to the Agency, certifying compliance with the conditions of the exclusion and providing documentation, as required by subsection (c)(1)(A)(iii) of this Section;
 - ii) If the generator is a company that generates comparable or syngas fuel at more than one facility, the generator must specify at which sites the comparable or syngas fuel will be generated;
 - iii) A comparable or syngas fuel generator's notification to the

Agency must contain the items listed in subsection (c)(1)(C) of this Section.

- B) Public notice. Prior to burning an excluded comparable or syngas fuel, the burner must publish in a major newspaper of general circulation, local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Comparable or Syngas Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:
 - i) The name, address, and USEPA identification number of the generating facility;
 - ii) The name and address of the units that will burn the comparable or syngas fuel;
 - iii) A brief, general description of the manufacturing, treatment, or other process generating the comparable or syngas fuel;
 - iv) An estimate of the average and maximum monthly and annual quantity of the waste claimed to be excluded; and
 - v) The name and mailing address of the Agency office to which the claim was submitted.
- C) Required content of comparable or syngas notification to the Agency.
 - i) The name, address, and USEPA identification number of the person or facility claiming the exclusion;
 - ii) The applicable USEPA hazardous waste codes for the hazardous waste;
 - iii) The name and address of the units that meet the requirements of subsection (c)(2) of this Section that will burn the comparable or syngas fuel; and
 - iv) The following statement, signed and submitted by the person claiming the exclusion or its authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 35 Ill. Adm. Code 721.138 have been met for all waste identified in this notification. Copies of the records and information required by 35 Ill. Adm. Code 721.138(c)(10) are available at the comparable or syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BOARD NOTE: Subsections (c)(1)(C)(i) through (c)(1)(C)(iv) are derived from 40 CFR 261.138(c)(1)(i)(C)(I) and (c)(1)(i)(C)(I), which the Board has codified here to comport with Illinois Administrative Code format requirements.

- Burning. The comparable or syngas fuel exclusion for fuels that meet the requirements of subsections (a) or (b) and (c)(1) of this Section applies only if the fuel is burned in the following units that also must be subject to federal, State, and local air emission requirements, including all applicable federal Clean Air Act (CAA) maximum achievable control technology (MACT) requirements:
 - A) Industrial furnaces, as defined in 35 Ill. Adm. Code 720.110;
 - B) Boilers, as defined in 35 Ill. Adm. Code 720.110, that are further defined as follows:
 - i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or
 - ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;
 - C) Hazardous waste incinerators subject to regulation pursuant to Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or applicable CAA MACT standards.
 - D) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.
- 3) Blending to meet the viscosity specification. A hazardous waste blended

to meet the viscosity specification must fulfill the following requirements:

- A) As generated and prior to any blending, manipulation, or processing, the waste must meet the constituent and heating value specifications of subsections (a)(1)(A) and (a)(2) of this Section;
- B) The waste must be blended at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134; and
- C) The waste must not violate the dilution prohibition of subsection (c)(6) of this Section.
- 4) Treatment to meet the comparable fuel exclusion specifications.
 - A) A hazardous waste may be treated to meet the exclusion specifications of subsections (a)(1) and (a)(2) of this Section provided the treatment fulfills the following requirements:
 - i) The treatment destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;
 - ii) The treatment is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134; and
 - iii) The treatment does not violate the dilution prohibition of subsection (c)(6) of this Section.
 - B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a comparable fuel remain a hazardous waste.
- 5) Generation of a syngas fuel.
 - A) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of subsection (b) of this Section provided the processing fulfills the following requirements:
 - The processing destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;
 - ii) The processing is performed at a facility that is subject to

- the applicable requirements of 35 Ill. Adm. Code 724 and 725 or 35 Ill. Adm. Code 722.134 or is an exempt recycling unit pursuant to Section 721.106(c); and
- iii) The processing does not violate the dilution prohibition of subsection (c)(6) of this Section.
- B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a syngas fuel remain a hazardous waste.
- Dilution prohibition for comparable and syngas fuels. No generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must in any way dilute a hazardous waste to meet the exclusion specifications of subsection (a)(1)(A), (a)(2), or (b) of this Section.
- Waste analysis plans. The generator of a comparable or syngas fuel must develop and follow a written waste analysis plan that describes the procedures for sampling and analysis of the hazardous waste to be excluded. The plan must be followed and retained at the facility excluding the waste.
 - A) At a minimum, the plan must specify the following:
 - The parameters for which each hazardous waste will be analyzed and the rationale for the selection of those parameters;
 - ii) The test methods that will be used to test for these parameters;
 - iii) The sampling method that will be used to obtain a representative sample of the waste to be analyzed;
 - iv) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date; and
 - v) If process knowledge is used in the waste determination, any information prepared by the generator in making such determination.
 - B) The waste analysis plan must also contain records of the following:
 - i) The dates and times waste samples were obtained, and the

- dates the samples were analyzed;
- ii) The names and qualifications of the persons who obtained the samples;
- iii) A description of the temporal and spatial locations of the samples;
- iv) The name and address of the laboratory facility at which analyses of the samples were performed;
- v) A description of the analytical methods used, including any clean-up and sample preparation methods;
- vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;
- vii) All laboratory results demonstrating that the exclusion specifications have been met for the waste; and
- viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (c)(11) of this Section and also provides for the availability of the documentation to the claimant upon request.
- C) Syngas fuel generators must submit for approval, prior to performing sampling, analysis, or any management of a syngas fuel as an excluded waste, a waste analysis plan containing the elements of subsection (c)(7)(A) of this Section to the Agency. The approval of waste analysis plans must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the waste analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.
- 8) Comparable fuel sampling and analysis.
 - A) General. For each waste for which an exclusion is claimed, the generator of the hazardous waste must test for all the constituents on Appendix H of this Part, except those that the generator

determines, based on testing or knowledge, should not be present in the waste. The generator is required to document the basis of each determination that a constituent should not be present. The generator may not determine that any of the following categories of constituents should not be present:

- i) A constituent that triggered the toxicity characteristic for the waste constituents that were the basis of the listing of the waste stream, or constituents for which there is a treatment standard for the waste code in 35 Ill. Adm. Code 728.140;
- ii) A constituent detected in previous analysis of the waste;
- iii) Constituents introduced into the process that generates the waste; or
- iv) Constituents that are byproducts or side reactions to the process that generates the waste.
- B) For each waste for which the exclusion is claimed where the generator of the comparable or syngas fuel is not the original generator of the hazardous waste, the generator of the comparable or syngas fuel may not use process knowledge pursuant to subsection (c)(8)(A) of this Section and must test to determine that all of the constituent specifications of subsections (a)(2) and (b) of this Section have been met.
- C) The comparable or syngas fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the waste. For the waste to be eligible for exclusion, a generator must demonstrate the following:
 - i) That each constituent of concern is not present in the waste above the specification level at the 95 percent upper confidence limit around the mean; and
 - ii) That the analysis could have detected the presence of the constituent at or below the specification level at the 95 percent upper confidence limit around the mean.
- D) Nothing in this subsection (c)(8) preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires

- any person that generates a solid waste to determine if that waste is a hazardous waste.
- E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification must be on the generator claiming the exclusion.
- F) The generator must conduct sampling and analysis in accordance with its waste analysis plan developed pursuant to subsection (c)(7) of this Section.
- G) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications must be analyzed as generated.
- H) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator must undertake the following actions:
 - i) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and
 - ii) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable or syngas fuel specifications.
- I) Excluded comparable or syngas fuel must be retested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.
- BOARD NOTE: Any claim pursuant to this Section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.
- 9) Speculative accumulation. Any persons handling a comparable or syngas fuel are subject to the speculative accumulation test pursuant to Section 721.102(c)(4).
- 10) Records. The generator must maintain records of the following information on-site:
 - A) All information required to be submitted to the implementing authority as part of the notification of the claim:
 - i) The owner or operator name, address, and RCRA facility

- USEPA identification number of the person claiming the exclusion;
- ii) The applicable USEPA hazardous waste codes for each hazardous waste excluded as a fuel; and
- iii) The certification signed by the person claiming the exclusion or his authorized representative;
- B) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;
- C) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;
- D) Documentation for any claim that a constituent is not present in the hazardous waste, as required pursuant to subsection (c)(8)(A) of this Section;
- E) The results of all analyses and all detection limits achieved, as required pursuant to subsection (c)(8) of this Section;
- F) If the excluded waste was generated through treatment or blending, documentation, as required pursuant to subsection (c)(3) or (c)(4) of this Section;
- G) If the waste is to be shipped off-site, a certification from the burner, as required pursuant to subsection (c)(12) of this Section;
- H) A waste analysis plan and the results of the sampling and analysis that include the following:
 - i) The dates and times waste samples were obtained, and the dates the samples were analyzed;
 - ii) The names and qualifications of the persons that obtained the samples;
 - iii) A description of the temporal and spatial locations of the samples;
 - iv) The name and address of the laboratory facility at which analyses of the samples were performed;
 - v) A description of the analytical methods used, including any clean-up and sample preparation methods;

- vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;
- vii) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and
- viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (c)(11) of this Section and also provides for the availability of the documentation to the claimant upon request; and
- I) If the generator ships comparable or syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:
 - i) The name and address of the facility receiving the comparable or syngas fuel for burning;
 - ii) The quantity of comparable or syngas fuel shipped and delivered;
 - iii) The date of shipment or delivery;
 - iv) A cross-reference to the record of comparable or syngas fuel analysis or other information used to make the determination that the comparable or syngas fuel meets the specifications, as required pursuant to subsection (c)(8) of this Section; and
 - v) A one-time certification by the burner, as required pursuant to subsection (c)(12) of this Section.
- 11) Records retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three-year period.
- 12) Burner certification. Prior to submitting a notification to the Agency, a comparable or syngas fuel generator that intends to ship its fuel off-site for burning must obtain a one-time written, signed statement from the burner

that includes the following:

- A) A certification that the comparable or syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required pursuant to subsection (c)(2) of this Section;
- B) Identification of the name and address of the units that will burn the comparable or syngas fuel; and
- C) A certification that the state in which the burner is located is authorized to exclude wastes as comparable or syngas fuel under the provisions of 40 CFR 261.38.
- Ineligible waste codes. Wastes that are listed because of presence of dioxins or furans, as set out in Appendix G of this Part, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full RCRA hazardous waste management requirements.
- d) Table Appendix Y of this Part sets forth the table of detection and detection limit values for comparable fuel specification.

Source: Amended at 32 Ill. Reg.	, effective	
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Section 721.139 Conditional Exclusion for Used, Broken CRTs and Processed CRT Glass
Undergoing Recycling

Used, broken CRTs are not solid waste if they meet the following conditions:

- a) Prior to CRT processing. These materials are not solid wastes if they are destined for recycling and they meet the following requirements:
 - 1) Storage. The broken CRTs must be managed in either of the following ways:
 - A) They are stored in a building with a roof, floor, and walls, or
 - B) They are placed in a container (i.e., a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).
 - 2) Labeling. Each container in which the used, broken CRT is contained must be labeled or marked clearly with one of the following phrases:

 "Used cathode ray tubes--contains leaded glass " or "Leaded glass from televisions or computers." It must also be labeled with the following

- statement: "Do not mix with other glass materials."
- 3) Transportation. The used, broken CRTs must be transported in a container meeting the requirements of subsections (a)(1)(B) and (a)(1)(2) of this Section.
- 4) Speculative accumulation and use constituting disposal. The used, broken CRTs are subject to the limitations on speculative accumulation, as defined in subsection (c)(8) of this Section. If they are used in a manner constituting disposal, they must comply with the applicable requirements of Subpart C of 40 C.F.R. 726, instead of the requirements of this Section.
- 5) Exports. In addition to the applicable conditions specified in subsections
 (a)(1) through (a)(4) of this Section, an exporter of used, broken CRTs
 must comply with the following requirements:
 - A) It must notify the Agency and USEPA of an intended export before the CRTs are scheduled to leave the United States. A complete notification should be submitted sixty (60) days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a 12-month or shorter period. The notification must be in writing, signed by the exporter, and include the following information:
 - i) The name, mailing address, telephone number and USEPA
 ID number (if applicable) of the exporter of the CRTs.
 - ii) The estimated frequency or rate at which the CRTs are to be exported and the period of time over which they are to be exported.
 - iii) The estimated total quantity of CRTs specified in kilograms.
 - iv) All points of entry to and departure from each foreign country through which the CRTs will pass.
 - v) A description of the means by which each shipment of the CRTs will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), types of container (drums, boxes, tanks, etc.)).
 - vi) The name and address of the recycler and any alternate recycler.
 - vii) A description of the manner in which the CRTs will be

- recycled in the foreign country that will be receiving the CRTs.
- viii) The name of any transit country through which the CRTs will be sent and a description of the approximate length of time the CRTs will remain in such country and the nature of their handling while there.
- B) Notifications submitted. Whether delievered by mail or handdelivered, the following words must be prominently displayed on the front of any envelope containing an export notification: "Attention: Notification of Intent to Export CRTs."
 - i) An export notification submitted to USEPA by mail must be sent to the following mailing address:

Office of Enforcement and Compliance Assurance

Office of Federal Activities, International
Compliance Assurance Division (Mail Code
2254A)
Environmental Protection Agency
1200 Pennsylvania Ave., NW.
Washington, DC 20460.

ii) An export notification hand-delivered to USEPA must be sent to:

Office of Enforcement and Compliance Assurance
Office of Federal Activities, International
Compliance Assurance Division (Mail Code
2254A)
Environmental Protection Agency
Ariel Rios Bldg., Room 6144
1200 Pennsylvania Ave., NW.
Washington, DC.

iii) An export notification submitted to the Agency by mail or hand-delivered must be sent to the following mailing address:

Illinois Environmental Protection Agency
Bureau of Land Pollution Control
1021 North Grand Ave – East
P.O. Box 19276
Springfield, IL 62794-9276

- C) Upon request by the Agency or USEPA, the exporter must furnish to the Agency and USEPA any additional information which a receiving country requests in order to respond to a notification.
- D) USEPA has stated that it will provide a complete notification to the receiving country and any transit countries. A notification is complete when the Agency and USEPA receives a notification that USEPA determines satisfies the requirements of subsection (a)(5)(A) of this Section. Where a claim of confidentiality is asserted with respect to any notification information required by subsection (a)(5)(A) of this Section, USEPA has stated that it may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.
- E) The export of CRTs is prohibited, unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the CRTs, USEPA has stated that it will forward an Acknowledgment of Consent to Export CRTs to the exporter. Where the receiving country objects to receipt of the CRTs or withdraws a prior consent, USEPA has stated that it will notify the exporter in writing. USEPA has stated that it will also notify the exporter of any responses from transit countries.
- When the conditions specified on the original notification change, the exporter must provide the Agency and USEPA with a written renotification of the change, except for changes to the telephone number in subsection (a)(5)(A)(i) of this Section and decreases in the quantity indicated pursuant to subsection (a)(5)(A)(iii) of this Section. The shipment cannot take place until consent of the receiving country to the changes has been obtained (except for changes to information about points of entry and departure and transit countries pursuant to subsections (a)(5)(A)(iv) and (a)(5)(A)(viii) of this Section) and the exporter of CRTs receives from USEPA a copy of the Acknowledgment of Consent to Export CRTs reflecting the receiving country's consent to the changes.
- G) A copy of the Acknowledgment of Consent to Export CRTs must accompany the shipment of CRTs. The shipment must conform to the terms of the Acknowledgment.
- H) If a shipment of CRTs cannot be delivered for any reason to the recycler or the alternate recycler, the exporter of CRTs must renotify the Agency and USEPA of a change in the conditions of the original notification to allow shipment to a new recycler in accordance with subsection (a)(5)(F) of this Section and obtain

another Acknowledgment of Consent to Export CRTs.

An exporter must keep copies of notifications and
 Acknowledgments of Consent to Export CRTs for a period of three years following receipt of the Acknowledgment.

BOARD NOTE: Corresponding 40 CFR 261.39(a)(5) requires communications relating to export of CRTs between the exporter and USEPA. It is clear that USEPA intends to maintain its central role between the exporter and the exporter ecceiving country and it granting authorization to export. Nevertheless, the Board has required the exporter submit to the Agency also whatever notifications it must submit to USEPA relating to the export. The intent is to facilitate the Agency's efforts towards assurance of compliance with the regulations as a whole, and not to require a separate authorization for export by the Agency.

- b) Requirements for used CRT processing. Used, broken CRTs undergoing CRT processing, as defined in 35 Ill. Adm. Code 720.110, are not solid waste if they meet the following requirements:
 - 1) Storage. Used, broken CRTs undergoing CRT processing are subject to the requirement of subsection (a)(4) of this Section.
 - 2) CRT processing.
 - A) All activities specified in the second and third subsections of the definition of "CRT processing" in 35 Ill. Adm. Code 720.110 must be performed within a building with a roof, floor, and walls; and

BOARD NOTE: The activities specified in the second and third subsections of the definition of "CRT processing" are "intentionally breaking intact CRTs or further breaking or separating broken CRTs" and "sorting or otherwise managing glass removed from CRT monitors."

- B) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.
- c) Glass from CRT processing that is sent to CRT glass making or lead smelting.

 Glass from CRT processing that is destined for recycling at a CRT glass

 manufacturer or a lead smelter after CRT processing is not a solid waste unless it
 is speculatively accumulated, as defined in Section 721.101(c)(8).
- d) Use constituting disposal. Glass from CRT processing that is used in a manner constituting disposal must comply with the requirements of Subpart C of 35 Ill. Adm. Code 726 instead of the requirements of this Section.

Section 721.140 Conditional Exclusion for Used, Intact CRTs Exported for Recycling

<u>Used, intact CRTs exported for recycling are not solid waste if they meet the notice and consent conditions of Section 721.139(a)(5) and they are not speculatively accumulated, as defined in Section 721.101(c)(8).</u>

Section 721.141 Notification and Recordkeeping for Used, Intact CRTs Exported for Reuse

- a) A person that exports used, intact CRTs for reuse must send a one-time notification to the Agency and the Regional Administrator of USEPA Region 5.

 The notification must include a statement that the notifier plans to export used, intact CRTs for reuse, the notifier's name, address, and USEPA ID number (if applicable) and the name and phone number of a contact person.
- b) A person that exports used, intact CRTs for reuse must keep copies of normal business records, such as contracts, demonstrating that each shipment of exported CRTs will be reused. This documentation must be retained for a period of at least three years from the date the CRTs were exported.

Section 721. Appendix H Hazardous Constituents

			USEPA
		Chemical	Hazard-
		Abstracts	ous
		Number	Waste
Common Name	Chemical Abstracts Name	(CAS No.)	Number
A2213	Ethanimidothioic acid, 2-	30558-43-1	U394
	(dimethylamino)-N-hydroxy-2-oxo-, methyl ester		
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-	591-08-2	P002
	(aminothioxomethyl)-		
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-	116-06-3	P070
	(methylthio)-, O-		
	((methylamino)carbonyl)oxime		
Aldicarb sulfone	Propanal, 2-methyl-2- (methyl-	1646-88-4	P203
	sulfonyl)-, O-((methylamino)-		
	carbonyl)oxime		

Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro-, (1-α,4-	309-00-2	P004
	α ,4a- β ,5- α ,8a- β)-	105 10 6	D005
Allyl ablarida	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro-	107-18-6 <u>107-05-1</u>	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	(1,1'-Biphenyl)-4-amine	92-67-1	1000
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(amino-	2763-96-4	P007
(methyl)-	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	U119
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90-04-0	
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S.			
(not otherwise specified)			
Aramite	Sulfurous acid, 2-chloroethyl-, 2-	140-57-8	
	(4-(1,1-dimethylethyl)phenoxy)-		
	1-methylethyl ester		
Arsenic	Arsenic	7440-38-2	
Arsenic compounds, N.O.S.			
Arsenic acid	Arsenic acid H ₃ AsO ₄	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As ₂ O ₅	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As ₂ O ₃	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbon-	492-80-8	U014
	imidoylbis(N, N-dimethyl-		
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-	101-27-9	U280
	, 4-chloro-2-butynyl ester		
Barium	Same	7440-39-3	
Barium compounds, N.O.S.	_		
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol-2,2-	22781-23-3	U278
	dimethyl-, methyl carbamate		***
Bendiocarb phenol	1,3-Benzodioxol-4-ol-2,2-	22961-82-6	U364
D 1	dimethyl-,	15004 25 2	11071
Benomyl	Carbamic acid, (1- ((butylamino)-	17804-35-2	U271
	carbonyl)-1H-benzimidazol-2-		
D(-):1:	yl)-, methyl ester	225 51 4	11017
Benz(c)acridine	Same	225-51-4	U016
Benz(a)anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U018

Benzenearsonic acid Benzidine Benzo(b)fluoranthene Benzo(j)fluoranthene Benzo(k)fluoranthene	Arsonic acid, phenyl- (1,1'-Biphenyl)-4,4'-diamine Benz(e)acephenanthrylene Same Same	98-05-5 92-87-5 205-99-2 205-82-3 207-08-9	U021
Benzo(a)pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.			
Bis(pentamethylene)thiuram	Piperidine, 1,1'-(tetrathio-	120-54-7	
tetrasulfide	dicarbonothioyl)-bis-		
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-	357-57-3	P018
	dimethoxy-		
Butylate	Carbamothioic acid, bis(2-	2008-41-5	
	methylpropyl)-, S-ethyl ester		
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid,	85-68-7	
	butyl phenylmethyl ester		
Cacodylic acid	Arsenic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.			
Calcium chromate	Chromic acid H ₂ CrO ₄ , calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide Ca(CN) ₂	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-	10605-21-7	U372
	2-yl, methyl ester		
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-	1563-66-2	P127
	dimethyl-, methylcarbamate		
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-	1563-38-8	U367
	dimethyl-		
Carbosulfan	Carbamic acid, ((dibutylamino)-	55285-14-8	P189
	thio)methyl-2,3-dihydro-2,2-		
	dimethyl-7-benzofuranyl ester		
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difuoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4(bis-(2-	305-03-3	U035
	chloroethyl)amino)-		
	• / /		

Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro- 2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane, α and γ isomers Chlorinated benzenes, N.O.S. Chlorinated ethane, N.O.S. Chlorinated fluorocarbons, N.O.S. Chlorinated naphthalene, N.O.S. Chlorinated phenol, N.O.S.			U036
Chlornaphazine	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde Chloroalkyl ethers, N.O.S.	Acetaldehyde, chloro-	107-20-0	P023
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-α- (4-chlorophenyl)-α-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-((2,5-dimethoxyphenyl)azo)-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamodithioato-S,S')-,	137-29-1	
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-	120-71-8	
	methylbenzenamine		
Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl	64-00-6	P202
, ,	carbamate		
Cyanides (soluble salts and complexes), N.O.S.			P030

Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br Cyanogen chloride (CN)Cl	506-68-3 506-77-4	U246 P033
Cyanogen chloride Cycasin	β-D-glucopyranoside, (methyl-	14901-08-7	1033
Cycasiii	ONN-azoxy)methyl-	14701-00-7	
Cycloate	Carbamothioic acid, cyclohexyl-	1134-23-2	
Cycloude	ethyl-, S-ethyl ester	1154 25 2	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-	50-18-0	U058
7 1 1	amine, N,N-bis(2-chloro-		
	ethyl)tetrahydro-2-oxide		
2,4-D	Acetic acid, (2,4-dichloro-	94-75-7	U240
	phenoxy)-		
2,4-D, salts and esters	Acetic acid, (2,4-		U240
	dichlorophenoxy)-, salts and		
	esters		
Daunomycin	5, 12-Naphthacenedione, 8-	20830-81-3	U059
	acetyl-10-((3-amino-2,3,6-		
	trideoxy-α-L-lyxo-hexo-		
	pyranosyl)oxy)-7,8,9,10-		
	tetrahydro-6,8,11-trihydroxy-l-		
Danamat	methoxy-, 8S-cis)-	522 74 4	
Dazomet	2H-1,3,5-thiadiazine-2-thione,	533-74-4	
DDD	tetrahydro-3,5-dimethyl Benzene, 1,1'-(2,2-dichloroethyl-	72-54-8	U060
DDD	idene)bis(4-chloro-	12-34-0	0000
DDE	Benzene, 1,1'-(dichloroethenyl-	72-55-9	
DDL	idene)bis(4-chloro-	72 33 7	
DDT	Benzene, 1,1'-(2,2,2-trichloro-	50-29-3	U061
	ethylidene)bis(4-chloro-		
Diallate	Carbamothioic acid, bis(1-	2303-16-4	U062
	methylethyl)-, S-(2,3-dichloro-2-		
	propenyl) ester		
Dibenz(a,h)acridine	Same	226-36-8	
Dibenz(a,j)acridine	Same	224-42-0	
Dibenz(a,h)anthracene	Same	53-70-3	U063
7H-Dibenzo(c,g)carbazole	Same	194-59-2	
Dibenzo(a,e)pyrene	Naphtho(1,2,3,4-def)chrysene	192-65-4	
Dibenzo(a,h)pyrene	Dibenzo(b,def)chrysene	189-64-0	*****
Dibenzo(a,i)pyrene	Benzo(rst)pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072

Dichlorobenzene, N.O.S. 3,3'-Dichlorobenzidine	Benzene, dichloro- (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	25321-22-6 91-94-1	U073
1,4-Dichloro-2-butene Dichlorodifluoromethane	2-Butene, 1,4-dichloro- Methane, dichlorodifluoro-	764-41-0 75-71-8	U074 U075
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	0073
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'-oxybis(2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis(2-chloro-	108-60-1	U027
Dichloromethoxyethane	Ethane, 1,1'-(methylenebis(oxy)-	111-91-1	U024
Diemoromemoxyemane	bis(2-chloro-	111-71-1	0024
Dichloromethyl ether	Methane, oxybis(chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth(2, 3-b)-	60-57-1	P037
	oxirene, 3,4,5,6,9,9-hexachloro-		
	1a,2,2a,3,6, 6a,7,7a-octahydro-,		
	$(1a\alpha,2\beta,2a\alpha,3\beta,6\beta,6a\alpha,7\beta,7a\alpha)$ -		
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-,	5952-26-1	U395
	dicarbamate		
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid,	117-81-7	U028
	bis(2-ethylhexyl) ester		
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl-S-methyl dithio-	Phosphorodithioic acid, O,O-	3288-58-2	U087
phosphate	diethyl S-methyl ester		
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitro-	311-45-5	P041
	phenyl ester		
Diethyl phthalate	1,2-Benzenedicarboxylic acid,	84-66-2	U088
	diethyl ester		
O,O-Diethyl O-pyrazinyl	Phosphorothioic acid, O,O-	297-97-2	P040
phosphorothioate	diethyl O-pyrazinyl ester		
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-	56-53-1	U089
	ethenediyl)bis-, (E)-		
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate	Phosphorofluoridic acid, bis(1-	55-91-4	P043
(DFP)	methylethyl) ester		

Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-	60-51-5	P044
3,3'-Dimethoxybenzidine	oxoethyl) ester (1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	
7,12-Dimethylbenz(a)anthracene	Benz(a)anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
α , α -Dimethylphenethylamine	Benzeneethanamine, α , α -dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1- ((dimethylamino) carbonyl)-5- methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	541-53-7	P049

Endosulfan	6, 9-Methano-2,4,3-benzodioxa-thiepen,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-	115-29-7	P050
Endothal	oxide, 7-Oxabicyclo(2.2.1)heptane-2,3- dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth(2,3-b)-oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a α,2β,2aβ,3α,6α,6aβ,7β,7aα)-	72-20-8	P051
Endrin motobolitos	,		DO5 1
Endrin metabolites	Ovinona (ablamamathyi)	106 90 9	P051
Epichlorohydrin Epinephrine	Oxirane, (chloromethyl)- 1,2-Benzenediol, 4-(1-hydroxy-2- (methylamino)ethyl)-, (R)-	106-89-8 51-43-4	U041 P042
EPTC	Carbamothioic acid, dipropyl-, Sethyl ester	759-94-4	
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid,	•		U114
salts and esters			
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidine dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	U407
Famphur	Phosphorothioc acid, O-(4- ((dimethylamino)sulfonyl)-	52-85-7	P097
Ferbam	phenyl) O,O-dimethyl ester Iron, tris(dimethylcarbamo- dithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122

Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-16	U123
Formparanate	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino)carbonyl)oxy)-phenyl)-	17702-57-7	P197
Glycidylaldehyde Halomethanes, N.O.S.	Oxiranecarboxaldehyde	765-34-4	U126
Heptachlor	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno(1, 2b)oxirene, 2,3,4,5,6,7,7-hepta- chloro-1a,1b,5,5a,6,6a-hexa- hydro-, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-	1024-57-3	
Heptachlor epoxide (α , β , and γ			
isomers)			
Heptachlorodibenzofurans			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexa- chloro-	87-68-3	U128
Hexachlorocyclo-pentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3- hexachloro-	1888-71-7	U243
Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H ₂ S	7783-06-4	U135
Indeno(1,2,3-cd)pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl-n-butyl-	Carbamic acid, butyl-, 3-iodo-2-	55406-53-6	
carbamate	propynyl ester		
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140

Isodrin	1,4:5,8-Dimethanonaph- thalene,1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro-,	465-73-6	P060
Isolan	(1α,4α,4aβ,5β,8β,8aβ)-, Carbamic acid, dimethyl-, 3- methyl-1-(1-methylethyl)-1H- pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta(cd)-pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-,	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-, 7- ((2,3-dihydroxy-2-(1- methoxyethyl)-3-methyl-1- oxobutoxy)methyl)-2,3,5,7a- tetrahydro-1H-pyrrolizin-l-yl ester, (1S-(1- $\alpha(Z)$,7(2S*,3R*),7a α))-	303-34-1 303-34-4	U143
Lead	Same	7439-92-1	
Lead and compounds, N.O.S.			
Lead acetate	Acetic acid, lead (2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead (2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetra- hydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, 1α , 2α , 3β , 4α , 5α , 6β)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithio- carbamate	Manganese, bis(dimethyl-carbamodithioato-S,S')-,	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.	Fulminia agid margury (2±) calt	628-86-4	P065
Mercury fulminate Metam Sodium	Fulminic acid, mercury (2+) salt Carbamodithioic acid, methyl-, monosodium salt	137-42-8	FU03
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155

Methiocarb	Phenol, (3,5-dimethyl-4-	2032-65-7	P199
Metholmyl	(methylthio)-, methylcarbamate Ethanimidothioic acid, N- (((methylamino)carbonyl)oxy)-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloro- ethylidene)bis(4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methylchlorocarbonate	Carbonochloridic acid, methyl	79-22-1	U156
•	ester		
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz(j)aceanthrylene, 1,2-	56-49-5	U157
•	dihydro-3-methyl-		
4,4'-Methylenebis(2-chloro-	Benzenamine, 4,4'-methylene-	101-14-4	U158
aniline)	bis(2-chloro-		
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5- dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino(2', 3':3, 4)pyrrolo(1, 2-a)indole-4, 7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-,	50-07-7	U010
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	

MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas Naphthalene 1,4-Naphthoquinone	Ethane, 1,1'-thiobis(2-chloro- Same 1,4-Naphthalenedione	505-60-2 91-20-3 130-15-4	U165 U165 U166
α -Naphthylamine	1-Naphthalenamine	134-32-7	U167
β-Naphthylamine	2-Naphthalenamine	91-59-8	U168
α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S.			
Nickel carbonyl	Nickel carbonyl Ni(CO) ₄ , (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide Ni(CN) ₂	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	P078
Nitrogen dioxide	Nitrogen oxide NO ₂	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt	5 / 5		
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide,	emercenty, it meany, it emac		
Nitrogen mustard, N-oxide, hydrochloride salt	emoroemyry it meanyr, it omae		
hydrochloride salt Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
hydrochloride salt Nitroglycerin p-Nitrophenol	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro-	100-02-7	U170
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane	1,2,3-Propanetriol, trinitrate	100-02-7 79-46-9	
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S.	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro-	100-02-7 79-46-9 35576-91-1	U170 U171
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro-	100-02-7 79-46-9	U170
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S.	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N-	100-02-7 79-46-9 35576-91-1	U170 U171
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso-	100-02-7 79-46-9 35576-91-1 924-16-3	U170 U171 U172
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis-	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7	U170 U171 U172 U173
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N-	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5	U170 U171 U172 U173 U174
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso-	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9	U170 U171 U172 U173 U174 P082
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodimethylamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso- Urea, N-ethyl-N-nitroso-	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9 759-73-9	U170 U171 U172 U173 U174 P082
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitrosodimethylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso- Urea, N-ethyl-N-nitroso- Ethanamine, N-methyl-N-nitroso- Urea, N-methyl-N-nitroso- Carbamic acid, methylnitroso-,	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9 759-73-9 10595-95-6	U170 U171 U172 U173 U174 P082 U176
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine N-Nitroso-N-methylurea N-Nitroso-N-methylurea N-Nitroso-N-methylurea	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso- Urea, N-ethyl-N-nitroso- Ethanamine, N-methyl-N-nitroso- Carbamic acid, methylnitroso- ethyl ester	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9 759-73-9 10595-95-6 684-93-5 615-53-2	U170 U171 U172 U173 U174 P082 U176 U177 U178
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine N-Nitroso-N-methylurea N-Nitroso-N-methylurea N-Nitroso-N-methylurea N-Nitroso-N-methylurethane	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso- Urea, N-ethyl-N-nitroso- Ethanamine, N-methyl-N-nitroso- Urea, N-methyl-N-nitroso- Carbamic acid, methylnitroso-, ethyl ester Vinylamine, N-methyl-N-nitroso-	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9 759-73-9 10595-95-6 684-93-5 615-53-2 4549-40-0	U170 U171 U172 U173 U174 P082 U176 U177
hydrochloride salt Nitroglycerin p-Nitrophenol 2-Nitropropane Nitrosamines, N.O.S. N-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine N-Nitroso-N-ethylurea N-Nitrosomethylethylamine N-Nitroso-N-methylurea N-Nitroso-N-methylurea N-Nitroso-N-methylurea	1,2,3-Propanetriol, trinitrate Phenol, 4-nitro- Propane, 2-nitro- 1-Butanamine, N-butyl-N- nitroso- Ethanol, 2,2'-(nitrosoimino)bis- Ethanamine, N-ethyl-N-nitroso- Methanamine, N-methyl-N- nitroso- Urea, N-ethyl-N-nitroso- Ethanamine, N-methyl-N-nitroso- Carbamic acid, methylnitroso- ethyl ester	100-02-7 79-46-9 35576-91-1 924-16-3 1116-54-7 55-18-5 62-75-9 759-73-9 10595-95-6 684-93-5 615-53-2	U170 U171 U172 U173 U174 P082 U176 U177 U178

N-Nitrosopiperidine N-Nitrosopyrrolidine N-Nitrososarcosine	Piperidine, 1-nitroso- Pyrrolidine, 1-nitroso- Glycine, N-methyl-N-nitroso-	100-75-4 930-55-2 13256-22-9	U179 U180
5-Nitro-o-toluidine Octachlorodibenzo-p-dioxin (OCDD)	Benzenamine, 2-methyl-5-nitro- 1,2,3,4,6,7,8,9-Octachloro- dibenzo-p-dioxin.	99-55-8 3268-87-9	U181
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachloro-dibenzofuran.	39001-02-0	
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO ₄ , (T-4)	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, 2- (dimethylamino)-N-(((methyl- amino)carbonyl)oxy)-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-	56-38-2	P089
	diethyl O-(4-nitrophenyl) ester		
Pebulate	Carbamothioic acid, butylethyl-,	1114-71-2	
Pentachlorobenzene	S-propyl ester Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins	Benzene, pentaemoro-	000-73-3	0103
Pentachlorodibenzofurans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
1,2-Phenylenediamine	1,2-Benzenediamine	95–54–5	
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	298-02-2	P094
Phthalic acid esters, N.O.S.			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-	57-47-6	P204
	trimethyl-, methylcarbamate (ester), (3aS-cis)-		

Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)- 1,2,3,3a,8,8a-hexahydro-1,3a,8- trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	57-64-7	P188
2-Picoline Polychlorinated biphenyls, N.O.S.	Pyridine, 2-methyl-	109-06-8	U191
Potassium cyanide	Same	151-50-8	P098
Potassium dimethyldithio- carbamate	Carbamodithioc acid, dimethyl, potassium salt	128-03-0	
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioc acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	
Potassium n-methyldithio- carbamate	Carbamodithioc acid, methyl- monopotassium salt	137-41-7	
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium)	506-61-6	P099
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None
Promecarb	Phenol, 3-methyl-5-(1-methyl-ethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Prosulfocarb	Carbamothioic acid, dipropyl-, S- (phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-($(3,4,5$ -trimethoxybenzoyl)oxy)-, methyl ester, $(3\beta,16\beta,17\alpha,18\beta,20\alpha)$ -,	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
Saccharin salts			U202

Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium Selenium compounds, N.O.S.	Same	7782-49-2	
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS ₂	7488-56-4	U205
Selenium, tetrakis(dimethyl-dithiocarbamate	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with ortho- thioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.			
Silver cyanide	Silver cyanide AgCN	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide NaCN	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl-, sodium salt	136-30-1	
Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, 2-deoxy-2-(((methyl-nitrosoamino)carbonyl)amino)-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts	2		P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans		25222 20 7	
Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7	11200
1,1,1,2-Tetrachloroethane	Ethane, 1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol,	Same	53535276	None
potassium salt			

2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567559	None
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds			
Thallic oxide	Thallium oxide Tl ₂ O ₃	1314-32-5	P113
Thallium (I) acetate	Acetic acid, thallium (1+) salt	563-68-8	U214
Thallium (I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium (I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium (I) nitrate	Nitric acid, thallium (1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium (1+) salt	12039-52-0	P114
Thallium (I) sulfate	Sulfuric acid, dithallium (1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'- (thiobis((methylimino)- carbonyloxy))-bis-, dimethyl	59669-26-0	U410
	ester		
Thiofanox	2-Butanone, 3,3-dimethyl-1-	39196-18-4	P045
Thiotunox	(methylthio)-, O-	37170 10 1	1015
	((methylamino)carbonyl)oxime		
Thiophanate-methyl	Carbamic acid, (1,2-	23564-05-8	U409
T	phyenylenebis(iminocarbono-		
	thioyl))-bis-, dimethyl ester		
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	P219
Thiram	Thioperoxydicarbonic diamide	137-26-8	U244
T:	$((H_2N)C(S))_2S_2$, tetramethyl-	26410.72.0	D105
Tirpate	1,3-Dithiolane-2-carboxaldehyde,	26419-73-8	P185
	2,4-dimethyl-, O-((methylamino)-		
Talana	carbonyl)oxime	100 00 2	11220
Toluene Toluenediamine	Benzene, methyl-	108-88-3	U220
	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine Toluene-2,6-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7 823-40-5	
Toluene-3,4-diamine	1,3-Benzenediamine, 2-methyl- 1,2-Benzenediamine, 4-methyl-	823-40-3 496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanato-	26471-62-5	U223
Toruche unsucyanate	methyl-	204/1 - 02-3	0223
	memyi-		

o-Toluidine o-Toluidine hydrochloride	Benzenamine, 2-methyl- Benzeneamine, 2-methyl-, hydro-	95-53-4 636-21-5	U328 U222
2	chloride		
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-	2303-17-5	U389
	methylethyl)-, S-(2,3,3-trichloro-		
	2-propenyl) ester		
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-	126-68-1	
	triethyl ester		
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(l-aziridinyl)phosphine	Aziridine, 1,1',1"-phosphino-	52-24-4	
sulfide	thioylidynetris-		
Tris(2,3-dibromopropyl)	1-Propanol, 2,3-dibromo-,	126-72-7	U235
phosphate	phosphate (3:1)		
Trypan blue	2,7-Naphthalenedisulfonic acid,	72-57-1	U236
	3,3'-((3,3'-dimethyl(1,1'-		
	biphenyl)-4,4'-diyl)bis(azo))bis-		
	(5-amino-4-hydroxy)-,		
	tetrasodium salt		
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-	66-75-1	U237
	(bis(2-chloroethyl)amino)-		
Vanadium pentoxide	Vanadium oxide V ₂ O ₅	1314-62-1	P120
Vernolate	Carbamothioc acid, dipropyl-, S-	1929-77-7	
	propyl ester		
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-	81-81-2	U248
	hydroxy-3-(3-oxo-1-phenyl-		
	butyl)-, when present at		
	concentrations less than 0.3		
	percent		

Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, when present at concentrations greater than 0.3 percent	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3	percent		U248
Warfarin salts, when present at			P001
Warfarin salts, when present at concentrations greater than 0.3			1001
percent			
Zinc cyanide	Zinc cyanide Zn(CN) ₂	557-21-1	P121
Zinc phosphide	Zinc phosphide P ₂ Zn ₃ , when present at concentrations greater than 10 percent	1314-84-7	P122
Zinc phosphide	Zinc phosphide P ₂ Zn ₃ , when present at concentrations of 10 percent or less	1314-84-7	U249
Ziram	Zinc, bis(dimethylcarbamodithioato-S,S')- (T-4)-	137-30-4	P205
Note: The abbreviation N.O.S. (not that are not specifically listed by n	ot otherwise specified) signifies thosame in this Section.	se m.s of the ge	neral class

that are not specifically listed by hame in this section.

(Source: Amended at 32 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

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722.111	Hazardous Waste Determination
722.112	USEPA Identification Numbers
722.113	Electronic Reporting
	SUBPART B: THE MANIFEST
Section	
722.120	General Requirements
722.121	Manifest Tracking Numbers, Manifest Printing, and Obtaining Manifests
722.122	Number of Copies

722.123	Use of the Manifest
722.127	Waste Minimization Certification
~ .	SUBPART C: PRE-TRANSPORT REQUIREMENTS
Section	
722.130	Packaging
722.131	Labeling
722.132	Marking
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722. Appendix A Hazardous Waste Manifest

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R84-9 at 9 Ill. Reg. 11950, effective July 24, 1985; amended in R85-22 at 10 III. 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 Nov. 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 Nov. 13, 1989; amended in R90-10 at 14 Ill. Reg. 16653, effective Sept. 25, 1990; amended in R90-11 at 15 Ill. Reg. 9644, effective June 17, 1991; amended in R91-1 at 15 III. Reg. 14562, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17696, effective Nov. 6, 1992; amended in R93-4 at 17 Ill. Reg. 20822, effective Nov. 22, 1993; amended in R95-6 at 19 Ill. Reg. 9935, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11236, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 603, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17950, effective Sept. 28, 1998; amended in R00-5 at 24 III. Reg. 1136, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9822, effective June 20, 2000; expedited correction at 25 Ill. Reg. 5105, effective June 20, 2000; amended in R05-2 at 29 Ill. Reg. 6312, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3138, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 871, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. ______, effective _

SUBPART B: THE MANIFEST

Section 722.120 General Requirements

a) Manifest use.

4<u>a</u>) A generator that transports hazardous waste or offers a hazardous waste for transportation for off-site treatment, storage, or disposal or, effective Sept. 5, 2006, a treatment, storage, or disposal facility that offers for transport a rejected load of hazardous waste must prepare a manifest on USEPA Form 8700-22 (and, if necessary, on USEPA Form 8700-22A) according to the instructions included

in the appendix to 40 CFR 262 (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions)), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) Manifest amendments effective dates.

- A) The revised manifest form and procedures in 35 Ill. Adm. Code 720.110 and 721.107, this Section, and Sections 722.121, 722.127, 722.132 through 722.134, 722.154 and in Appendix A to this Part, as amended at 70 Fed. Reg. 10776 (March 4, 2005), will not apply until Sept. 5, 2006.
- B) The existing manifest form and procedures in 35 Ill. Adm. Code 720.110 and 721.107, this Section, and Sections 722.121, 722.127, 722.132 through 722.134, 722.154 and in Appendix A to this Part will apply until Sept. 5, 2006.
- b) A generator must designate on the manifest one receiving facility that is permitted to handle the waste described on the manifest.
- c) A generator may also designate on the manifest one alternate receiving facility that is permitted to handle his waste in the event an emergency prevents delivery of the waste to the primary designated facility.
- d) If the transporter is unable to deliver the hazardous waste to the designated receiving facility or the alternate facility, the generator must either designate another receiving facility or instruct the transporter to return the waste.
- e) The requirements of this Subpart B do not apply to hazardous waste produced by generators of greater than 100 kg but less than 1,000 kg in a calendar month where the following conditions are fulfilled:
 - 1) The waste is reclaimed under a contractual agreement that specifies the type of waste and frequency of shipments;
 - 2) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; and
 - 3) The generator maintains a copy of the reclamation agreement in his files for a period of at least three years after termination or expiration of the agreement.
- f) The requirements of this Subpart B and Section 722.132(b) do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if

such contiguous property is divided by a public or private right-of-way. Notwithstanding 35 Ill. Adm. Code 723.110(a), the generator or transporter must comply with the requirements for transporters set forth in 35 Ill. Adm. Code 723.130 and 723.131 in the event of a discharge of hazardous waste on a public or private right-of-way.

(Source:	Amended at 32 Ill. Reg.	, effective)
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- Section 722.121 Manifest Tracking Numbers, Manifest Printing, and Obtaining Manifests
 - a) The following requirements apply until Sept. 5, 2006:
 - 1) If the State of Illinois is the state to which the shipment is manifested (designated receiving state), the generator must use the manifest supplied by the Agency.
 - 2) If the State of Illinois is not the designated receiving state, the generator must use the manifest required by the designated receiving state. If the designated receiving state does not supply and require the manifest, then the generator must use the manifest supplied by the Agency.
 - b) The following requirements apply effective Sept. 5, 2006:
 - <u>4a</u>) USEPA approval of manifest.
 - A1) A registrant may not print the manifest or have the manifest printed for use or distribution, unless it has received approval from the USEPA Director of the Office of Solid Waste to do so pursuant to 40 CFR 262.21(c) and (e), as described in subsections (b)(3)-(c) and (b)(5)-(e) of this Section.
 - B2) The approved registrant is responsible for ensuring that the organizations identified in its application are in compliance with the procedures of its approved application and the requirements of 40 CFR 262.21, as described in this-subsection (b) Section. The registrant is responsible for assigning manifest tracking numbers to its manifests.
 - 2<u>b</u>) A registrant must submit an initial application to the USEPA Director of the Office of Solid Waste that contains the following information:
 - A<u>1</u>) The name and mailing address of registrant;
 - <u>B2</u>) The name, telephone number, and email address of contact person;
 - C3) A brief description of registrant's government or business activity;

- <u>D4</u>) The USEPA identification number of the registrant, if applicable;
- E5) A description of the scope of the operations that the registrant plans to undertake in printing, distributing, and using its manifests, including the following:
 - A description of the printing operation. The description should include an explanation of whether the registrant intends to print its manifests in-house (i.e., using its own printing establishments) or through a separate (i.e., unaffiliated) printing company. If the registrant intends to use a separate printing company to print the manifest on its behalf, the application must identify this printing company and discuss how the registrant will oversee the company. If this includes the use of intermediaries (e.g., prime and subcontractor relationships), the role of each must be discussed. The application must provide the name and mailing address of each company. It also must provide the name and telephone number of the contact person at each company;
 - ₩B) A description of how the registrant will ensure that its organization and unaffiliated companies, if any, comply with the requirements of 40 CFR 262.21, as described in this subsection (b) Section. The application must discuss how the registrant will ensure that a unique manifest tracking number will be preprinted on each manifest. The application must describe the internal control procedures to be followed by the registrant and unaffiliated companies to ensure that numbers are tightly controlled and remain unique. In particular, the application must describe how the registrant will assign manifest tracking numbers to its manifests. If computer systems or other infrastructure will be used to maintain. track, or assign numbers, these should be indicated. The application must also indicate how the printer will pre-print a unique number on each form (e.g., crash or press numbering). The application also must explain the other quality procedures to be followed by each establishment and printing company to ensure that all required print specifications are consistently achieved and that printing violations are identified and corrected at the earliest practicable time; and
 - <u>HiiC</u>) An indication of whether the registrant intends to use the manifests for its own business operations or to distribute the manifests to a separate company or to the general public (e.g., for purchase);
- F6) A brief description of the qualifications of the company that will print the manifest. The registrant may use readily available information to do so (e.g., corporate brochures, product samples, customer references,

- documentation of ISO certification), so long as such information pertains to the establishments or company being proposed to print the manifest;
- G7) Proposed unique three-letter manifest tracking number suffix. If the registrant is approved to print the manifest, the registrant must use this suffix to pre-print a unique manifest tracking number on each manifest; and
- H8) A signed certification by a duly authorized employee of the registrant that the organizations and companies in its application will comply with the procedures of its approved application and the requirements of 40 CFR 262.21, as described in this subsection (b) Section and that it will notify the Agency and the USEPA Director of the Office of Solid Waste of any duplicated manifest tracking numbers on manifests that have been used or distributed to other parties as soon as this becomes known.
- 3c) USEPA will review the application submitted under subsection (b)(2) (b) of this Section and either approve it or request additional information or modification before approving it.
- 4d) Submission of document samples.
 - A1) Upon USEPA approval of the application pursuant to 40 CFR 262.21(c), as described in subsection (b)(3)-(c) of this Section, USEPA will provide the registrant an electronic file of the manifest, continuation sheet, and manifest instructions and ask the registrant to submit three fully assembled manifests and continuation sheet samples, except as noted in 40 CFR 262.21(d)(3), as described in subsection (b)(4)(C)-(d)(3) of this Section. The registrant's samples must meet all of the specifications in 40 CFR 262.21(f), as described in subsection (b)(6)-(f) of this Section, and be printed by the company that will print the manifest as identified in the application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3)-(c) of this Section.
 - <u>B2</u>) The registrant must submit a description of the manifest samples as follows:
 - $\frac{1}{4}$ The paper type (i.e., manufacturer and grade of the manifest paper);
 - \underline{HB}) The paper weight of each copy;
 - <u>iiiC</u>) The ink color of the manifest's instructions. If screening of the ink was used, the registrant must indicate the extent of the screening; and

- \underline{ivD}) The method of binding the copies.
- C3) The registrant need not submit samples of the continuation sheet if it will print its continuation sheet using the same paper type, paper weight of each copy, ink color of the instructions, and binding method as its manifest form samples.
- 5e) USEPA will evaluate the forms and either approve the registrant to print them as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its forms until USEPA approves them. An approved registrant must print the manifest and continuation sheet according to its application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3)-(e) of this Section and the manifest specifications in 40 CFR 262.21(f), as described in subsection (b)(6)-(f) of this Section. It also must print the forms according to the paper type, paper weight, ink color of the manifest instructions and binding method of its approved forms.
- Paper manifests and continuation sheets must be printed according to the following specifications:
 - A1) The manifest and continuation sheet must be printed with the exact format and appearance as USEPA Forms 8700-22 and 8700-22A, respectively. However, information required to complete the manifest may be preprinted on the manifest form.
 - <u>B2</u>) A unique manifest tracking number assigned in accordance with a numbering system approved by USEPA must be pre-printed in Item 4 of the manifest. The tracking number must consist of a unique three-letter suffix following nine digits.
 - <u>C3</u>) The manifest and continuation sheet must be printed on $8\frac{1}{2} \times 11$ -inch white paper, excluding common stubs (*e.g.*, top- or side-bound stubs). The paper must be durable enough to withstand normal use.
 - <u>D4</u>) The manifest and continuation sheet must be printed in black ink that can be legibly photocopied, scanned, and faxed, except that the marginal words indicating copy distribution must be in red ink.
 - E5) The manifest and continuation sheet must be printed as six-copy forms. Copy-to-copy registration must be exact within 1/32 inch. Handwritten and typed impressions on the form must be legible on all six copies. Copies must be bound together by one or more common stubs that reasonably ensure that they will not become detached inadvertently during normal use.

- F_6) Each copy of the manifest and continuation sheet must indicate how the copy must be distributed, as follows:
 - <u>iA</u>) Page 1 (top copy): "Designated facility to destination State (if required)."
 - <u>#B</u>) Page 2: "Designated facility to generator State (if required)."
 - iiiC) Page 3: "Designated facility to generator."
 - <u>ivD</u>) Page 4: "Designated facility's copy."
 - **v**E) Page 5: "Transporter's copy."
 - viF) Page 6 (bottom copy): "Generator's initial copy."
- G7) The instructions in the appendix to 40 CFR 262 (Uniform Hazardous Waste Manifest and Instructions (EPA Forms 8700-22 and 8700-22A and Their Instructions)), incorporated by reference in 35 Ill. Adm. Code 720.111(b), must appear legibly on the back of the copies of the manifest and continuation sheet as provided in 40 CFR 262.21(f), as described in this subsection (b)(6) and subsection (b)(14) of this Section (f). The instructions must not be visible through the front of the copies when photocopied or faxed.

BOARD NOTE: Subsection (b)(6)(G) corresponds with 40 CFR 262.21(f)(7) (2004), as amended at 70 Fed. Reg. 10776 (March 4, 2005). The Board has moved 40 CFR 262.21(f)(7)(i) and (f)(7)(ii) to appear as subsections (b)(14)(A) and (b)(14)(B) to comport with Illinois Administrative Code codification requirements.

A) Manifest Form 8700-22.

- i) The "Instructions for Generators" on Copy 6;
- ii) The "Instructions for International Shipment Block" and "Instructions for Transporters" on Copy 5; and
- iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

B) Manifest Form 8700-22A.

i) The "Instructions for Generators" on Copy 6;

- ii) The "Instructions for Transporters" on Copy 5; and
- iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.
- 7g) Use of approved manifests.
 - A1) A generator may use manifests printed by any source so long as the source of the printed form has received approval from USEPA to print the manifest pursuant to 40 CFR 262.21(c) and (e), as described in subsections (b)(3)-(c) and (b)(5)-(e) of this Section. A registered source may be any of the following:
 - iA) A state agency;
 - <u>iiB</u>) A commercial printer;
 - iiiC) A hazardous waste generator, transporter, or treatment, storage, or disposal facility; or
 - ivD) A hazardous waste broker or other preparer who prepares or arranges shipments of hazardous waste for transportation.
 - B2) The waste generator must determine whether the generator state or the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under these states' authorized programs. The generator must also determine whether the consignment state or generator state requires the generator to submit any copies of the manifest to these states. In cases where the generator must supply copies to either the generator's state or the consignment state, the generator is responsible for supplying legible photocopies of the manifest to these states.
- <u>8h</u>) Manifest revisions.
 - A1) If an approved registrant would like to update any of the information provided in its application approved by USEPA pursuant to 40 CFR 262.21(c), as described in subsection (b)(3)(c) of this Section (e.g., to update a company phone number or name of contact person), the registrant must revise the application and submit it to the USEPA Director of the Office of Solid Waste, along with an indication or explanation of the update, as soon as practicable after the change occurs. The USEPA will either approve or deny the revision. If USEPA denies the revision, it will explain the reasons for the denial, and it will contact the registrant and request further modification before approval.

- B2) If the registrant would like a new tracking number suffix, the registrant must submit a proposed suffix to the USEPA Director of the Office of Solid Waste, along with the reason for requesting it. USEPA will either approve the suffix or deny the suffix and provide an explanation why it is not acceptable.
- G3) If a registrant would like to change the paper type, paper weight, ink color of the manifest instructions, or binding method of its manifest or continuation sheet subsequent to approval by USEPA pursuant to 40 CFR 262.21(e), as described in this subsection (b)(5)-(e) of this Section, then the registrant must submit three samples of the revised form for USEPA review and approval. If the approved registrant would like to use a new printer, the registrant must submit three manifest samples printed by the new printer, along with a brief description of the printer's qualifications to print the manifest. USEPA will evaluate the manifests and either approve the registrant to print the forms as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its revised forms until USEPA approves them.
- 9<u>i</u>) If, subsequent to its approval by USEPA pursuant to 40 CFR 262.21(e), as described in subsection (b)(5)-(e) of this Section, a registrant typesets its manifest or continuation sheet instead of using the electronic file of the forms provided by USEPA, it must submit three samples of the manifest or continuation sheet to the registry for approval. USEPA will evaluate the manifests or continuation sheets and either approve the registrant to print them as proposed or request additional information or modification to them before approval. USEPA will notify the registrant of its decision by mail. The registrant cannot use or distribute its typeset forms until USEPA approves them.
- USEPA may exempt a registrant from the requirement to submit form samples pursuant to 40 CFR 262.21(d) or (h)(3), as described in subsection (b)(4)(d) or (b)(8)(C)(h)(3) of this Section, if USEPA is persuaded that a separate review of the registrant's forms would serve little purpose in informing an approval decision (e.g., a registrant certifies that it will print the manifest using the same paper type, paper weight, ink color of the instructions, and binding method of the form samples approved for some other registrant). A registrant may request an exemption from USEPA by indicating why an exemption is warranted.
- 41<u>k</u>) An approved registrant must notify USEPA by phone or email as soon as it becomes aware that it has duplicated tracking numbers on any manifests that have been used or distributed to other parties.
- 121) If, subsequent to approval of a registrant by USEPA pursuant to 40 CFR 262.21(e), as described in subsection (b)(5) (e) of this Section, USEPA becomes aware that the approved paper type, paper weight, ink color of the instructions, or

binding method of the registrant's form is unsatisfactory, USEPA will contact the registrant and require modifications to the form.

- 13m) Effects of non-compliance.
 - A1) USEPA may suspend and, if necessary, revoke printing privileges if we find that the registrant has done either of the following:
 - <u>iA</u>) The registrant has used or distributed forms that deviate from its approved form samples in regard to paper weight, paper type, ink color of the instructions, or binding method; or
 - <u>#B</u>) The registrant exhibits a continuing pattern of behavior in using or distributing manifests that contain duplicate manifest tracking numbers.
 - B2) USEPA will send a warning letter to the registrant that specifies the date by which it must come into compliance with the requirements. If the registrant does not come in compliance by the specified date, USEPA will send a second letter notifying the registrant that USEPA has suspended or revoked its printing privileges. An approved registrant must provide information on its printing activities to the Agency and USEPA if requested.
 - 14) Required manifest instructions.
 - A) Manifest Form 8700-22.
 - i) The "Instructions for Generators" on Copy 6;
 - ii) The "Instructions for International Shipment Block" and "Instructions for Transporters" on Copy 5; and
 - iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.
 - B) Manifest Form 8700-22A.
 - i) The "Instructions for Generators" on Copy 6;
 - ii) The "Instructions for Transporters" on Copy 5; and
 - iii) The "Instructions for Treatment, Storage, and Disposal Facilities" on Copy 4.

BOARD NOTE: Subsection (b)(14)(A) and (b)(14)(B) are derived from

40 CFR 262.21(f)(7)(i) and (f)(7)(ii) (2004), as amended at 70 Fed. Reg. 10776 (March 4, 2005). These provisions would normally correspond with subsections (b)(6)(G)(i) and (b)(6)(G)(ii) of this Section. The Board has moved 40 CFR 262.21(f)(7)(i) and (f)(7)(ii) to appear as subsections (b)(14)(A) and (b)(14)(B) of this Section to comport with Illinois Administrative Code codification requirements.

BOARD NOTE: Subsection (a) is derived from 40 CFR 262.21 (2004), effective until Sept. 5. 2006. Subsection (b) is derived from 40 CFR 262.21 (2005), effective Sept. 5, 2006. (Source: Amended at 32 Ill. Reg. _____, effective Section 722.127 Waste Minimization Certification Effective Sept. 5, 2006, a A generator that initiates a shipment of hazardous waste must certify to one of the following statements in Item 15 of the uniform hazardous waste manifest: "I am a large quantity generator. I have a program in place to reduce the volume a) and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment"; or "I am a small quantity generator. I have made a good faith effort to minimize my b) waste generation and select the best waste management method that is available to me and that I can afford." BOARD NOTE: 35 Ill. Adm. Code 720.110 defines a "small quantity generator" as a generator that generates less than 1,000 kilograms of hazardous waste in any calendar month. There is no corresponding definition of "large quantity generator" in the federal regulations, but the Board interprets the term to mean a hazardous waste generator that is not a small quantity generator. (Source: Amended at 32 Ill. Reg. , effective SUBPART C: PRE-TRANSPORT REQUIREMENTS Section 722.132 Marking

- a) Before transporting or offering hazardous waste for transportation off-site, a generator must mark each package of hazardous waste in accordance with the applicable USDOT regulations on hazardous materials under 49 CFR 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b);
- b) Marking small containers.

	1) Until Sept. 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 416 liters (110 gallons) or less that is used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304 (Marking Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b): HAZARDOUS WASTE — Federal Law Prohibits Improper Disposal If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
	Generator's Name and Address
	Manifest Document Number
<u>2b</u>)	Effective Sept. 5, 2006, before Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must mark each container of 450 liters (110 gallons) or less that is used in such transportation with the following words and information displayed in accordance with the requirements of 49 CFR 172.304 (Marking Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b):
	HAZARDOUS WASTEFederal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.
	Generator's Name and Address
	Generator's USEPA Identification Number
	Manifest Tracking Number
	BOARD NOTE: Subsection (b)(1) is derived from 40 CFR 262.32(b) (2004), effective until Sept. 5, 2006. Subsection (b)(2) is derived from 40 CFR 262.32(b) (2005), effective Sept. 5, 2006.
(Source: Ame	ended at 32 Ill. Reg, effective)
Section 722.13	Placarding

Until Sept. 5, 2006, before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to USDOT regulations for hazardous materials under subpart F of 49 CFR 172 (Placarding), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

b) Effective Sept. 5, 2006, before Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to USDOT regulations for hazardous materials under subpart F of 49 CFR 172 (Placarding), incorporated by reference in 35 Ill. Adm. Code 720.111(b). If placards are not required, a generator must mark each motor vehicle according to 49 CFR 171.3(b)(1) (Hazardous Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

BOARD NOTE: Subsection (a) is derived from 40 CFR 262.33 (2004), effective until Sept. 5, 2006. Subsection (b) is derived from 40 CFR 262.33 (2005), effective Sept. 5, 2006.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 722.134 Accumulation Time

- a) Except as provided in subsection (d), (e), (f), (g), (h), or (i) of this Section, a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214, and may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that the following conditions are fulfilled:
 - 1) The waste is placed in or on one of the following types of units, and the generator complies with the applicable requirements:
 - A) In containers, and the generator complies with Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725;
 - B) In tanks, and the generator complies with Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.297(c) and 725.300;
 - C) On drip pads, and the generator complies with Subpart W of 35 Ill. Adm. Code 725 and maintains the following records at the facility:
 - A description of the procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and
 - ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; or
 - D) In containment buildings, and the generator complies with Subpart DD of 35 Ill. Adm. Code 725 (has placed its Professional Engineer (PE) certification that the building complies with the design

standards specified in 35 III. Adm. Code 725.1101 in the facility's operating record prior to the date of initial operation of the unit). The owner or operator must maintain the following records at the facility:

- i) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respect to the 90 day limit, and documentation that the procedures are complied with; or
- ii) Documentation that the unit is emptied at least once every 90 days;

BOARD NOTE: The Board placed the "in addition" hanging subsection that appears in the federal rules after 40 CFR 262.34(a)(1)(iv)(B) in the introduction to subsection (a) of this Section.

- 2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
- While being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste"; and
- 4) The generator complies with the requirements for owners or operators in Subparts C and D of 35 Ill. Adm. Code 725 and with 35 Ill. Adm. Code 725.116 and 728.107(a)(5).
- b) A generator that accumulates hazardous waste for more than 90 days is an operator of a storage facility. Such a generator is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702, 703, and 705, unless the generator has been granted an extension of the 90-day period. If hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of a variance or provisional variance, pursuant to Sections 35(b), 36(c), and 37(b) of the Environmental Protection Act [415 ILCS 5/35(b), 36(c), and 37(b)] and 35 Ill. Adm. Code 180 (Agency procedural regulations).
- c) Accumulation near the point of generation.
 - 1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in containers at or near any point of generation where wastes initially accumulate that is under the control of the operator of the process

generating the waste without a permit or interim status and without complying with subsection (a) of this Section, provided the generator does the following:

- A) The generator complies with 35 Ill. Adm. Code 725.271, 725.272, and 725.273(a); and
- B) The generator marks the containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.
- A generator that accumulates either hazardous waste or acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in excess of the amounts listed in subsection (c)(1) of this Section at or near any point of generation must, with respect to that amount of excess waste, comply within three days with subsection (a) of this Section or other applicable provisions of this Chapter. During the three day period the generator must continue to comply with subsection (c)(1) of this Section. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.
- d) A generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that the following conditions are fulfilled:
 - 1) The quantity of waste accumulated on-site never exceeds 6,000 kilograms;
 - 2) The generator complies with the requirements of Subpart I of 35 Ill. Adm. Code 725 (except 35 Ill. Adm. Code 725.276 and 725.278);
 - 3) The generator complies with the requirements of 35 Ill. Adm. Code 725.301;
 - 4) The generator complies with the requirements of subsections (a)(2) and (a)(3) of this Section, Subpart C of 35 Ill. Adm. Code 725, and 35 Ill. Adm. Code 728.107(a)(5); and
 - 5) The generator complies with the following requirements:
 - A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in subsection (d)(5)(D) of this Section. The employee is the emergency coordinator.

- B) The generator must post the following information next to the telephone:
 - i) The name and telephone number of the emergency coordinator;
 - ii) Location of fire extinguishers and spill control material and, if present, fire alarm; and
 - iii) The telephone number of the fire department, unless the facility has a direct alarm.
- C) The generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.
- D) The emergency coordinator or designee must respond to any emergencies that arise. The following are applicable responses:
 - i) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
 - ii) In the event of a spill, contain the flow of hazardous waste to the extent possible and, as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil; and
 - iii) In the event of a fire, explosion, or other release that could threaten human health outside the facility, or when the generator has knowledge that a spill has reached surface water, the generator must immediately notify the National Response Center (using its 24-hour toll free number 800-424-8802).
- E) A report to the National Response Center pursuant to subsection (d)(5)(D)(iii) of this Section must include the following information:
 - i) The name, address, and USEPA identification number (Section 722.112 of this Part) of the generator;
 - ii) The date, time, and type of incident (e.g., spill or fire);
 - iii) The quantity and type of hazardous waste involved in the

incident; the extent of injuries, if any; and

iv) The estimated quantity and disposition of recoverable materials, if any.

BOARD NOTE: The Board has codified 40 CFR 262.34(d)(5)(iv)(C)(1) through (d)(5)(iv)(C)(5) as subsections (d)(5)(E)(i) through (d)(5)(E)(iv) because Illinois Administrative Code codification requirements do not allow the use of a fifth level of subsection indents.

- e) A generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month and that must transport the waste or offer the waste for transportation over a distance of 200 miles or more for off-site treatment, storage, or disposal may accumulate hazardous waste onsite for 270 days or less without a permit or without having interim status, provided that the generator complies with the requirements of subsection (d) of this Section.
- kilograms of hazardous waste in a calendar month and that accumulates hazardous waste in quantities exceeding 6,000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if the generator must transport the waste or offer the waste for transportation over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 703, unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period. If hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of variance or provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Environmental Protection Act [415 ILCS 5/35(b), 36(c), and 37(b)].
- g) A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, may accumulate F006 waste on-site for more than 90 days, but not more than 180 days, without a permit or without having interim status provided that the generator fulfills the following conditions:
 - The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants entering F006 or otherwise released to the environment prior to its recycling;

- 2) The F006 waste is legitimately recycled through metals recovery;
- 3) No more than 20,000 kilograms of F006 waste is accumulated on-site at any one time; and
- 4) The F006 waste is managed in accordance with the following conditions:
 - A) The F006 waste is placed in one of the following containing devices:
 - i) In containers and the generator complies with the applicable requirements of Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725;
 - ii) In tanks and the generator complies with the applicable requirements of Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.297(c) and 725.300; or
 - iii) In containment buildings, and the generator complies with Subpart DD of 35 Ill. Adm. Code 725 and has placed its professional engineer certification that the building complies with the design standards specified in 35 Ill. Adm. Code 725.1101 in the facility's operating record prior to operation of the unit. The owner or operator must maintain the records listed in subsection (g)(4)(F) of this Section at the facility;
 - B) In addition, such a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214;
 - C) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
 - D) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and
 - E) The generator complies with the requirements for owners or operators in Subparts C and D of 35 Ill. Adm. Code 725, with 35 Ill. Adm. Code 725.116, and with 35 Ill. Adm. Code 728.107(a)(5).
 - F) Required records for a containment building:
 - i) A written description of procedures to ensure that the F006 waste remains in the unit for no more than 180 days, a

written description of the waste generation and management practices for the facility showing that they are consistent with the 180-day limit, and documentation that the generator is complying with the procedures; or

ii) Documentation that the unit is emptied at least once every 180 days.

BOARD NOTE: The Board has codified 40 CFR 262.34(g)(4)(i)(C)(1) and (g)(4)(i)(C)(2) as subsections (g)(4)(F)(i) and (g)(4)(F)(ii) because Illinois Administrative Code codification requirements do not allow the use of a fifth level of subsection indents.

- h) A generator that generates 1,000 kilograms or greater of hazardous waste per calendar month, which also generates wastewater treatment sludges from electroplating operations that meet the listing description for the RCRA hazardous waste code F006, and which must transport this waste or offer this waste for transportation over a distance of 200 miles or more for off-site metals recovery may accumulate F006 waste on-site for more than 90 days, but not more than 270 days, without a permit or without having interim status if the generator complies with the requirements of subsections (g)(1) through (g)(4) of this Section.
- i) A generator accumulating F006 in accordance with subsections (g) and (h) of this Section that accumulates F006 waste on-site for more than 180 days (or for more than 270 days if the generator must transport this waste or offer this waste for transportation over a distance of 200 miles or more) or which accumulates more than 20,000 kilograms of F006 waste on-site is an operator of a storage facility, and such a generator is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702 and 703, unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period or an exception to the 20,000 kilogram accumulation limit.
 - On a case-by-case basis, the Agency must grant a provisional variance that allows an extension of the accumulation time up to an additional 30 days pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)] if it finds that the F006 waste must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances.
 - On a case-by-case basis, the Agency must grant a provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)] that allows an exception to the 20,000 kilogram accumulation limit if the Agency finds that more than 20,000 kilograms of F006 waste must remain on-site due to unforeseen, temporary, and uncontrollable circumstances.

- A generator must follow the procedure of 35 Ill. Adm. Code 180 (Agency procedural rules) when seeking a provisional variance under subsection (i)(1) or (i)(2) of this Section.
- j) A member of the federal National Environmental Performance Track program that generates 1,000 kg or greater of hazardous waste per month (or one kilogram or more of acute hazardous waste) may accumulate hazardous waste on-site without a permit or interim status for an extended period of time, provided that the following conditions are fulfilled:
 - 1) The generator accumulates the hazardous waste for no more than 180 days, or for no more than 270 days if the generator must transport the waste (or offer the waste for transport) more than 200 miles from the generating facility;
 - 2) The generator first notifies USEPA Region 5 and the Agency in writing of its intent to begin accumulation of hazardous waste for extended time periods under the provisions of this Section. Such advance notice must include the following information:
 - A) The name and USEPA ID number of the facility and specification of when the facility will begin accumulation of hazardous wastes for extended periods of time in accordance with this Section;
 - B) A description of the types of hazardous wastes that will be accumulated for extended periods of time and the units that will be used for such extended accumulation;
 - C) A statement that the facility has made all changes to its operations; procedures, including emergency preparedness procedures; and equipment, including equipment needed for emergency preparedness, that will be necessary to accommodate extended time periods for accumulating hazardous wastes; and
 - D) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under 35 Ill. Adm. Code 702 and 703, federal 40 CFR 270, or the corresponding regulations of a sister state to receive these wastes is not available within 200 miles of the generating facility;
 - 3) The waste is managed in the following types of units:
 - A) Containers, in accordance with the applicable requirements of Subparts I, AA, BB, and CC of 35 Ill. Adm. Code 725 and 35 Ill.

- Adm. Code 724.275;
- B) Tanks, in accordance with the requirements of Subparts J, AA, BB, and CC of 35 Ill. Adm. Code 725, except for Sections 725.297(c) and Section 725.300;
- C) Drip pads, in accordance with Subpart W of 35 Ill. Adm. Code 725; or
- D) Containment buildings, in accordance with Subpart DD of 35 Ill. Adm. Code 725;
- 4) The quantity of hazardous waste that is accumulated for extended time periods at the facility does not exceed 30,000 kg;
- 5) The generator maintains the following records at the facility for each unit used for extended accumulation times:
 - A) A written description of procedures to ensure that each waste volume remains in the unit for no more than 180 days (or 270 days, as applicable), a description of the waste generation and management practices at the facility showing that they are consistent with the extended accumulation time limit, and documentation that the procedures are complied with; or
 - B) Documentation that the unit is emptied at least once every 180 days (or 270 days, if applicable);
- Each container or tank that is used for extended accumulation time periods is labeled or marked clearly with the words "Hazardous Waste," and for each container the date upon which each period of accumulation begins is clearly marked and visible for inspection;
- The generator complies with the requirements for owners and operators in Subparts C and D of 35 Ill. Adm. Code 725, 35 Ill. Adm. Code 725.116, and 35 Ill. Adm. Code 728.107(a)(5). In addition, such a generator is exempt from all the requirements in Subparts G and H of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.211 and 725.214;
- 8) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants released to the environment prior to its recycling, treatment, or disposal; and
- 9) The generator includes the following information with its federal National Environmental Performance Track Annual Performance Report, which

must be submitted to the USEPA Region 5 and the Agency:

- A) Information on the total quantity of each hazardous waste generated at the facility that has been managed in the previous year according to extended accumulation time periods;
- B) Information for the previous year on the number of off-site shipments of hazardous wastes generated at the facility, the types and locations of destination facilities, how the wastes were managed at the destination facilities (e.g., recycling, treatment, storage, or disposal), and what changes in on-site or off-site waste management practices have occurred as a result of extended accumulation times or other pollution prevention provisions of this Section;
- C) Information for the previous year on any hazardous waste spills or accidents occurring at extended accumulation units at the facility, or during off-site transport of accumulated wastes; and
- D) If the generator intends to accumulate hazardous wastes on-site for up to 270 days, a certification that a facility that is permitted (or operating under interim status) under 35 Ill. Adm. Code 702 and 703, federal 40 CFR 270, or the corresponding regulations of a sister state to receive these wastes is not available within 200 miles of the generating facility.

BOARD NOTE: The National Environmental Performance Track program is operated exclusively by USEPA. USEPA established the program in 2000 (see 65 Fed. Reg. 41655 (July 6, 2000)) and amended it in 2004 (see 69 Fed. Reg. 27922 (May 17, 2004)). USEPA confers membership in the program on application of interested and eligible entities. Information about the program is available from a website maintained by USEPA: www.epa.gov/performancetrack.

- k) If the Agency finds that hazardous wastes must remain on-site at a federal National Environmental Performance Track member facility for longer than the 180 days (or 270 days, if applicable) allowed under subsection (j) of this Section due to unforeseen, temporary, and uncontrollable circumstances, it must grant an extension to the extended accumulation time period of up to 30 days on a case-by-case basis by a provisional variance pursuant to Sections 35(b), 36(c), and 37(b) of the Act [415 ILCS 5/35(b), 36(c), and 37(b)].
- 1) If a generator that is a member of the federal National Environmental Performance Track program withdraws from the National Environmental Performance Track program or if USEPA Region 5 terminates a generator's membership, the generator must return to compliance with all otherwise

applicable hazardous waste regulations as soon as possible, but no later than six months after the date of withdrawal or termination.

- m) Effective Sept. 5, 2006, a A generator that sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and which later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of 35 Ill. Adm. Code 724.172 or 725.172 may accumulate the returned waste on-site in accordance with subsections (a) and (b) or (d), (e), and (f) of this Section, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the returned shipment, the generator must sign the appropriate of the following:
 - 1) Item 18c of the manifest, if the transporter returned the shipment using the original manifest; or
 - 2) Item 20 of the manifest, if the transporter returned the shipment using a new manifest.

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART E: EXPORTS OF HAZARDOUS WASTE

ection 722.158 International Agreements

- a) Any person that exports or imports hazardous waste subject to either the manifest requirements of this Part or the universal waste management standards of 35 Ill. Adm. Code 733 which is shipped to or from designated member countries of the Organisation for Economic Co-operation and Development (OECD), as defined in subsection (a)(1) of this Section, for purposes of recovery is subject to the requirements of Subpart H of this Part. The requirements of Subparts E and F of this Part do not apply where Subpart H of this Part applies.
 - 1) For the purposes of this Subpart E, the designated OECD countries are Australia, Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, the Slovak Republic, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.
 - 2) Only for the purposes of transit under this Subpart E, Canada and Mexico are considered OECD member countries.
- b) Any person that exports hazardous waste to or imports hazardous waste from any designated OECD member country for purposes other than recovery (e.g., incineration, disposal, etc.), Mexico (for any purpose), or Canada (for any

	purpo	ose) remains subje	ect to the requirements	of Subparts E and F of this Part.
(Source:	Amended	at 32 Ill. Reg	, effective)
		SUBPART F: IN	MPORTS OF HAZARI	DOUS WASTE
Section 7	22.160	Imports of Haza	ardous Waste	
a)	States	-		a foreign country into the United as Part and the special requirements of
b)	722.1		· •	st meet all the requirements of Section lowing information items are
	1)	the name and ad		ss, and USEPA identification number, nerator and the importer's name, nber must be used.
	2)	States importer of		the certification statement, the United must sign and date the certification ansporter.
c)	-	rson that imports ha on 722.121 (a) or (l		otain the manifest form as provided in
d)	the in		k the import box and e	l Shipments block of the manifest, enter the point of entry (city and
e)	additi USEI	ional copy of the r PA in accordance	manifest to be submitte	st provide the transporter with an ed by the receiving facility to e 724.171(a)(2)(C) 724.171(a)(3) or te.
(Source:	Amended	at 32 Ill. Reg.	, effective)
SUBPART H: TRANSFRONTIER SHIPMENTS OF HAZARDOUS WASTE FOR RECOVERY WITHIN THE OECD				

a) Applicability. Consent must be obtained from the competent authorities of the relevant OECD importing and transit countries prior to exporting hazardous waste destined for recovery operations subject to this Subpart H. Hazardous wastes

Notification and Consent

Section 722.183

- subject to amber-list controls are subject to the requirements of subsection (b) of this Section; hazardous wastes subject to red-list controls are subject to the requirements of subsection (c) of this Section; and wastes not identified on any list are subject to the requirements of subsection (d) of this Section.
- b) Amber-list wastes. The export from the U.S. of hazardous waste, as described in Section 722.180(a), that is amber-list waste is prohibited unless the notification and consent requirements of subsection (b)(1) or subsection (b)(2) of this Section are met.
 - 1) Transactions requiring specific consent.
 - A) Notification. At least 45 days prior to commencement of the transfrontier movement, the notifier must provide written notification in English of the proposed transfrontier movement to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 401 M St., SW, 1200 Pennsylvania Ave., NW, Washington, DC 20460, and the Illinois Environmental Protection Agency, Bureau of Land, Division of Land Pollution Control, P.O. Box 19276, Springfield, IL 62794-9276, with the words "Attention: OECD Export Notification" prominently displayed on the envelope. This notification must include all of the information identified in subsection (e) of this Section. In cases where wastes having similar physical and chemical characteristics, the same United Nations classification, and the same USEPA hazardous waste codes are to be sent periodically to the same recovery facility by the same notifier, the notifier may submit one notification of intent to export these wastes in multiple shipments during a period of up to one year.
 - B) Tacit consent. If no objection has been lodged by any concerned country (i.e., exporting, importing, or transit countries) to a notification provided pursuant to subsection (b)(1)(A) of this Section within 30 days after the date of issuance of the Acknowledgment of Receipt of notification by the competent authority of the importing country, the transfrontier movement may commence. Tacit consent expires one calendar year after the close of the 30-day period; renotification and renewal of all consents is required for exports after that date.
 - C) Written consent. If the competent authorities of all the relevant OECD importing and transit countries provide written consent in a period less than 30 days, the transfrontier movement may

commence immediately after all necessary consents are received. Written consent expires for each relevant OECD importing and transit country one calendar year after the date of that country's consent unless otherwise specified; renotification and renewal of each expired consent is required for exports after that date.

- 2) Shipments to facilities pre-approved by the competent authorities of the importing countries to accept specific wastes for recovery.
 - A) The notifier must provide USEPA and the Agency the information identified in subsection (e) of this Section in English, at least 10 days in advance of commencing shipment to a pre-approved facility. The notification should indicate that the recovery facility is pre-approved, and may apply to a single specific shipment or to multiple shipments as described in subsection (b)(1)(A) of this Section. This information must be sent to the Office of Enforcement and Compliance Assurance, Office of Compliance. Enforcement Planning, Targeting and Data Division (2222A), Federal Activities, International Compliance Assurance Division (2254A), Environmental Protection Agency, 401 M St., SW., 1200 Pennsylvania Ave., NW, Washington, DC 20460, and the Illinois Environmental Protection Agency, Bureau of Land, Division of Land Pollution Control, P.O. Box 19276, Springfield, IL 62794-9276, with the words "Attention: OECD Export Notification--Preapproved Facility" prominently displayed on the envelope.
 - B) Shipments may commence after the notification required in subsection (b)(1)(A) of this Section has been received by the competent authorities of all concerned countries, unless the notifier has received information indicating that the competent authorities of one or more concerned countries objects to the shipment.
- c) Red-list wastes. The export from the U.S. of hazardous waste, as described in Section 722.180(a), that is red-list waste is prohibited unless notice is given pursuant to subsection (b)(1)(A) of this Section and the notifier receives written consent from the importing country and any transit countries prior to commencement of the transfrontier movement.
- d) Unlisted wastes. Waste that is not green-list waste, amber-list waste, or red-list waste and which is considered hazardous under U.S. national procedures, as defined in Section 722.180(a), is subject to the notification and consent requirements established for red-list wastes in accordance with subsection (c) of this Section. Unlisted wastes that are not considered hazardous under U.S. national procedures, as defined in Section 722.180(a), are not subject to amberlist or red-list controls when exported or imported.

- e) Notification information. Notifications submitted under this Section must include the following information:
 - 1) Serial number or other accepted identifier of the notification form;
 - 2) Notifier name and USEPA identification number (if applicable), address, and telephone and telefax numbers;
 - 3) Importing recovery facility name, address, telephone and telefax numbers, and technologies employed;
 - 4) Consignee name (if not the owner or operator of the recovery facility), address, and telephone and telefax numbers; whether the consignee will engage in waste exchange or storage prior to delivering the waste to the final recovery facility; and identification of recovery operations to be employed at the final recovery facility;
 - 5) Intended transporters or their agents;
 - 6) Country of export and relevant competent authority and point of departure;
 - 7) Countries of transit and relevant competent authorities and points of entry and departure;
 - 8) Country of import and relevant competent authority and point of entry;
 - 9) Statement of whether the notification is a single notification or a general notification. If general, include period of validity requested;
 - 10) Date foreseen for commencement of transfrontier movement;
 - Designation of waste types from the appropriate list (e.g., amber-list waste or red-list waste and waste list code), descriptions of each waste type, estimated total quantity of each, USEPA hazardous waste code, and United Nations number for each waste type; and
 - 12) Certification/Declaration signed by the notifier that states as follows:

"I certify that the above information is complete and correct to the best of
my knowledge. I also certify that legally-enforceable written contractual
obligations have been entered into, and that any applicable insurance or
other financial guarantees are or must be in force covering the transfrontier
movement

	Signature:		_
	Date:		" —
	however, U.S. exp	The U.S. does not currently requiporters may be asked by other governments as a condition of obtainent.	vernments to provide
(Source: Amended at	32 Ill. Reg	, effective)
Section 722.184	Tracking Docume	ent	

- Trucking Document
- a) All U.S. parties subject to the contract provisions of Section 722.185 must ensure that a tracking document meeting the conditions of subsection (b) of this Section accompanies each transfrontier shipment of wastes subject to amber-list or red-list controls from the initiation of the shipment until it reaches the final recovery facility, including cases in which the waste is stored or exchanged by the consignee prior to shipment to the final recovery facility, except as provided in this subsection (a).
 - 1) For shipments of hazardous waste within the U.S. solely by water (bulk shipments only), the generator must forward the tracking document with the manifest to the last water (bulk shipment) transporter to handle the waste in the U.S. if exported by water (in accordance with the manifest routing procedures at Section 722.123(c)).
 - For rail shipments of hazardous waste within the U.S. that originate at the site of generation, the generator must forward the tracking document with the manifest (in accordance with the routing procedures for the manifest in Section 722.123(d)) to the next non-rail transporter, if any, or the last rail transporter to handle the waste in the U.S. if exported by rail.
- b) The tracking document must include all information required under Section 722.183 (for notification) and the following information:
 - 1) The date shipment commenced;
 - 2) The name (if not notifier), address, and telephone and telefax numbers of primary exporter;
 - 3) The company name and USEPA identification number of all transporters;
 - 4) Identification (license, registered name, or registration number) of means of transport, including types of packaging;

- 5) Any special precautions to be taken by transporters;
- A certification or declaration signed by notifier that no objection to the shipment has been lodged as follows:

"I certify that the above information is complete and correct to the best of my knowledge. I also certify that legally-enforceable written contractual obligations have been entered into, that any applicable insurance or other financial guarantees are or must be in force covering the transfrontier movement, and that:"

"1. All necessary consents have been received;"

(delete sentences that are not applicable)

- "2. The shipment is directed at a recovery facility within the OECD area and no objection has been received from any of the concerned countries within the 30 day tacit consent period;"
- "3. The shipment is directed at a recovery facility pre-authorized for that type of waste within the OECD area, such an authorization has not been revoked, and no objection has been received from any of the concerned countries."

"Name:	
Signature:	
Date:	

- 7) The appropriate signatures for each custody transfer (e.g., transporter, consignee, and owner or operator of the recovery facility).
- c) Notifiers also must comply with the special manifest requirements of Section 722.154(a), (b), (c), (e), and (i) and consignees must comply with the import requirements of Subpart F of this Part.
- d) Each U.S. person that has physical custody of the waste from the time the movement commences until it arrives at the recovery facility must sign the tracking document (e.g., transporter, consignee, and owner or operator of the recovery facility).
- e) Within three working days after the receipt of imports subject to this Subpart H, the owner or operator of the U.S. recovery facility must send signed copies of the tracking document to the notifier, to the Office of Enforcement and Compliance

Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Federal Activites, International Compliance Assurance Division (2254A), Environmental Protection Agency, 401 M St., SW, 1200 Pennsylvania Ave., NW, Washington, DC 20460, and to the competent authorities of the exporting and transit countries.

(Source: Amended	at 32 Ill. Reg	, effective)
g .: 722 107	D (* 10		
Section 722 187	Reporting and R	ecordkeening	

- Annual reports. For all waste movements subject to this Subpart H, persons (e.g., a) notifiers, recognized traders, etc.) that meet the definition of primary exporter in Section 722.151 must file an annual report with the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Federal Activites, International Compliance Assurance Division (2254A), U.S. Environmental Protection Agency, 401 M St., SW-1200 Pennsylvania Ave., NW, Washington, DC 20460 and the Illinois Environmental Protection Agency, Bureau of Land, Division of Land Pollution Control, P.O. Box 19276, Springfield, IL 62794, no later than March 1 of each year summarizing the types, quantities, frequency, and ultimate destination of all such hazardous waste exported during the previous calendar year. (If the primary exporter is required to file an annual report for waste exports that are not covered under this Subpart H, the person filing may include all export information in one report provided the following information on exports of waste destined for recovery within the designated OECD member countries is contained in a separate Section). Such reports must include the following information:
 - 1) The USEPA identification number, name, and mailing and site address of the notifier filing the report;
 - 2) The calendar year covered by the report;
 - 3) The name and site address of each final recovery facility;
 - 4) By final recovery facility, for each hazardous waste exported, a description of the hazardous waste, the USEPA hazardous waste number (from Subpart C or D of 35 Ill. Adm. Code 721); the designation of waste types from the OECD waste list and applicable waste code from the OECD lists, as described in the annex to OECD Council Decision C(88)90/Final, as amended by C(94)152/Final, incorporated by reference in 35 Ill. Adm. Code 720.111(a), USDOT hazard class; the name and USEPA identification number (where applicable) for each transporter used; the total amount of hazardous waste shipped pursuant to this Subpart H; and number of shipments pursuant to each notification;
 - 5) In even numbered years, for each hazardous waste exported, except for

hazardous waste produced by exporters of greater than 100 kilograms (kg) but less than 1,000 kg in a calendar month, and except for hazardous waste for which information was already provided pursuant to Section 722.141:

- A) A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated; and
- B) A description of the changes in volume and toxicity of the waste actually achieved during the year in comparison to previous years to the extent such information is available for years prior to 1984; and
- A certification signed by the person acting as primary exporter that states as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

- b) Exception reports. Any person that meets the definition of primary exporter in Section 722.151 must file with USEPA and the Agency an exception report in lieu of the requirements of Section 722.142 if any of the following occurs:
 - 1) The person has not received a copy of the tracking documentation signed by the transporter stating point of departure of the waste from the United States within 45 days from the date it was accepted by the initial transporter;
 - 2) Within 90 days from the date the waste was accepted by the initial transporter, the notifier has not received written confirmation from the recovery facility that the hazardous waste was received; or
 - 3) The waste is returned to the United States.
- c) Recordkeeping.
 - 1) Persons that meet the definition of primary exporter in Section 722.151 must keep the following records:
 - A) A copy of each notification of intent to export and all written consents obtained from the competent authorities of concerned countries, for a period of at least three years from the date the

hazardous waste was accepted by the initial transporter;

- B) A copy of each annual report, for a period of at least three years from the due date of the report; and
- C) A copy of any exception reports and a copy of each confirmation of delivery (i.e., tracking documentation) sent by the recovery facility to the notifier, for at least three years from the date the hazardous waste was accepted by the initial transporter or received by the recovery facility, whichever is applicable.
- 2) The periods of retention referred to in this Section are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by USEPA or the Agency.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

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

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 723 STANDARDS APPLICABLE TO TRANSPORTERS OF HAZARDOUS WASTE

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723.110	Scope
723.111	USEPA Identification Number
723.112	Transfer Facility Requirements
723.113	Electronic Reporting

SUBPART B: COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

Section	
723.120	The Manifest System
723.121	Compliance with the Manifest
723.122	Recordkeeping

SUBPART C: HAZARDOUS WASTE DISCHARGES

Section
723.130 Immediate Action
723.131 Discharge Cleanup

AUTHORITY: Implementing Section 7.2 and 22.4 and authorized by Section 27 of the

Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R81-22 at 5 III. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 III. Reg. 4828, effective May 17, 1982; amended in R84-9, at 9 III. Reg. 11961, effective July 24, 1985; amended in R86-19, at 10 III. Reg. 20718, effective December 2, 1986; amended in R86-46 at 11 III. Reg. 13570, effective August 4, 1987; amended in R87-5 at 11 III. Reg. 19412, effective November 12, 1987; amended in R95-6 at 19 III. Reg. 9945, effective June 27, 1995; amended in R96-10/R97-3/R97-5 at 22 III. Reg. 589, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17965, effective September 28, 1998; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3180, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 881, effective December 20, 2006; amended in R07-5/R07-14 at 32 III. Reg. _______, effective ________.

SUBPART B: COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

Section 723.120 The Manifest System

- a) No acceptance without a manifest.
 - 1) The following manifest requirements apply until Sept. 5, 2006:
 - A) A transporter may not accept hazardous waste from a generator unless it is accompanied by a manifest signed in accordance with the provisions of 35 III. Adm. Code 722.120. In the case of exports other than those subject to Subpart H of 35 III. Adm. Code 722, a transporter may not accept such waste from a primary exporter or other person:
 - i) If the transporter knows the shipment does not conform with the USEPA Acknowledgement of Consent (as defined in 35 III. Adm. Code 722.151); and
 - ii) Unless, in addition to a manifest signed in accordance with 35 Ill. Adm. Code 722.120, the waste is also accompanied by a USEPA Acknowledgement of Consent that, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).
 - B) For exports of hazardous waste subject to Subpart H of 35 Ill.

 Adm. Code 722, a transporter may not accept hazardous waste without a tracking document that includes all information required by 35 Ill. Adm. Code 722.184.
 - 2) The following manifest requirements apply effective Sept. 5, 2006:

A1) Manifest requirement. A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest signed in accordance with the provisions of 35 Ill. Adm. Code 723.123.

B2) Exports.

- In the case of exports other than those subject to Subpart H of 35 Ill. Adm. Code 722, a transporter may not accept such waste from a primary exporter or other person if the transporter knows that the shipment does not conform to the USEPA Acknowledgement of Consent; and unless, in addition to a manifest signed by the generator as provided in this Section, the transporter must also be provided with a USEPA Acknowledgement of Consent that, except for shipment by rail, is attached to the manifest (or shipping paper for exports by water (bulk shipment)).
- HB) For exports of hazardous waste subject to Subpart H of 35 Ill. Adm. Code 722, a transporter may not accept hazardous waste without a tracking document that includes all information required by 35 Ill. Adm. Code 722.184.

BOARD NOTE: Subsection (a)(1) corresponds with 40 CFR 263.20(a) (2004), effective until Sept. 5, 2006. Subsection (a)(2) corresponds with 40 CFR 263.20(a) (2005), effective Sept. 5, 2006. The Board omitted 40 CFR 263.20(a)(3) (2005), since that provision merely stated the Sept. 5, 2006 effective date for the newer manifest requirements.

- b) Before transporting the hazardous waste, the transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter must return a signed copy to the generator before leaving the generator's property.
- c) The transporter must ensure that the manifest accompanies the hazardous waste. In the case of exports, the transporter must ensure that a copy of the USEPA Acknowledgement of Consent also accompanies the hazardous waste.
- d) A transporter that delivers a hazardous waste to another transporter or to the designated facility must do the following:
 - 1) It must obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest;
 - 2) It must retain one copy of the manifest in accordance with Section 723.122; and

- 3) It must give the remaining copies of the manifest to the accepting transporter or designated facility.
- e) Subsections (c), (d), and (f) do not apply to water (bulk shipment) transporters if all of the following are true:
 - 1) The hazardous waste is delivered by water (bulk shipment) to the designated facility;
 - 2) A shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification and signatures) accompanies the hazardous waste and, for exports, a USEPA Acknowledgement of Consent accompanies the hazardous waste;
 - 3) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator designated facility on either the manifest or the shipping paper;
 - 4) The person delivering the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards it to the designated facility; and
 - A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with Section 723.122.
- f) For shipments involving rail transportation, the following requirements apply instead of subsections (c), (d), and (e), which do not apply:
 - 1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter must do the following:
 - A) It must sign and date the manifest acknowledging acceptance of the hazardous waste;
 - B) It must return a signed copy of the manifest to the non-rail transporter;
 - C) It must forward at least three copies of the manifest to the following entities:
 - i) The next non-rail transporter, if any;
 - ii) The designated facility, if the shipment is delivered to that facility by rail; or

- iii) The last rail transporter designated to handle the waste in the United States;
- D) It must retain one copy of the manifest and rail shipping paper in accordance with Section 723.122.
- 2) Rail transporters must ensure that a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification and signatures) and, for exports, a USEPA Acknowledgement of Consent accompanies the hazardous waste at all times.
 - BOARD NOTE: Intermediate rail transporters are not required to sign either the manifest or shipping paper.
- 3) When delivering hazardous waste to the designated facility, a rail transporter must do the following:
 - A) It must obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility); and
 - B) It must retain a copy of the manifest or signed shipping paper in accordance with Section 723.122.
- 4) When delivering hazardous waste to a non-rail transporter a rail transporter must do the following:
 - A) It must obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest; and
 - B) It must retain a copy of the manifest in accordance with Section 723.122.
- 5) Before accepting hazardous waste from a rail transporter, a non-rail transporter must sign and date the manifest and provide a copy to the rail transporter.
- g) Transporters that transport hazardous waste out of the United States must do the following:
 - 1) Until Sept. 5, 2006:
 - A) Indicate on the manifest the date the hazardous waste left the United States;

- B) Sign the manifest and retain one copy in accordance with Section 723.122(e);
- C) Return a signed copy of the manifest to the generator; and
- D) Give a copy of the manifest to a United States Customs official at the point of departure from the United States.
- 2) Effective Sept. 5, 2006:
- A1) Sign and date the manifest in the International Shipments block to indicate the date that the hazardous waste left the United States;
- <u>B2</u>) Retain one copy in accordance with Section 723.122(d);
- C_3) Return a signed copy of the manifest to the generator; and
- <u>D4</u>) Give a copy of the manifest to a U.S. Customs official at the point of departure from the United States.

BOARD NOTE: Subsections (g)(1)(A) through (g)(1)(B) correspond with 40 CFR 263.20(g) (2004). Subsections (g)(2)(A) through (g)(2)(B) correspond with 40 CFR 263.20(g) (2005). The Board added subsections (g)(1) and (g)(2), reciting the effective dates, based on 40 CFR 263.20(a)(3) (2005).

- h) A transporter transporting hazardous waste from a generator that generates greater than 100 kilograms but less than 1,000 kilograms of hazardous waste in a calendar month need not comply with this Section or Section 723.122 provided that:
 - 1) The waste is being transported pursuant to a reclamation agreement provided for in 35 Ill. Adm. Code 722.120(e);
 - 2) The transporter records, on a log or shipping paper, the following information for each shipment:
 - A) The name, address and USEPA Identification Number (35 III. Adm. Code 722.112) of the generator of the waste;
 - B) The quantity of waste accepted;
 - C) All shipping information required by the United States Department of Transportation;
 - D) The date the waste is accepted; and

- 3) The transporter carries this record when transporting waste to the reclamation facility; and
- 4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

(Source: Amended at 32 III. Reg.	_, effective)
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Section 723.121 Compliance with the Manifest

- a) The transporter must deliver the entire quantity of hazardous waste which he has accepted from a generator or a transporter to:
 - 1) The designated facility listed on the manifest; or
 - 2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; or
 - 3) The next designated transporter; or
 - 4) The place outside the United States designated by the generator.
- b) Non-delivery of the hazardous waste.
 - 1) Until Sept. 5, 2006, if the hazardous waste cannot be delivered in accordance with subsection (a) of this Section, the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.
 - 2) Effective Sept. 5, 2006.
 - A1) If the hazardous waste cannot be delivered in accordance with subsection (a) of this Section because of an emergency condition other than rejection of the waste by the designated facility, then the transporter must contact the generator for further directions and must revise the manifest according to the generator's instructions.
 - B2) If hazardous waste is rejected by the designated facility while the transporter is on the premises of the designated facility, then the transporter must obtain the following, as appropriate:
 - <u>iA</u>) For a partial load rejection or for regulated quantities of container residues: a copy of the original manifest that includes the facility's date and signature, the manifest tracking number of the new

manifest that will accompany the shipment, and a description of the partial rejection or container residue in the discrepancy block of the original manifest. The transporter must retain a copy of this manifest in accordance with Section 723.122 and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning it to the generator, the transporter must obtain a new manifest to accompany the shipment, and the new manifest must include all of the information required in 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F) 724.172(e)(1) through (e)(6) or (f)(1) through (f)(6) or 725.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F) 725.172(e)(1) through (e)(6) or (f)(1) through (f)(6).

₩B) For a full load rejection that will be taken back by the transporter: a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the discrepancy block of the manifest, and the name, address, phone number, and USEPA identification number for the alternate facility or generator to whom the shipment must be delivered. The transporter must retain a copy of the manifest in accordance with Section 723.122, and give a copy of the manifest containing this information to the rejecting designated facility. If the original manifest is not used, then the transporter must obtain a new manifest for the shipment and comply with 35 Ill. Adm. Code 724.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F)724.172(e)(1) through (e)(6) or (f)(1) through (f)(6) or 725.172(b)(5)(A) through (b)(5)(F) or (b)(6)(A) through (b)(6)(F)725.172(e)(1) through (e)(6) or (f)(1) through (f)(6).

BOARD NOTE: Subsection (b)(1) is derived from 40 CFR 263.21(b) (2004), effective until Sept. 5, 2006. Subsection (b)(2) is derived from 40 CFR 263.21(b) (2005), effective Sept. 5, 2006.

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

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 724 STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

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724.Appendix I	Groundwater Monitoring List

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

SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 III. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 III. Reg. 19397, effective Nov. 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 Nov. 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 Sept. 25, 1990; amended in R90-11 at 15 Ill. Reg. 9654, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14572, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17702, effective Nov. 6, 1992; amended in R92-10 at 17 Ill. Reg. 5806, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20830, effective Nov. 22, 1993; amended in R93-16 at 18 Ill. Reg. 6973, effective April 26, 1994; amended in R94-7 at 18 III. Reg. 12487, effective July 29, 1994; amended in R94-17 at 18 III. Reg. 17601, effective Nov. 23, 1994; amended in R95-6 at 19 III. Reg. 9951, effective June 27, 1995; amended in R95-20 at 20 III. Reg. 11244, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 636, effective December 16, 1997; amended in R98-12 at 22 III. Reg. 7638, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17972, effective Sept. 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2186, effective January 19, 1999; amended in R99-15 at 23 III. Reg. 9437, effective July 26, 1999; amended in R00-5 at 24 III. Reg. 1146, effective January 6, 2000; amended in R00-13 at 24 III. Reg. 9833, effective June 20, 2000; expedited correction at 25 Ill. Reg. 5115, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 III. Reg. 6635, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3725, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6009, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6365, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3196, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 893, effective December 20, 2006; amended in R07-5/R07-14 at 32 III. Reg. ______, effective _

SUBPART B: GENERAL FACILITY STANDARDS

Section 724.115 General Inspection Requirements

a) The owner or operator must conduct inspections often enough to identify

problems in time to correct them before they harm human health or the environment. The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, and discharges that may be causing or may lead to either of the following:

- 1) Release of hazardous waste constituents to the environment; or
- 2) A threat to human health.
- b) Inspection schedule.
 - The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
 - 2) The owner or operator must keep this schedule at the facility.
 - The schedule must identify the types of problems (e.g., malfunctions or deterioration) that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
 - The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use, except for the owner or operator of a Performance Track member facility, which must inspect at least once each month after approval by the Agency, as described in subsection (b)(5) of this Section. At a minimum, the inspection schedule must include the items and frequencies called for in Sections 724.274, 724.293, 724.295, 724.326, 724.354, 724.378, 724.403, 724.447, 724.702, 724.933, 724.952, 724.953, 724.958, and 724.983 through 724.990, where applicable.

BOARD NOTE: 35 Ill. Adm. Code 703 requires the inspection schedule to be submitted with Part B of the permit application. The Agency must evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the Agency may modify or amend the schedule as may be necessary.

5) The owner or operator of a Performance Track member facility that chooses to reduce its inspection frequency must fulfill the following

requirements:

- A) It must submit a request for a Class I permit modification with prior approval to the Agency. The modification request must identify its facility as a member of the National Environmental Performance Track Program, and it must identify the management units for reduced inspections and the proposed frequency of inspections. The modification request must also specify, in writing, that the reduced inspection frequency will apply for as long as its facility is a Performance Track member facility, and that within seven calendar days of ceasing to be a Performance Track member, the owner or operator will revert to the non-Performance Track inspection frequency, as provided in subsection (b)(4) of this Section. Inspections pursuant to this subsection (b)(5) must be conducted at least once each month.
- B) Within 60 days, the Agency must notify the owner or operator of the Performance Track member facility, in writing, if the request submitted pursuant to subsection (b)(5)(A) of this Section is approved, denied, or if an extension to the 60-day deadline is needed. This notice must be placed in the facility's operating record. The owner or operator of the Performance Track member facility should consider the application approved if the Agency does not either deny the application or notify the owner or operator of the Performance Track member facility of an extension to the 60-day deadline. In these situations, the owner or operator of the Performance Track member facility must adhere to the revised inspection schedule outlined in its request for a Class 1 permit modification and keep a copy of the application in the facility's operating record.
- C) Any owner or operator of a Performance Track member facility that discontinues its membership or which USEPA terminates from the program must immediately notify the Agency of its change in status. The facility owner or operator must place in its operating record a dated copy of this notification and revert back to the non-Performance Track inspection frequencies within seven calendar days.
- c) The owner or operator must remedy any deterioration or malfunction of equipment or structures that the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
- d) The owner or operator must record inspections in an inspection log or summary.

The owner or operator must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date, and nature of any repairs or other remedial actions.

(Source: Amended a	t 32 III. Reg	_, effective _)
Section 724.116	Personnel Training		

- a) The personnel training program.
 - Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Part. The owner or operator must ensure that this program includes all the elements described in the document required under subsection (d)(3) of this Section.

BOARD NOTE: 35 Ill. Adm. Code 703 requires that owners and operators submit with Part B of the RCRA permit application, an outline of the training program used (or to be used) at the facility and a brief description of how the training program is designed to meet actual jobs tasks.

- This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- 3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:
 - A) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
 - B) Key parameters for automatic waste feed cut-off systems;
 - C) Communications or alarm systems;
 - D) Response to fires or explosions;
 - E) Response to groundwater contamination incidents; and

- F) Shutdown of operations.
- 4) For facility employees that have receive emergency response training pursuant to the federal Occupational Safety and Health Administration (OSHA) regulations at 29 CFR 1910.120(p)(8) and (q), the facility is not required to provide separate emergency response training pursuant to this Section, provided that the overall facility OSHA emergency response training meets all the requirements of this Section.
- b) Facility personnel must successfully complete the program required in subsection (a) of this Section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of subsection (a) of this Section.
- c) Facility personnel must take part in an annual review of the initial training required in subsection (a) of this Section.
- d) The owner or operator must maintain the following documents and records at the facility:
 - 1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
 - A written job description for each position listed under subsection (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education or other qualifications, and duties of employees assigned to each position;
 - A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subsection (d)(1) of this Section;
 - 4) Records that document that the training or job experience required under subsections (a), (b), and (c) of this Section has been given to, and completed by, facility personnel.
- e) Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 724.118 Location Standards

- a) Seismic considerations.
 - 1) Portions of new facilities where treatment, storage or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault that has had displacement in Holocene time.
 - 2) As used in subsection (a)(1) of this Section:
 - A) "Fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side.
 - B) "Displacement" means the relative movement of any two sides of a fault measured in any direction.
 - C) "Holocene" means the most recent epoch of the Quarternary

 Quaternary period, extending from the end of the Pleistocene to the present.

BOARD NOTE: Procedures for demonstrating compliance with this standard in Part B of the permit application are specified in 35 Ill. Adm. Code 703.182. Facilities that are located in political jurisdictions other than those listed in appendix VI to 40 CFR 264 (Political Jurisdictions in Which Compliance with § 264.18(a) Must Be Demonstrated), incorporated by reference in 35 Ill. Adm. Code 720.111(b), are assumed to be in compliance with this requirement.

b) Floodplains.

- A facility located in a 100 year floodplain must be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate the following to the Agency's satisfaction:
 - A) That procedures are in effect that will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters; or
 - B) For existing surface impoundments, waste piles, land treatment units, landfills and miscellaneous units, that no adverse effect on human health or the environment will result if washout occurs, considering the following:
 - i) The volume and physical and chemical characteristics of the waste in the facility;

- ii) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;
- iii) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and
- iv) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout;
- 2) As used in subsection (b)(1) of this Section:
 - A) "100-year floodplain" means any land area that is subject to a one percent or greater chance of flooding in any given year from any source.
 - B) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.
 - C) "100-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

BOARD NOTE: Requirements pertaining to other federal laws that affect the location and permitting of facilities are found in 40 CFR 270.3. For details relative to these laws, see EPA's manual for SEA (special environmental area) requirements for hazardous waste facility permits. Though EPA is responsible for complying with these requirements, applicants are advised to consider them in planning the location of a facility to help prevent subsequent project delays. Facilities may be required to obtain from the Illinois Department of Transportation on a permit or certification that a facility is flood-proofed.

c)	Salt dome formations, salt bed formations, underground mines and caves. The
	placement of any non-containerized or bulk liquid hazardous waste in any salt
	dome formation, salt bed formation, underground cave or mine is prohibited.

(Source: Amended at 32 Ill. Reg	, effective	
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SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 724.152 Content of Contingency Plan

a) The contingency plan must describe the actions facility personnel must take to comply with Sections 724.151 and 724.156 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous

waste constituents to air, soil, or surface water at the facility.

b) If the owner or operator has already prepared a Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with federal 40 CFR 112 or 300, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part. The owner or operator may develop one contingency plan that meets all regulatory requirements.

USEPA has recommended that the plan be based on the National Response Team's Integrated Contingency Plan Guidance (One Plan). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

BOARD NOTE: The federal One Plan guidance appeared in the Federal Register at 61 Fed. Reg. 28642 (June 5, 1996), and was corrected at 61 Fed. Reg. 31103 (June 19, 1996). USEPA, Office of Solid Waste and Emergency Response, Chemical Emergency Preparedness and Prevention Office, has made these documents available on-line for examination and download at yosemite.epa.gov/oswer/Ceppoweb.nsf/content/serc-lepc-publications.htm.

- c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services pursuant to Section 724.137.
- d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see Section 724.155), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the Agency at the time of certification, rather than at the time of permit application.
- e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.
- f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(Source:	Amended at 32 Ill. Reg.	, effective	

Section 724.156 Emergency Procedures

- a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) must immediately do the following:
 - 1) He or she must activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - 2) He or she must notify appropriate State or local agencies with designated response roles if their help is needed.
- b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).
- d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, the emergency coordinator must report the findings as follows:
 - 1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and
 - 2) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan pursuant to federal 40 CFR 300) or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following:
 - A) The name and telephone number of the reporter;
 - B) The name and address of the facility;
 - C) The time and type of incident (e.g., release, fire);

- D) The name and quantity of materials involved, to the extent known;
- E) The extent of injuries, if any; and
- F) The possible hazards to human health or the environment outside the facility.
- e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.
- f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
 - BOARD NOTE: Unless the owner or operator can demonstrate, in accordance with 35 Ill. Adm. Code 721.103(d) or (e), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 724.
- h) The emergency coordinator must ensure that the following is true in the affected areas of the facility:
 - 1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
 - 2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- i) The owner or operator must notify the Agency and appropriate state and local authorities that the facility is in compliance with subsection (h) of this Section before operations are resumed in the affected areas of the facility.
- <u>ji</u>) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator must submit a written report on the incident to the Agency. The report must include the following:

- 1) The name, address, and telephone number of the owner or operator;
- 2) The name, address, and telephone number of the facility;
- 3) The date, time, and type of incident (e.g., fire, explosion);
- 4) The name and quantity of materials involved;
- 5) The extent of injuries, if any;
- 6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- 7) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source:	Amended at 32 Ill. Reg.	. effective	

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 724.171 Use of Manifest System

- a) Receipt of manifested hazardous waste.
 - 1) The following requirements apply until Sept. 5, 2006: If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or the owner or operator's agent, must do the following:
 - A) It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
 - B) It must note any significant discrepancies in the manifest (as defined in Section 724.172(a)) on each copy of the manifest;

BOARD NOTE: The Board does not intend that the owner or operator of a facility whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the manifest and giving it to the transporter. Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

- C) It must immediately give the transporter at least one copy of the signed manifest;
- D) It must send a copy of the manifest to the generator and to the

Agency within 30 days after delivery; and

- E) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.
- 2) The following requirements apply effective Sept. 5, 2006:
- A1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator, or its agent must sign and date the manifest, as indicated in subsection (a)(2)(B) of this Section to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- <u>B2</u>) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:
 - iA) It must sign and date, by hand, each copy of the manifest;
 - iiB) It must note any discrepancies (as defined in Section 724.172(b)) on each copy of the manifest;
 - iiiC) It must immediately give the transporter at least one copy of the manifest;
 - ivD) It must send a copy of the manifest to the generator within 30 days after delivery; and
 - $\star E$) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.
- C3) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within 30 days after delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

BOARD NOTE: Subsection (a)(1) of this Section corresponds with 40 CFR 264.71(a) (2004), effective until Sept. 5, 2006. Subsection (a)(2) of this Section corresponds with 40 CFR 264.71(a) (2005), effective Sept. 5, 2006.

b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers,

generator's certification, and signatures), the owner or operator, or the owner or operator's agent, must do the following:

- 1) It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;
- 2) It must note any significant discrepancies (as defined in Section 724.172(a)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;
 - BOARD NOTE: The Board does not intend that the owner or operator of a facility whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.
- 3) It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);
- 4) It must forward copies of the manifest as follows:
 - A) Until Sept. 5, 2006: The owner or operator must send a copy of the signed and dated manifest to the generator and to the Agency within 30 days after the delivery; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or the owner or operator's agent, must send a copy of the shipping paper signed and dated to the generator; or
- <u>B4</u>) <u>Effective Sept. 5, 2006:</u> The owner or operator must send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within 30 days after delivery) to the generator within 30 days after the delivery; and
 - BOARD NOTE: Section 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment). Subsection (b)(4)(A) is derived from 40 CFR 264.74(b)(4) (2004), effective until Sept. 5, 2006. Subsection (b)(4)(B) is derived from 40 CFR 264.74(b)(4) (2005), effective Sept. 5, 2006.
- 5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.
- c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or

operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Section 722.134 only apply to owners or operators that are shipping hazardous waste that they generated at that facility.

d) Within three working days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier; to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460; to the Bureau of Land, Division of Land Pollution Control, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(Source: Amended a	t 32 III. Reg, effective)
Section 724.172	Manifest Discrepancies
a) The fo	ollowing requirements apply until Sept. 5, 2005:
1)	Definition of a "manifest discrepancy."
	A) A manifest discrepancy is a difference between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives;
	B) A significant discrepancy in quantity is as follows:
	i) For bulk waste, variations greater than 10 percent in weight; and

C) Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

discrepancy of one drum in a truckload;

For batch waste, any variation in piece count, such as a

- 2) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- b) The following requirements apply effective Sept. 5, 2005:
- 4<u>a</u>) "Manifest discrepancies" are defined as any one of the following:
 - A1) Significant differences (as defined by subsection (b)(2) of this Section) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
 - B2) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or
 - Container residues, which are residues that exceed the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b).
- 2b) "Significant differences in quantity" are defined as the appropriate of the following: for bulk waste, variations greater than 10 percent in weight; or, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. "Significant differences in type" are defined as obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or as toxic constituents not reported on the manifest or shipping paper.
- <u>3c</u>) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (*e.g.*, with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- 4d) Rejection of hazardous waste.
 - A1) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the

- facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within 60 days after the rejection or the container residue identification.
- While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under subsection (b)(5)(e) or (b)(6)(f) of this Section.
- <u>5e</u>) Except as provided in subsection (b)(5)(G) (e)(7) of this Section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the <u>following</u>-instructions <u>set forth in subsections (e)(1)</u> through (e)(6) of this Section:
 - A1) Write the generator's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.
 - B2) Write the name of the alternate designated facility and the facility's USEPA identification number in the designated facility block (Item 8) of the new manifest.
 - Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
 - D4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).
 - E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
 - F6) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
 - G7) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the

alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections $\frac{(b)(5)(A)}{(e)(1)}$ through $\frac{(b)(5)(F)}{(e)(6)}$ of this Section.

- Except as provided in subsection (b)(6)(G) (f)(7) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions set forth in subsections (f)(1) through (f)(6) of this Section:
 - A1) Write the facility's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
 - <u>B2</u>) Write the name of the initial generator and the generator's USEPA identification number in the designated facility block (Item 8) of the new manifest.
 - Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
 - D4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).
 - E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
 - F6) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
 - G7) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility must retain a copy for its records and then give the remaining copies of the

manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections $\frac{b}{6}(6)(A) \cdot \frac{f}{1}(1)$ through $\frac{b}{6}(F) \cdot \frac{f}{1}(6)$ of this Section.

If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

$B \cap A E$	D NOTE.	Subsection	(a) ic dariv	ad from 10	CEP 264 72	(2004) offer	tive until Sept. 5,
DOM	D NOIL.	Buoscenon	(a) is activ	cu nom To	CI K 207.72	(2007), crice	tive until bept. 5,
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2000.	Subscellor	1 (<i>b)</i> 13 u ci 1 v	cu nom t o	CI K 207.	2 (2003), cm	icciive Bept	, 2000.

Source: Amended at 32 III. Reg		, effective)	
Section 724 173	Operating Record			

- a) The owner or operator must 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 for three years unless otherwise provided as follows:
 - 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 of this Part. This information must be maintained in the operating record until closure of the facility:
 - 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 that shows 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. This information must be maintained in the operating record until closure of the facility;

BOARD NOTE: See Section 724.219 for related requirements.

Records and results of waste analyses and waste determinations performed as specified in Sections 724.113, 724.117, 724.414, 724.441, 724.934,

- 724.963, and 724.983 and in 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 724.156(j);
- Records and results of inspections, as required by Section 724.115(d) (except these data need to be kept only three years);
- Monitoring, testing, or analytical data and corrective action data where required by Subpart F of this Part or Sections 724.119, 724.291, 724.293, 724.295, 724.322, 724.323, 724.326, 724.352 through 724.354, 724.376, 724.378, 724.380, 724.402 through 724.404, 724.409, 724.447, 724.702, 724.934(c) through (f), 724.935, 724.963(d) through (i), 724.964, and 724.982 through 724.990. Maintain in the operating record for three years, except for records and results pertaining to ground-water monitoring and cleanup, which must be maintained in the operating record until closure of the facility;
- 7) For off-site facilities, notices to generators as specified in Section 724.112(b);
- All closure cost estimates under Section 724.242 and, for disposal facilities, all post-closure care cost estimates under Section 724.244. This information must be maintained in the operating record until closure of the facility;
- 9) A certification by the permittee, no less often than annually: that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that the permittee generates, to the degree the permittee determines to be economically practicable, and that the proposed method of treatment, storage, or disposal is that practicable method currently available to the permittee that minimizes the present and future threat to human health and the environment;
- 10) 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). This information must be maintained in the operating record until closure of the facility;
- 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;

- 12) 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;
- 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;
- 14) 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, required under 35 Ill. Adm. Code 728.108, whichever is applicable;
- 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;
- 16) 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; and
- 17) Any records required under Section 724.101(j)(13).;
- Monitoring, testing, or analytical data where required by Section 724.447 must be maintained in the operating record for five years; and
- 19) Certifications, as required by Section 724.296(f), must be maintained in the operating record until closure of the facility.

Source:	Amended at 32 Ill. Reg.	, effective)
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Section 724.175 Annual <u>Facility Activities</u> Report

The owner or operator must prepare and submit a single copy of an annual <u>facility activities</u> report to the Agency by March 1 of each year. The report form supplied by the Agency must be used for this report. The annual <u>facility activities</u> report must cover facility activities during the previous calendar year and must include the following information:

- a) The USEPA identification number, name, and address of the facility;
- b) The calendar year covered by the report;

- c) For off-site facilities, the USEPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;
- d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by USEPA identification number of each generator;
- e) The method of treatment, storage, or disposal for each hazardous waste;
- f) This subsection (f) corresponds with 40 CFR 264.75(f), which USEPA has designated as "reserved." This statement maintains structural consistency with the USEPA rules;
- g) The most recent closure cost estimate under Section 724.242, and, for disposal facilities, the most recent post-closure cost estimate under Section 724.244;
- h) For generators that treat, store or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated;
- i) For generators that treat, store or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years, to the extent such information is available for years prior to 1984; and
- j) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative.

BOARD NOTE: Corresponding 40 CFR 264.75 requires biennial reporting. The Board has required annual reporting, since Section 20.1 of the Act [415 ILCS 5/20.1 (2006)] requires the Agency to assemble annual reports, and only annual facility activity reports will enable the Agency to fulfill this mandate.

(Source: Amended a	t 32 Ill. Reg, effective)
Section 724.176	Unmanifested Waste Report

a) The following requirements apply until Sept. 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper as described in 35 III. Adm. Code 723.120(e)(2), and if the waste is not excluded from the manifest requirement by 35 III. Adm. Code 721.105, then the owner or operator must prepare and submit a single copy of a report to the Agency within

- 15 days after receiving the waste. The unmanifested waste report must be submitted on EPA form 8700-13B. Such report must be designated "Unmanifested Waste Report" and include the following information:
- 1) The USEPA identification number, name, and address of the facility;
- 2) The date the facility received the waste;
- 3) The USEPA identification number, name, and address of the generator and the transporter, if available;
- 4) A description and the quantity of each unmanifested hazardous waste and facility received;
- 5) The method of treatment, storage, or disposal for each hazardous waste;
- 6) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative; and
- 7) A brief explanation of why the waste was unmanifested, if known.
- ba) The following requirements apply effective Sept. 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, as described by 35 Ill. Adm. Code 723.120(e), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 260 through 265, then the owner or operator must prepare and submit a letter to the Agency within 15 days after receiving the waste. The unmanifested waste report must contain the following information:
 - 1) The USEPA identification number, name, and address of the facility;
 - 2) The date the facility received the waste;
 - The USEPA identification number, name, and address of the generator and the transporter, if available;
 - 4) A description and the quantity of each unmanifested hazardous waste the facility received;
 - 5) The method of treatment, storage, or disposal for each hazardous waste;
 - 6) The certification signed by the owner or operator of the facility or its authorized representative; and
 - 7) A brief explanation of why the waste was unmanifested, if known.

b) This subsection (b) corresponds with 40 CFR 264.76(b), which USEPA has marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

BOARD NOTE: Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility receives unmanifested hazardous wastes, USEPA has suggested that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Board USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement. Subsection (a) is derived from 40 CFR 264.76 (2004), effective until Sept. 5, 2006. Subsection (b) is derived from 40 CFR 264.76 (2005), effective Sept. 5, 2006.

(Source:	Amended at 32 Ill. Reg.	, effective	

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

Section 724.197 General Groundwater Monitoring Requirements

The owner or operator must comply with the following requirements for any groundwater monitoring program developed to satisfy Section 724.198, 724.199, or 724.200.

- a) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that fulfill the following requirements:
 - They represent the quality of background water groundwater that has not been affected by leakage from a regulated unit. A determination of background groundwater quality may include sampling of wells that are not hydraulically upgradient from the waste management area where the following is true:
 - A) Hydrogeologic conditions do not allow the owner or operator to determine what wells are upgradient; or
 - B) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells;
 - 2) They represent the quality of groundwater passing the point of compliance; and
 - They allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the hazardous waste management area to the uppermost aquifer.

- b) If a facility contains more than one regulated unit, separate groundwater monitoring systems are not required for each regulated unit provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the groundwater in the uppermost aquifer.
- c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.
- d) The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area. At a minimum the program must include procedures and techniques for the following:
 - 1) Sample collection;
 - 2) Sample preservation and shipment;
 - 3) Analytical procedures; and
 - 4) Chain of custody control.
- e) The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples.
- f) The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater is sampled.
- g) In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance points. The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to groundwater from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit that must be specified in the unit permit upon approval by the Agency. This sampling procedure must fulfill the following requirements:

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- 1) It may be a sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or
- 2) It may be an alternate sampling procedure proposed by the owner or operator and approved by the Agency.
- h) The owner or operator must specify one of the following statistical methods to be used in evaluating groundwater monitoring data for each hazardous constituent that, upon approval by the Agency, will be specified in the unit permit. The statistical test chosen must be conducted separately for each hazardous constituent in each well. Where practical quantification limits (pqls) are used in any of the following statistical procedures to comply with subsection (i)(5) of this Section, the pql must be proposed by the owner or operator and approved by the Agency. Use of any of the following statistical methods must adequately protect human health and the environment and must comply with the performance standards outlined in subsection (i) of this Section.
 - 1) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.
 - An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.
 - 3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.
 - 4) A control chart approach that gives control limits for each constituent.
 - 5) Another statistical test method submitted by the owner or operator and approved by the Agency.
- i) Any statistical method chosen pursuant to subsection (h) of this Section for specification in the unit permit must comply with the following performance standards, as appropriate:

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- The statistical method used to evaluate groundwater monitoring data must be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.
- If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experimentwise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.
- If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter value must be proposed by the owner or operator and approved by the Agency if the Agency finds it to adequately protect human health and the environment.
- 4) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the Agency if the Agency finds these parameters to adequately protect human health and the environment. These parameters will be determined after considering the number of samples in the background database, the data distribution, and the range of the concentration values for each constituent of concern.
- The statistical method must account for data below the limit of detection with one or more statistical procedures that adequately protect human health and the environment. Any practical quantification limit (pql) approved by the Agency pursuant to subsection (h) of this Section that is used in the statistical method must be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.
- 6) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability, as well as temporal correlation in the data.

j) Groundwater monitoring data collected in accordance with subsection (g) of this Section, including actual levels of constituents, must be maintained in the facility operating record. The Agency must specify in the permit when the data must be submitted for review.

(Source: Amended at	32 Ill. Reg	, effective)
Section 724.198	Detection Monitoria	ng Program	

An owner or operator required to establish a detection monitoring program under this Subpart F must, at a minimum, discharge the following responsibilities:

- a) The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. The Agency must specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:
 - 1) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;
 - 2) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;
 - 3) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and
 - 4) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.
- b) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 724.195. The groundwater monitoring system must comply with Sections 724.197(a)(2), 724.197(b), and 724.197(c).
- c) The owner or operator must conduct a groundwater monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to subsection (a) of this Section in accordance with Section 724.197(g). The owner or operator must maintain a record of groundwater analytical data, as measured and in a form necessary for the determination of statistical significance under Section 724.197(h).
- d) The Agency must specify the frequencies for collecting samples and conducting

statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit conditions under subsection (a) of this Section in accordance with Section 724.197(g).—A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during detection monitoring.

- e) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the permit pursuant to subsection (a) of this Section at a frequency specified under subsection (d) of this Section.
 - 1) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the methods specified in the permit under Section 724.197(h). These methods must compare data collected at the compliance points to the background groundwater quality data.
 - 2) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well at the compliance point within a reasonable period of time after completion of sampling. The Agency must specify in the facility permit what period of time is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.
- g) If the owner or operator determines pursuant to subsection (f) of this Section that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to subsection (a) of this Section at any monitoring well at the compliance point, the owner or operator must do the following:
 - 1) Notify the Agency of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.
 - 2) Immediately sample the groundwater in all monitoring wells and determine whether constituents in the list of Appendix I of this Part are present, and if so, in what concentration. However, the Agency must allow sampling for a site-specific subset of constituents from the Appendix I list of this Part and for other representative or related waste constituents if it determines that sampling for that site-specific subset of contaminants and other constituents is more economical and equally

- <u>effective for determining whether groundwater contamination has</u> occurred.
- For any compounds in Appendix I of this Part found in the analysis pursuant to subsection (g)(2) of this Section, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Agency and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to set forth in subsection (g)(2) of this Section, the hazardous constituents found during this initial Appendix I analysis will form the basis for compliance monitoring.
- 4) Within 90 days, submit to the Agency an application for a permit modification to establish a compliance monitoring program meeting the requirements of Section 724.199. The application must include the following information:
 - A) An identification of the concentration of any constituent in Appendix I of this Part detected in the groundwater at each monitoring well at the compliance point;
 - B) Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of Section 724.199;
 - C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of Section 724.199;
 - D) For each hazardous constituent detected at the compliance point, a proposed concentration limit under Section 724.194(a)(1) or (a)(2), or a notice of intent to seek an alternate concentration limit under Section 724.194(b).
- 5) Within 180 days, submit the following to the Agency:
 - A) All data necessary to justify an alternate concentration limit sought under Section 724.194(b); and
 - B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of Section 724.200, unless the following is true:
 - i) All hazardous constituents identified under subsection

- (g)(2) of this Section are listed in Table 1 of Section 724.194 and their concentrations do not exceed the respective values given in that table; or
- ii) The owner or operator has sought an alternate concentration limit under Section 724.194(b) for every hazardous constituent identified under subsection (g)(2) of this Section.
- 6) If the owner or operator determines, pursuant to subsection (f) of this Section, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to subsection (a) of this Section at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis or statistical evaluation, or natural variation in the groundwater. The owner or operator may make a demonstration under this subsection (g) in addition to, or in lieu of, submitting a permit modification application under subsection (g)(4) of this Section; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in subsection (g)(4) of this Section unless the demonstration made under this subsection (g) successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection (g), the owner or operator must do the following:
 - A) Notify the Agency in writing, within seven days of determining statistically significant evidence of contamination at the compliance point, that the owner or operator intends to make a demonstration under this subsection (g);
 - B) Within 90 days, submit a report to the Agency that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;
 - C) Within 90 days, submit to the Agency an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and
 - D) Continue to monitor in accordance with the detection monitoring program established under this Section.
- h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this Section, the owner or operator must,

within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(Source: Amended a	at 32 Ill.Reg	, effectiv	e)
Section 724.199	Compliance M	Ionitoring Progra	am	

An owner or operator required to establish a compliance monitoring program under this Subpart F must, at a minimum, discharge the following responsibilities:

- a) The owner or operator must monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard under Section 724.192. The Agency must specify the groundwater protection standard in the facility permit, including the following:
 - 1) A list of the hazardous constituents identified under Section 724.193;
 - 2) Concentration limits under Section 724.194 for each of those hazardous constituents;
 - 3) The compliance point under Section 724.195; and
 - 4) The compliance period under Section 724.196.
- b) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 724.195. The groundwater monitoring system must comply with Section 724.197(a)(2), 724.197(b), and 724.197(c).
- c) The Agency must specify the sampling procedures and statistical methods appropriate for the constituents and facility, consistent with Section 724.197(g) and (h).
 - 1) The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with Section 724.297(g).
 - 2) The owner or operator must record groundwater analytical data as measured and in a form necessary for the determination of statistical significance under Section 724.197(h) for the compliance period of the facility.
- d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to subsection (a) of this Section, at a frequency specified under subsection (f) of this Section.

- In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the methods specified in the permit under Section 724.197(h). The methods must compare data collected at the compliance points to a concentration limit developed in accordance with Section 724.194.
- 2) The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of the sampling. The Agency must specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.
- e) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- f) The Agency must specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with Section 724.197(g). A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during the compliance period for the facility.
- The owner or operator must annually analyze samples from all monitoring wells g) at the compliance point for all constituents contained in Appendix I of this Part at least annually to-determine whether additional hazardous constituents from Appendix I of this Part, which could possibly be present but are not on the <u>detection monitoring list in the permit</u>, are <u>actually</u> present in the uppermost aguifer and, if so, at what concentration, pursuant to procedures in Section 724.198(f). If the owner or operator finds constituents of Appendix I of this Part in the groundwater that are not already identified as monitoring constituents, the owner or operator may resample within one month and repeat the Appendix I analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the Agency within seven days after the completion of the second analysis, and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator must report the concentrations of these additional constituents to the Agency within seven days after completion of the initial analysis, and add them to the monitoring list. To accomplish this, the owner or operator must consult with the Agency to determine the following on a case-bycase basis: which sample collection event during the year will involve enhanced sampling; the number of monitoring wells at the compliance point to undergo enhanced sampling; the number of samples to be collected from each of these monitoring wells; and, the specific constituents from Appendix I of this Part for which these samples must be analyzed. If the enhanced sampling event indicates

that Appendix I constituents are present in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Agency, and repeat the analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the Agency within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then it must report the concentrations of these additional constituents to the Agency within seven days after completion of the initial analysis, and add them to the monitoring list.

- h) If the owner or operator determines, pursuant to subsection (d) of this Section that any concentration limits under Section 724.194 are being exceeded at any monitoring well at the point of compliance, the owner or operator must do the following:
 - 1) Notify the Agency of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded.
 - Submit to the Agency an application for a permit modification to establish a corrective action program meeting the requirements of Section 724.200 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the Agency under Section-724.198(h)(5)

 724.198(g)(5). The application must at a minimum include the following information:
 - A) A detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under subsection (a) of this Section; and
 - B) A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this Section.
- i) If the owner or operator determines, pursuant to subsection (d) of this Section, that the groundwater concentration limits under this Section are being exceeded at any monitoring well at the point of compliance, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in groundwater. In making a demonstration under this subsection (i), the owner or operator must do the following:
 - 1) Notify the Agency in writing within seven days that it intends to make a

demonstration under this subsection (i);

- 2) Within 90 days, submit a report to the Agency that demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis, or evaluation;
- Within 90 days, submit to the Agency an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and
- 4) Continue to monitor in accord with the compliance monitoring program established under this Section.
- j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this Section, the owner or operator must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 724.200 Corrective Action Program

An owner or operator required to establish a corrective action program pursuant to this Subpart F must, at a minimum, discharge the following responsibilities:

- a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard pursuant to Section 724.192. The Agency must specify the groundwater protection standard in the facility permit, including the following:
 - 1) A list of the hazardous constituents identified pursuant to Section 724.193;
 - 2) Concentration limits pursuant to Section 724.194 for each of those hazardous constituents;
 - 3) The compliance point pursuant to Section 724.195; and
 - 4) The compliance period pursuant to Section 724.196.
- b) The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that must be taken.
- c) The owner or operator must begin corrective action within a reasonable time

period after the groundwater protection standard is exceeded. The Agency must specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action must begin and such a requirement will operate in lieu of Section 724.199(i)(2).

- d) In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program pursuant to Section 724.199 and must be as effective as that program in determining compliance with the groundwater protection standard pursuant to Section 724.192 and in determining the success of a corrective action program pursuant to subsection (e) of this Section where appropriate.
- e) In addition to the other requirements of this Section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents pursuant to Section 724.193 that exceed concentration limits pursuant to Section 724.194 in groundwater, as follows:
 - 1) At the following locations:
 - A) Between the compliance point pursuant to Section 724.195 and the downgradient facility property boundary; and
 - B) Beyond the facility boundary, where necessary to adequately protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner and operator are not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis.
 - 2) The permit will specify the following measures to be taken:
 - A) Corrective action measures pursuant to this subsection (e) must be initiated and completed within a reasonable period of time considering the extent of contamination.
 - B) Corrective action measures pursuant to this subsection (e) may be terminated once the concentration of hazardous constituents pursuant to Section 724.193 is reduced to levels below their respective concentration limits pursuant to Section 724.194.

- f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, the owner or operator must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if the owner or operator can demonstrate, based on data from the groundwater monitoring program pursuant to subsection (d) of this Section, that the groundwater protection standard of Section 724.192 has not been exceeded for a period of three consecutive years.
- g) The owner or operator must report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator must submit these reports-semi-annually annually.
- h) If the owner or operator determines that the corrective action program no longer satisfies this Section, the owner or operator must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART G: CLOSURE AND POST-CLOSURE CARE

Section 724.213 Closure; Time Allowed for Closure

- a) All permits must require that, within 90 days after receiving the final volume of hazardous waste, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e) of this Section, at a hazardous waste management unit or facility, the owner or operator treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency must approve a longer period if the owner or operator demonstrates that the following is true:
 - 1) Either of the following:
 - A) The activities required to comply with this subsection (a) will, of necessity, take longer than 90 days to complete; or
 - B) All of the following is true:
 - 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) of this Section;

- 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 has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.
- b) All permits must require that the owner or operator 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 applicable requirements in subsections (d) and (e) of this Section, at the hazardous waste management unit or facility, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency must approve a longer closure period if the owner or operator demonstrates as follows:
 - 1) Either of the following:
 - A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
 - B) All of the following:
 - 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) of this Section;
 - ii) There is reasonable likelihood that the owner or operator 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 permit requirements.
- c) The demonstration referred to in subsections (a)(1) and (b)(1) of this Section must be made as follows:
 - 1) The demonstration in subsection (a)(1) of this Section must be made at least 30 days prior to the expiration of the 90-day period in subsection (a) of this Section; and
 - 2) The demonstration in subsection (b)(1) of this Section must be made at least 30 days prior to the expiration of the 180-day period in subsection (b) of this Section, unless the owner or operator is otherwise subject to deadlines in subsection (d) of this Section.
- d) Continued receipt of non-hazardous waste. The Agency must permit an owner or operator to receive only non-hazardous wastes in a landfill, land treatment unit, or surface impoundment unit after the final receipt of hazardous wastes at that unit if the following is true:
 - 1) The owner or operator requests a permit modification in compliance with all applicable requirements in 35 Ill. Adm. Code 702, 703, and 705, and in the permit modification request demonstrates the following:
 - A) That the unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes;
 - B) That there is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes;
 - C) That 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 pursuant to this Part;
 - D) That closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and
 - E) That the owner or operator is operating and will continue to operate in compliance with all applicable permit requirements;

- The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required pursuant to 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 pursuant to Section 724.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes;
- 3) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and
- The request to modify the permit and the demonstrations referred to in subsections (d)(1) and (d)(2) of this Section are submitted to the Agency no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit 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) of this Section, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in Section 724.321(c), (d), or (e) must receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection (e).
 - 1) The petition for adjusted standard must include the following:
 - A) A plan for removing hazardous wastes; and
 - B) A contingent corrective measures plan.
 - 2) The removal plan must provide for the following:
 - 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 the following:

- i) That the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete; and
- ii) That an extension will not pose a threat to human health and the environment.
- The following requirements apply to the contingent corrective measures plan:
 - A) It must meet the requirements of a corrective action plan pursuant to Section 724.199, based upon the assumption that a release has been detected from the unit
 - B) It may be a portion of a corrective action plan previously submitted pursuant to Section 724.199.
 - C) It 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) It 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) Definition of "release." A release is defined as a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit, or over the facility's groundwater protection standard at the or over the facility's groundwater protection standard at the point of compliance, if applicable, detected in accordance with the requirements in Subpart F of this Part.
- 5) In the event of a release, the owner or operator of the unit must do the following:
 - A) Within 35 days, the owner or operator must file with the Board a petition for adjusted standard. If the Board finds that it is necessary to do so in order to adequately protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to fulfill the conditions of subsections (e)(5)(A)(i) and (e)(5)(A)(ii) of this Section. 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) of this Section.

- i) Begin to implement that corrective measures plan in less than one year; or
- ii) Cease the receipt of wastes until the plan has been implemented.
- B) The owner or operator must implement the contingent corrective measures plan.
- C) The owner or operator may continue to receive wastes at the unit if authorized by the approved contingent measures plan.
- 6) <u>Semi-annual Annual report.</u> During the period of corrective action, the owner or operator must provide <u>semi-annual annual reports</u> to the Agency that do the following:
 - A) Describe They must describe the progress of the corrective action program;
 - B) Compile They must compile all groundwater monitoring data; and
 - C) Evaluate They must 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 must 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.
 - 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.
 - 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 or terminating an adjusted standard pursuant to this subsection (e).
 - A) Except as otherwise provided, the owner or operator must follow the procedures of Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104 to petition the Board for an adjusted standard.
 - B) Initial justification. The Board will grant an adjusted standard pursuant to subsection (e)(1) of this Section if the owner or operator demonstrates that the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (e)(3) of this Section.
 - C) The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1) of this Section:
 - i) A plan for removing hazardous wastes.
 - ii) A requirement that the owner or operator 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 must do as follows: 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 do as follows: 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 must 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 pursuant to subsection (e)(5)(A) of this Section, as provided in that subsection or in subsection (e)(7) of this Section.

- 9) The Agency must modify the RCRA permit to include the adjusted standard.
- 10) The owner or operator may file a permit modification application with a revised closure plan within 15 days after an adjusted standard is terminated.

(Source:	Amended at 32 Ill. Reg.	, effective)

Certification of Closure

Section 724.215

Within 60 days after completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, or landfill unit, and within 60 days after completion of final closure, the owner or operator must submit to the Agency, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer a qualified Professional Engineer. Documentation supporting the independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for closure under Section 724.243(i).

(Source: Amended a	t 32 Ill. Reg	, effective)
Section 724.216	Survey Plat		

No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator must submit to any local zoning authority or authority with jurisdiction over local land use and to the Agency and record with land titles, a survey plat indicating the location and dimensions of <a href="landfill-land surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, that states the owner's and operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable regulations of Subpart G of this Part.

(Source: Amended at 32 Ill. Reg	, effective	

Section 724.220 Certification of Completion of Post-Closure Care

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Agency, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional

engineer a qualified Professional Engineer. Documentation supporting the independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for post-closure care under Section 724.245(i).

(Source: Amended at 32 Ill. I	Reg	_, effective)
SUBI	PART H: FI	NANCIAL REQ	UIREMENTS	

Section 724.240 Applicability

- a) The requirements of Sections 724.242, 724.243, and 724.247 through 724.251 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this Section or in Section 724.101.
- b) The requirements of Sections 724.244 and 724.245 apply only to owners and operators of the following:
 - 1) Disposal facilities;
 - Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that Sections 724.244 and 724.245 are made applicable to such facilities in Sections 724.328 and 724.358;
 - Tank systems that are required pursuant to Section 724.297 to meet the requirements for landfills; or
 - 4) Containment buildings that are required pursuant to Section 724.1102 to meet the requirements for landfills.
- c) The State and the federal government are exempt from the requirements of this Subpart H.
- d) A permit or enforceable document can contain alternative requirements that replace all or part of the financial assurance requirements of this Subpart H applying to a regulated unit, as provided in 35 Ill. Adm. Code 703.161, where the Board or Agency has done the following:
 - 1) The Board or Agency has established alternative requirements for the regulated unit established pursuant to Section 724.190(f) or 724.210(d) 724.210(c); and
 - 2) The Board or Agency determines that it is not necessary to apply the financial assurance requirements of this Subpart H because the alternative financial assurance requirements will adequately protect human health and

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(Source: Amended at	t 32 Ill. Reg	, effective)
Section 724.243	Financial Assu	rance for Closure	

An owner or operator of each facility must establish financial assurance for closure of the facility. The owner or operator must choose from the options that are specified in subsections (a) through (f) of this Section.

- a) Closure trust fund.
 - 1) An owner or operator may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the requirements of this subsection (a) and submitting an original signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original signed duplicate of the trust agreement to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.
 - The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.
 - Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:
 - A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

Next payment =
$$\frac{(CE - CV)}{Y}$$

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
V = the graph or of years remaining in the graph.

Y = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund as specified in 35 Ill. Adm. Code 725.243(a) and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

Next payment =
$$\frac{(CE - CV)}{Y}$$

Where:

CE = the current closure cost estimate CV = the current value of the trust fund

Y = the number of years remaining in the pay-in period.

- 4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.
- one or more alternate mechanisms specified in this Section or in 35 Ill. Adm. Code 725.243, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.243, as applicable.

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- 6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate or obtain other financial assurance as specified in this Section to cover the difference.
- 7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance, as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.
- 10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- 11) The Agency must agree to termination of the trust when either of the

following occurs:

- A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i).
- b) Surety bond guaranteeing payment into a closure trust fund.
 - 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
 - B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (see 35 Ill. Adm. Code 724.251) to show current closure cost

estimates;

- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do one of the following:
 - A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;
 - B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin final closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or
 - C) Provide alternate financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- 6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section.
- Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence evidenced by the return

receipts.

- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this Section.
- c) Surety bond guaranteeing performance of closure.
 - 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
 - B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;

- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do the following:
 - A) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or
 - B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so, under the terms of the bond the surety will perform final closure, as guaranteed by the bond, or will deposit the amount of the penal sum into the standby trust fund.
- 6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.
- Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance as specified in this Section. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:

- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 10) The surety must not be liable for deficiencies in the performance of closure by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- d) Closure letter of credit.
 - An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.
 - 2) The wording of the letter of credit must be that specified in Section 724.251.
 - An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
 - B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations.
 - i) Payments into the trust fund, as specified in subsection (a) of this Section:

- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.
- The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.
- 6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section.
- Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Agency may draw on the letter of credit.
- 9) If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration

date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

- 10) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

e) Closure insurance.

- 1) An owner or operator may satisfy the requirements of this Section by obtaining closure insurance that conforms to the requirements of this subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more States.
- 2) The wording of the certificate of insurance must be that specified in Section 724.251.
- The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties, as the Agency specifies.

- 5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Agency must instruct the insurer to make reimbursement in such amounts, as the Agency specifies in writing, if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, it must withhold reimbursement of such amounts that it deems prudent, until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for closure of the facility. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator, as specified in subsection (e)(10) of this Section. Failure to pay the premium, without substitution of alternative financial assurance, as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in

the event that on or before the date of expiration one of the following occurs:

- A) The Agency deems the facility abandoned;
- B) The permit is terminated or revoked or a new permit is denied;
- C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;
- D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
- E) The premium due is paid.
- Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 10) The Agency must give written consent to the owner or operator that it may terminate the insurance policy when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- f) Financial test and corporate guarantee for closure.
 - An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test, as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:
 - A) The owner or operator must have the following:
 - i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total

- liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;
- ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and the current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- B) The owner or operator must have the following:
 - i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;
 - ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible net worth of at least \$10 million; and
 - iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure estimates and the current plugging and abandonment cost estimates.
- The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 704.240).
- To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251; and

- B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
- C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
 - i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
 - ii) In connection with that procedure, that no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.
- An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.
- After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.
- The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative

- financial assurance, as specified in this Section, within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance
- 9) The owner or operator is no longer required to submit the items specified in subsection (f)(3) of this Section when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 10) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(8) of this Section, must comply with the terms of the corporate guarantee, and the wording of the corporate guarantee must be that specified in Section 724.251. The certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator. the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:
 - A) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the

- guarantor will do so or establish a trust fund, as specified in subsection (a) of this Section, in the name of the owner or operator.
- B) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- C) If the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.
- g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for closure of the facility.
- h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

- Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that final approved closure has been accomplished in accordance with the closure plan, the Agency must notify the owner or operator in writing that it is no longer required by this Section to maintain financial assurance for closure of the facility, unless the Agency determines that closure has not been in accordance with the approved closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that closure has not been in accordance with the approved closure plan.
- j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):
 - 1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance;
 - 2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source:	Amended at 32 Ill. Reg.	, effective)
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Section 724.245 Financial Assurance for Post-Closure Care

An owner or operator of a hazardous waste management unit subject to the requirements of Section 724.244 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. The owner or operator must choose from among the following options:

- a) Post-closure trust fund.
 - 1) An owner or operator may satisfy the requirements of this Section by establishing a post-closure trust fund that conforms to the requirements of this subsection (a) and submitting an original, signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original, signed duplicate of the trust agreement to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.
 - 2) The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the

trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.

- Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:
 - A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

Next payment =
$$\frac{(CE - CV)}{Y}$$

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
Y = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund, as specified in 35 Ill. Adm. Code 725.245(a), and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

Next payment =
$$\frac{(CE - CV)}{Y}$$

Where:

CE = the current closure cost estimate
CV = the current value of the trust fund
V = the number of years remaining in the n

the number of years remaining in the pay-in period.

- 4) The owner or operator may accelerate payments into the trust fund or owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.
- If the owner or operator establishes a post-closure trust fund after having used one or more alternative mechanisms specified in this Section or in 35 Ill. Adm. Code 725.245, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.245, as applicable.
- After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance, as specified in this Section, to cover the difference.
- During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds, as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.
- During the period of post-closure care, the Agency must approve a release of funds if the owner or operator demonstrates to the Agency that the

value of the trust fund exceeds the remaining cost of post-closure care.

- An owner or operator or any other person authorized to perform postclosure care may request reimbursement for post-closure care
 expenditures by submitting itemized bills to the Agency. Within 60 days
 after receiving bills for post-closure activities, the Agency must instruct
 the trustee to make requirements in those amounts that the Agency
 specifies in writing if the Agency determines that the post-closure care
 expenditures are in accordance with the approved post-closure plan or
 otherwise justified. If the Agency does not instruct the trustee to make
 such reimbursements, the Agency must provide the owner or operator with
 a detailed written statement of reasons.
- 12) The Agency must agree to termination of the trust when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- b) Surety bond guaranteeing payment into a post-closure trust fund.
 - 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from

the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:

- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
 - iii) Annual valuations, as required by the trust agreement; and
 - iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do one of the following:
 - A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;
 - B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or
 - C) Provide alternative financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- 6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.
- 7) Whenever the current post-closure cost estimate increases to an amount

greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternative financial assurance, as specified in this Section.
- c) Surety bond guaranteeing performance of post-closure care.
 - An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:

- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
 - iii) Annual valuations, as required by the trust agreement; and
 - iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do either of the following:
 - A) Perform final post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or
 - B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.
- The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.
- Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-

closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section. Whenever the current closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.

- 8) During the period of post-closure care, the Agency must approve a decrease in the penal sum if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.
- 9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- 10) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- The surety will not be liable for deficiencies in the performance of postclosure care by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- d) Post-closure letter of credit.
 - An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.
 - 2) The wording of the letter of credit must be that specified in Section 724.251.

- An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
 - B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
 - iii) Annual valuations, as required by the trust agreement; and
 - iv) Notices of nonpayment, as required by the trust agreement.
- 4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.
- The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.
- 6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.

- Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) During the period of post-closure care, the Agency must approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.
- 9) Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, the Agency may draw on the letter of credit.
- If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.
- 11) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.

e) Post-closure insurance.

1) An owner or operator may satisfy the requirements of this Section by obtaining post-closure insurance that conforms to the requirements of this

subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more states.

- 2) The wording of the certificate of insurance must be that specified in Section 724.251.
- The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of facility whenever the post-closure period begins. The policy must also guarantee that, once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies.
- An owner or operator or any other person authorized to perform postclosure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator as specified in subsection (e)(11) of this Section. Failure to pay the premium, without substitution of alternative financial assurance as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act [415 ILCS 5]. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the

- premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in the event that on or before the date of expiration one of the following occurs:
 - A) The Agency deems the facility abandoned;
 - B) The permit is terminated or revoked or a new permit is denied;
 - C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;
 - D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
 - E) The premium due is paid.
- Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face

amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

- 11) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:
 - A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- f) Financial test and corporate guarantee for post-closure care.
 - An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:
 - A) The owner or operator must have the following:
 - i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;
 - ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible net worth of at least \$10 million; and
 - iv) Assets in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
 - B) The owner or operator must have the following:
 - i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa,

- Aa, A, or Baa as issued by Moody's;
- ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 III. Adm. Code 704.240).
- To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251;
 - B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
 - C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
 - i) The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
 - ii) In connection with that procedure, no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.

- 4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for disposal.
- After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements the owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.
- Based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, the Agency may require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance.
- 9) During the period of post-closure care, the Agency must approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Agency that the amount of the cost estimate exceeds the remaining cost of post-closure care.
- 10) The owner or operator is no longer required to submit the items specified

in subsection (f)(3) of this Section when either of the following occurs:

- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 11) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(9), and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be that specified in Section 724.251. A certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:
 - A) That if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section in the name of the owner or operator.
 - B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
 - C) That if the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of

a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.

- g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for post-closure care of the facility.
- h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Agency must notify the owner or operator that it is no longer required to maintain financial assurance for post-closure care of that unit, unless the Agency determines that post-closure care has not been in accordance with the approved post-closure plan. The Agency must provide the owner or operator with-a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan.
- j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code

702.184(e)(3)):

- 1) An increase in or a refusal to decrease the amount of a bond, letter of credit, or insurance;
- 2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended a	at 32 Ill. Reg, effective)
Section 724.247	Liability Requirements	

- a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in subsections (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), or (a)(6) of this Section:
 - 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (a).
 - A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement and of the certificate of insurance must be that specified in Section 724.251. The wording of the certificate of insurance must be that specified in Section 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.
 - B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Insurance.
 - 2) An owner or operator may meet the requirements of this Section by

- passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section
- 5) An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances pursuant to this subsection (a), the owner or operator must specify at least one such assurance as "primary" coverage and must specify other such assurance as "excess" coverage.
- 7) An owner or operator must notify the Agency within 30 days whenever any of the following occurs:
 - A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (a)(1) through (a)(6) of this Section;
 - B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section; or
 - C) A final court order establishing a judgement for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner

or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section.

- b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment, landfill, land treatment facility, or disposal miscellaneous unit that is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator meeting the requirements of this Section may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified in subsections (b)(1), (b)(2), (b)(3), (b)(4), (b)(5), or (b)(6) of this Section:
 - 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (b).
 - A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be that specified in Section 724.251. The wording of the certificate of insurance must be that specified in Section 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.
 - B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Insurance.
 - 2) An owner or operator may meet the requirements of this Section by

- passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section.
- 5) An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances pursuant to this subsection (b), the owner or operator must specify at least one such assurance as "primary" coverage and must specify other such assurance as "excess" coverage.
- 7) An owner or operator must notify the Agency within 30 days whenever any of the following occurs:
 - A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (b)(1) through (b)(6) of this Section;
 - B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section; or
 - C) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner

or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section.

- c) Request for adjusted level of required liability coverage. If an owner or operator demonstrates to the Agency that the levels of financial responsibility required by subsection (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain an adjusted level of required liability coverage from the Agency. The request for an adjusted level of required liability coverage must be submitted to the Agency as part of the application pursuant to 35 III. Adm. Code 703.182 for a facility that does not have a permit, or pursuant to the procedures for permit modification pursuant to 35 Ill. Adm. Code 705.128 for a facility that has a permit. If granted, the modification will take the form of an adjusted level of required liability coverage, such level to be based on the Agency assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Agency may require an owner or operator who requests an adjusted level of required liability coverage to provide such technical and engineering information as is necessary to determine a level of financial responsibility other than that required by subsection (a) or (b) of this Section. Any request for an adjusted level of required liability coverage for a permitted facility will be treated as a request for a permit modification pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128.
- d) Adjustments by the Agency. If the Agency determines that the levels of financial responsibility required by subsection (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Agency must adjust the level of financial responsibility required pursuant to subsection (a) or (b) of this Section as may be necessary to adequately protect human health and the environment. This adjusted level must be based on the Agency's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Agency determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment facility, the Agency may require that an owner or operator of the facility comply with subsection (b) of this Section. An owner or operator must furnish to the Agency, within a time specified by the Agency in the request, which must be not be less than 30 days, any information that the Agency requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128.
- e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified

<u>Professional Engineer</u> that final closure has been completed in accordance with the approved closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain liability coverage for that facility, unless the Agency determines that closure has not been in accordance with the approved closure plan.

- f) Financial test for liability coverage.
 - An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of subsection (f)(1)(A) or (f)(1)(B) of this Section:
 - A) The owner or operator must have the following:
 - Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test;
 - ii) Tangible net worth of at least \$10 million; and
 - iii) Assets in the United States amounting to either of the following: at least 90 percent of the total assets; or at least six times the amount of liability coverage to be demonstrated by this test.
 - B) The owner or operator must have the following:
 - i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's;
 - ii) Tangible net worth of at least \$10 million;
 - iii) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and
 - iv) Assets in the United States amounting to either of the following: at least 90 percent of the total assets; or at least six times the amount of liability coverage to be demonstrated by this test.
 - 2) The phrase "amount of liability coverage," as used in subsection (f)(1) of this Section, refers to the annual aggregate amounts for which coverage is required pursuant to subsections (a) and (b) of this Section.

- To demonstrate that it meets this test, the owner or operator must submit the following three items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251. If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by Sections 724.243(f) and 724.245(f) and 35 Ill. Adm. Code 725.243(e) and 725.245(e), and liability coverage, it must submit the letter specified in Section 724.251 to cover both forms of financial responsibility; a separate letter, as specified in Section 724.251, is not required.
 - B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.
 - C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
 - i) The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
 - ii) In connection with that procedure, no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.
- An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.
- After the initial submission of items specified in subsection (f)(3) of this Section, the owner of operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in this Section. Evidence of

- insurance must be submitted to the Agency within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.
- The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage, as specified in this Section, within 30 days after notification of disallowance.
- g) Guarantee for liability coverage.
 - 1) Subject to subsection (g)(2) of this Section, an owner or operator may meet the requirements of this Section by obtaining a written guarantee, referred to as a "guarantee." The guarantor must be the direct or highertier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners and operators in subsections (f)(1) through (f)(6) of this Section. The wording of the guarantee must be that specified in Section 724.251. A certified copy of the guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide for the following:
 - A) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be) arising from the operation of facilities covered by this guarantee, or if the owner or operator fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, that the guarantor will do so up to the limits of coverage.
 - B) That the guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator

- and to the Agency. The guarantee must not be terminated unless and until the Agency approves alternative liability coverage complying with Section 724.247 or 35 Ill. Adm. Code 725.247.
- 2) The guaranter must execute the guarantee in Illinois. The guarantee must be accompanied by a letter signed by the guaranter that states as follows:
 - A) The guarantee was signed in Illinois by an authorized agent of the guarantor;
 - B) The guarantee is governed by Illinois law; and
 - C) The name and address of the guarantor's registered agent for service of process.
- The guarantor must have a registered agent pursuant to Section 5.05 of the Business Corporation Act of 1983 [805 ILCS 5/5.05] or Section 105.05 of the General Not-for-Profit Corporation Act of 1986 [805 ILCS 105/105.05].
- h) Letter of credit for liability coverage.
 - 1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (h), and submitting a copy of the letter of credit to the Agency.
 - 2) The financial institution issuing the letter of credit must be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies.
 - The wording of the letter of credit must be that specified in Section 724.251.
 - An owner or operator who uses a letter of credit to satisfy the requirements of this Section may also establish a trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or who complies with the Corporate Fiduciary Act [205 ILCS 620].
 - 5) The wording of the standby trust fund must be identical to that specified in Section 724.251(n).

- i) Surety bond for liability coverage.
 - An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (i) and submitting a copy of the bond to the Agency.
 - 2) The surety company issuing the bond must be licensed by the Illinois Department of Insurance.
 - 3) The wording of the surety bond must be that specified in Section 724.251.
- j) Trust fund for liability coverage.
 - An owner or operator may satisfy the requirements of this Section by establishing a trust fund that conforms to the requirements of this subsection (j) and submitting a signed, duplicate original of the trust agreement to the Agency.
 - The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or who complies with the Corporate Fiduciary Act [205 ILCS 620].
 - 3) The trust fund for liability coverage must be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this Section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of liability coverage to be provided, the owner or operator, by the anniversary of the date of establishment of the fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this Section to cover the difference. For purposes of this subsection (i), "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and non-sudden accidental occurrences required to be provided by the owner or operator by this Section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

4)	The wording of the tr	rust fund must be	that specified in	Section	724.251.
(Source: Amended at	t 32 III. Reg.	_, effective)	

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 724.274 Inspections

At least weekly, the owner or operator must inspect areas where containers are stored, looking except for the owner or operator of a Performance Track member facility, which may conduct inspections at least once each month, after approval by the Agency. To apply for reduced inspection frequencies, the owner or operator of the Performance Track member facility must follow the procedures identified in Section 724.115(b)(5). The owner or operator must look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

BOARD NOTE: See Sections 724.	115(c) and 724.271 for remedial act	ion required if
deterioration or leaks are detected.		
(Source: Amended at 32 Ill. Reg.	, effective)

Section 724.275 Containment

- a) Container storage areas must have a containment system that is designed and operated in accordance with subsection (b) of this Section, except as otherwise provided by subsection (c) of this Section;
- b) A containment system must be designed and operated as follows:
 - 1) A base must <u>underlay underlie</u> the containers that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
 - 2) The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids:
 - 3) The containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;
 - 4) Run-on into the containment system must be prevented, unless the collection system has sufficient excess capacity in addition to that required in subsection (b)(3) of this Section to contain any run-on that might enter the system; and
 - 5) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to

prevent overflow of the collection system.

BOARD NOTE: If the collected material is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the State, it is subject to the National Pollution Discharge Elimination System (NPDES) permit requirement of Section 12(f) of the Environmental Protection Act [415 ILCS 5/12(f)] and 35 Ill. Adm. Code 309.102.

- c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by subsection (b) of this Section, except as provided by subsection (d) of this Section, or provided as follows:
 - 1) That the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or
 - 2) That the containers are elevated or are otherwise protected from contact with accumulated liquid.
- d) Storage areas that store containers holding the wastes listed below that do not contain free liquids must have a containment system defined by subsection (b) of this Section: F020, F021, F022, F023, F026, and F027.

(Source:	Amended at 32 Ill. Reg.	, effective	_)
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SUBPART J: TANK SYSTEMS

Section 724.291 Assessment of Existing Tank System Integrity

- a) For each existing tank system that does not have secondary containment meeting the requirements of Section 724.293, the owner or operator must determine either that the tank system is not leaking or that it is unfit for use. Except as provided in subsection (c) of this Section, the owner or operator must, by January 12, 1988, obtain and keep on file at the facility a written assessment reviewed and certified by an independent, a qualified registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that attests to the tank system's integrity.
- b) This assessment must determine whether the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:
 - 1) Design standards, if available, according to which the tank and ancillary

equipment were constructed;

- 2) Hazardous characteristics of the wastes that have been and will be handled;
- 3) Existing corrosion protection measures;
- 4) Documented age of the tank system, if available (otherwise an estimate of the age); and
- 5) Results of a leak test, internal inspection, or other tank integrity examination so that the following is true:
 - A) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and
 - B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by an independent, a qualified registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that address cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in conducting other than a leak test.

- c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.
- d) If, as a result of the assessment conducted in accordance with subsection (a) of this Section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of Section 724.296.

(Source: Amended a	t 32 Ill. Reg	,	effective)
Section 724.292	Design and I	Installation	n of New	Tank Systems	or Componer	ıts

a) Owners or operators of new tank systems or components must obtain and submit to the Agency, at time of submittal of Part B information, a written assessment,

reviewed and certified by an independent, a qualified registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which will be used by the Agency to review and approve or disapprove the acceptability of the tank system design, must include, at a minimum, the following information:

- 1) Design standards according to which tanks or the ancillary equipment are constructed;
- 2) Hazardous characteristics of the wastes to be handled;
- 3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of the following:
 - A) Factors affecting the potential for corrosion, including but not limited to the following:
 - i) Soil moisture content;
 - ii) Soil pH;
 - iii) Soil sulfide level;
 - iv) Soil resistivity;
 - v) Structure to soil potential;
 - vi) Influence of nearby underground metal structures (e.g., piping);
 - vii) Existence of stray electric current;
 - viii) Existing corrosion-protection measures (e.g., coating, cathodic protection, etc.); and
 - B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the

following:

- i) Corrosion-resistant materials of construction, such as special alloys, fiberglass reinforced plastic, etc.;
- ii) Corrosion-resistant coating, such as epoxy, fiberglass, etc., with cathodic protection (e.g., impressed current or sacrificial anodes); and
- iii) Electrical isolation devices, such as insulating joints, flanges, etc.

BOARD NOTE: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285, and "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

- 4) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and
- 5) Design considerations to ensure the following:
 - A) That tank foundations will maintain the load of a full tank;
 - B) That tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of Section 724.118(a); and
 - C) That tank systems will withstand the effects of frost heave.
- b) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent qualified installation inspector or an independent, a qualified registered professional engineer Professional Engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:

- 1) Weld breaks;
- 2) Punctures;
- 3) Scrapes of protective coatings;
- 4) Cracks;
- 5) Corrosion;
- 6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.
- c) New tank systems or components that are placed underground and which are backfilled must be provided with a backfill material that is a noncorrosive, porous, and homogeneous substance which is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
- d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed, or placed into use.
- e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
 - BOARD NOTE: The piping system installation procedures described in "Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, or "Chemical Plant and Petroleum Refinery Piping," ASME/ANSI Standard B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, and "Liquid Petroleum Transportation Piping Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI Standard B31.4-1986, as supplemented by B31.4a-1987, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used where applicable, as guidelines for proper installation of piping systems.
- f) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under subsection (a)(3) of this Section, or other corrosion protection if the Agency determines that other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.

g) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (b) through (f) of this Section, that attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (b) and (d) of this Section, were performed. These written statements must also include the certification statement, as required in 35 Ill. Adm. Code 702.126(d).

(Source: Amended at	32 Ill. Reg	, effective)
Section 724.293	Containment and Dete	ection of Releases	

- a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in subsections (f) and (g) of this Section).
 - 1) For a new <u>or existing tank</u> system or component, prior to their being put into service;
 - 2) For all existing tank systems used to store or treat Hazardous Waste Numbers F020, F021, F022, F023, F026, or F027, as defined in 35 III. Adm. Code 721.131, within two years after January 12, 1987;
 - For those existing tank systems of known and documented age, within two years after January 12, 1987, or when the tank system has reached 15 years of age, whichever comes later;
 - 4) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of January 12, 1987, whichever comes later; and
 - 52) For <u>a tank systems system</u> that <u>store stores</u> or <u>treat treats</u> materials that become hazardous wastes <u>subsequent to January 12, 1987</u>, within the time intervals required in subsections (a)(1) through (a)(4) of this Section, except that the date that a material becomes a two years after the hazardous waste <u>must be used in place of January 12, 1987 listing, or</u> when the tank system has reached 15 years of age, whichever comes later.
- b) Secondary containment systems must fulfill the following:
 - 1) It must be designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and

- 2) It must be capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
- c) To meet the requirements of subsection (b) of this Section, secondary containment systems must, at a minimum, fulfill the following:
 - 1) It must be constructed of or lined with materials that are compatible with the wastes to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);
 - 2) It must be placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression or uplift;
 - 3) It must be provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator demonstrates, by way of permit application, to the Agency that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and
 - 4) It must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator demonstrates to the Agency, by way of permit application, that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

BOARD NOTE: If the collected material is a hazardous waste under 35 Ill. Adm. Code 721, it is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the State, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Work (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR

302.6.

- d) Secondary containment for tanks must include one or more of the following devices:
 - 1) A liner (external to the tank);
 - 2) A vault;
 - 3) A double-walled tank; or
 - 4) An equivalent device, as approved by the Board in an adjusted standards proceeding.
- e) In addition to the requirements of subsections (b), (c), and (d) of this Section, secondary containment systems must satisfy the following requirements:
 - 1) An external liner system must fulfill the following:
 - A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary.
 - B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.
 - C) It must be free of cracks or gaps.
 - D) It must be designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tanks (i.e., it is capable of preventing lateral as well as vertical migration of the waste).
 - 2) A vault system must fulfill the following:
 - A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within the vault system's boundary;
 - B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

- C) It must be constructed with chemical-resistant water stops in place at all joints (if any);
- D) It must be provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;
- E) It must be provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated fulfills the following:
 - i) It meets the definition of ignitable waste under 35 Ill. Adm. Code 721.121; or
 - ii) It meets the definition of reactive waste under 35 Ill. Adm. Code 721.123, and may form an ignitable or explosive vapor; and
- F) It must be provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.
- 3) A double-walled tank must fulfill the following:
 - A) It must be designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;
 - B) It must be protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and
 - C) It must be provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator demonstrates, by way of permit application, to the Agency that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

BOARD NOTE: The provisions outlined in the Steel Tank Institute document (STI) "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used as a guideline for aspects of the design of underground steel double-walled tanks.

f) Ancillary equipment must be provided with secondary containment (e.g., trench,

jacketing, double-walled piping, etc.) that meets the requirements of subsections (b) and (c) of this Section, except as follows:

- 1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;
- 2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;
- 3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and
- 4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.
- pursuant to Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1], and in accordance with 35 Ill. Adm. Code 101 and 104, an adjusted standard will be granted by the Board regarding alternative design and operating practices only if the Board finds either that the alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not receive an adjusted standard from the secondary containment requirements of this Section through a justification in accordance with subsection (g)(2) of this Section.
 - 1) When determining whether to grant alternative design and operating practices based on a demonstration of equivalent protection of groundwater and surface water, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:
 - A) The nature and quantity of the wastes;
 - B) The proposed alternative design and operation;
 - C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater; and
 - D) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.

- When determining whether to grant alternative design and operating practices based on a demonstration of no substantial present or potential hazard, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:
 - A) The potential adverse effects on groundwater, surface water and land quality taking into account, considering the following:
 - i) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;
 - ii) The hydrogeological characteristics of the facility and surrounding land;
 - iii) The potential for health risk caused by human exposure to waste constituents;
 - iv) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
 - v) The persistence and permanence of the potential adverse effects.
 - B) The potential adverse effects of a release on groundwater quality, taking into account;
 - i) The quantity and quality of groundwater and the direction of groundwater flow;
 - ii) The proximity and withdrawal rates of groundwater users;
 - iii) The current and future uses of groundwater in the area; and
 - iv) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality.
 - C) The potential adverse effects of a release on surface water quality, taking the following into account:
 - i) The quantity and quality of groundwater and the direction of groundwater flow;
 - ii) The patterns of rainfall in the region;

- iii) The proximity of the tank system to surface waters;
- iv) The current and future uses of surface waters in the area and water quality standards established for those surface waters; and
- v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality.
- D) The potential adverse effect of a release on the land surrounding the tank system, taking the following into account:
 - i) The patterns of rainfall in the region; and
 - ii) The current and future uses of the surrounding land.
- The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system but which has not migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:
 - A) It must comply with the requirements of Section 724.296, except Section 724.296(d); and
 - B) It must decontaminate or remove contaminated soil to the extent necessary to do the following:
 - i) Enable the tank system for which the alternative design and operating practices were granted to resume operation with the capability for the detection of releases at least equivalent to the capability it had prior to the release; and
 - ii) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and
 - C) If contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this Section, the owner or operator must comply with the requirement of Section 724.297(b).
- 4) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste

has occurred from the primary tank system and which has migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:

- A) Comply with the requirements of Section 724.296(a), (b), (c), and (d); and
- B) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of Section 724.297(b); and
- C) If repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this Section, or make the alternative design and operating practices demonstration to the Board again, and meet the requirements for new tank systems in Section 724.292 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil is decontaminated or removed and groundwater or surface water has not been contaminated.
- h) In order to make an alternative design and operating practices, the owner or operator must follow the following procedures in addition to those specified in Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:
 - 1) The owner or operator must file a petition for approval of alternative design and operating practices according to the following schedule:
 - A) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with subsection (a) of this Section.
 - B) For new tank systems, at least 30 days prior to entering into a contract for installation.
 - 2) As part of the petition, the owner or operator must also submit the following to the Board:
 - A) A description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in subsection (g)(1) or (g)(2) of this Section; and

- B) The portion of the Part B permit application specified in 35 Ill. Adm. Code 703.202.
- 3) The owner or operator must complete its showing within 180 days after filing its petition for approval of alternative design and operating practices.
- 4) The Agency must issue or modify the RCRA permit so as to require the permittee to construct and operate the tank system in the manner that was provided in any Board order approving alternative design and operating practices.
- i) All tank systems, until such time as secondary containment that meets the requirements of this Section is provided, must comply with the following:
 - 1) For non-enterable underground tanks, a leak test that meets the requirements of Section 724.291(b)(5) or other tank integrity methods, as approved or required by the Agency, must be conducted at least annually.
 - 2) For other than non-enterable underground tanks, the owner or operator must do either of the following:
 - A) Conduct a leak test, as in subsection (i)(1) of this Section; or
 - B) Develop a schedule and procedure for an assessment of the overall condition of the tank system by an independent, qualified registered professional engineer a qualified Professional Engineer. The schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.
 - 3) For ancillary equipment, a leak test or other integrity assessment, as approved by the Agency, must be conducted at least annually.
 - BOARD NOTE: The practices described in the API Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as a guideline for assessing the overall condition of the tank system.

- 4) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(1) through (i)(3) of this Section.
- 5) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(1) through (1)(3) of this Section, the owner or operator must comply with the requirements of Section 724.296.

(Source: Amended at	32 Ill. Reg	, effective _)
Section 724.295	Inspections		

- a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.
- b) The owner or operator must inspect the following at least once each operating day: data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design.
 - 1) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
 - 2) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design; and
 - The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.).

BOARD NOTE: Section 724.115(c) requires the owner or operator to remedy any deterioration or malfunction the owner or operator finds. Section 724.296 requires the owner or operator to notify the Agency within 24 hours of confirming a leak. Also federal 40 CFR 302.6 may require the owner or operator to notify the National Response Center of a release.

- c) In addition, except as noted under subsection (d) of this Section, the owner or operator must inspect the following at least once each operating day:
 - 1) Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and

- 2) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- d) Owners or operators of tank systems that either use leak detection systems to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, must inspect at least weekly those areas described in subsections (c)(1) and (c)(2) of this Section. Use of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.
- e) Performance Track member facilities may inspect on a less frequent basis, upon approval by the Director, but must inspect at least once each month. To apply for a less than weekly inspection frequency, the Performance Track member facility must follow the procedures described in Section 724.115(b)(5).
- f) Ancillary equipment that is not provided with secondary containment, as described in Section 724.293(f)(1) through (f)(4), must be inspected at least once each operating day.
- eg) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:
 - 1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and
 - 2) All sources of impressed current must be inspected or tested, as appropriate, at least bimonthly (i.e., every other month).

BOARD NOTE: The practices described in "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85 and "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

<u> </u>	<u>_</u> /	The owner or operator must document in the operating record of the facility inspection of those items in subsections (a) through (c) of this Section.			
(Source:	Amended at 32 Ill. Reg.	, effective			

Section 724.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

- a) Cease using; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
- b) Removal of waste from tank system or secondary containment system.
 - 1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak or as otherwise provided in the permit, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
 - 2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or as otherwise provided in the permit to prevent harm to human health and the environment.
- c) Containment of visible releases to the environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection, do the following:
 - 1) Prevent further migration of the leak or spill to soils or surface water; and
 - 2) Remove and properly dispose of any visible contamination of the soil or surface water.
- d) Notifications, reports.
 - 1) Any release to the environment, except as provided in subsection (d)(2) of this Section, must be reported to the Agency within 24 hours of its detection.
 - 2) A leak or spill of hazardous waste is exempted from the requirements of this subsection (d) if the following is true:
 - A) The spill was less than or equal to a quantity of one pound; and
 - B) It was immediately contained and cleaned up.

- 3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Agency:
 - A) Likely route of migration of the release;
 - B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate, etc.);
 - C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency as soon as they become available.
 - D) Proximity the downgradient drinking water, surface water, and populated areas; and
 - E) Description of response actions taken or planned.
- e) Provision of secondary containment, repair, or closure.
 - 1) Unless the owner or operator satisfies the requirements of subsections (e)(2) through (e)(4) of this Section, the tank system must be closed in accordance with Section 724.297.
 - 2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
 - 3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.
 - 4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner or operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 724.293 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment, as long as the requirements of subsection (f) of this Section are satisfied. If a component is replaced to comply with the requirements of this subsection (e), that component must satisfy the requirements of new tank systems or components in Sections 724.292 and 724.293. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g.,

the bottom of an in-ground or on-ground tank), the entire component must be provided with secondary containment in accordance with Section 724.293 prior to being returned to use.

Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (e) of this Section, and the repair has been extensive (e.g., installation of an internal liner, repair, or a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner or operator has obtained a certification by-an independent, a qualified registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Agency within seven days after returning the tank system to use placed in the operating record and maintained until closure of the facility.

BOARD NOTE: See Section 724.115(c) for the requirements necessary to remedy a failure. Also, federal 40 CFR 302.6 may require the owner or operator to notify the National Response Center of any "reportable quantity."

(Source: Amended at 32 Ill. Reg, effect	ctive
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SUBPART K: SURFACE IMPOUNDMENTS

Section 724.321 Design and Operating Requirements

- a) Any surface impoundment that is not covered by subsection (c) of this Section or 35 Ill. Adm. Code 725.321 must have a liner for all portions of the impoundment (except for existing portions of such impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with Section 724.328(a)(1). For impoundments that will be closed in accordance with Section 724.328(a)(2), the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be as follows:
 - 1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

- 2) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
- 3) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- b) The owner or operator will be exempted from the requirements of subsection (a) of this Section if the Board grants an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104. The level of justification is a demonstration by the owner or operator that alternative design or operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an adjusted standard, the Board will consider the following:
 - 1) The nature and quantity of the wastes;
 - 2) The proposed alternative design and operation;
 - 3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and
 - 4) All other factors that would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- c) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in 35 Ill. Adm. Code 720.110, under the definition of "existing facility."
 - 1) Liner requirements.
 - A) The liner system must include the following:
 - i) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and

- ii) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3-three feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10⁻⁷ cm/sec.
- B) The liners must comply with subsections (a)(1), (a)(2), and (a)(3) of this Section.
- The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system (LDS). This LDS must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a LDS in this subsection (c) are satisfied by installation of a system that is, at a minimum, as follows:
 - A) It is constructed with a bottom slope of one percent or more;
 - B) It is constructed of granular drainage materials with a hydraulic conductivity of 1 x 10⁻¹ cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x 10⁻⁴ m²/sec or more;
 - C) It is constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;
 - D) It is designed and operated to minimize clogging during the active life and post-closure care period; and
 - E) It is constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer.

Each unit must have its own sumps. The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.

- 3) The owner or operator must collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.
- 4) The owner or operator of a LDS that is not located completely above the seasonal high water table must demonstrate that the operation of the LDS will not be adversely affected by the presence of groundwater.
- d) Subsection (c) of this Section will not apply if the owner or operator demonstrates to the Agency, and the Agency finds for such surface impoundment, that alternative design or operating practices, together with location characteristics, will do the following:
 - 1) It will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal system specified in subsection (c) of this Section; and
 - 2) It will allow detection of leaks of hazardous constituents through the top liner at least as effectively.
- e) The double liner requirement set forth in subsection (c) of this Section may be waived by the Agency for any monofill, if the following is true of the unit:
 - 1) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents that would render the wastes hazardous for reasons other than the toxicity characteristic in 35 Ill. Adm. Code 721.124; and
 - 2) Design and location.
 - A) Liner, location, and groundwater monitoring.
 - i) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this subsection (e), the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active

life of the facility. In the case of any surface impoundment that has been exempted from the requirements of subsection (c) of this Section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to groundwater monitoring and corrective action;

- ii) The monofill is located more than one-quarter mile from an "underground source of drinking water" (as that term is defined in 35 Ill. Adm. Code 702.110); and
- iii) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits; or
- B) The owner or operator demonstrates to the Board that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.
- f) The owner or operator of any replacement surface impoundment unit is exempt from subsection (c) of this Section if the following is true of the unit:
 - 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.321(c), (d), and (e); and
 - BOARD NOTE: The cited subsections implemented the design standards of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 USC 6901 et seq.).
 - 2) There is no reason to believe that the liner is not functioning as designed.
- g) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.
- h) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the

dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.

i) The Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

(Source: Amended at 3	32 Ill. Reg	_, effective	
Section 724.323	Response Actions		

- a) The owner or operator of surface impoundment units subject to Section 724.321(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
 - 1) Notify the Agency in writing of the exceedence exceedance within seven days after the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days after the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size, and cause of any leak;
 - 4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs or controls, and whether or not the unit should be closed;
 - 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
 - Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and

(b)(5) of this Section, the owner or operator must do either of the following:

- 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.

(Source:	Amended at 32 Ill. Reg.	, effective	
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SUBPART L: WASTE PILES

Section 724.351 Design and Operating Requirements

- a) A waste pile (except for an existing portion of a waste pile) must have the following:
 - A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility. The liner must be as follows:
 - A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;
 - B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
 - C) Installed to cover all surrounding earth likely to be in contact with

the waste or leachate; and

- A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The Agency must specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be as follows:
 - A) Constructed of materials that are as follows:
 - i) Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and
 - ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials and by any equipment used at the pile; and
 - B) Designed and operated to function without clogging through the scheduled closure of the waste pile.
- b) The owner or operator will be exempted from the requirements of subsection (a) of this Section if the Board grants an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104. The level of justification is a demonstration by the owner or operator that alternative design or operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an adjusted standard, the Board will consider the following:
 - 1) The nature and quantity of the wastes;
 - 2) The proposed alternative design and operation;
 - 3) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and
 - 4) All other factors that influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- c) The owner or operator of each new waste pile unit-on which construction commenced after January 29, 1992, each lateral expansion of a waste pile unit-on which construction commenced after July 29, 1992, and each replacement of an existing waste pile unit-that was to commence reuse after July 29, 1992, must

install two or more liners and a leachate collection and removal system above and between such liners. "Construction commenced" is as defined in Section 720.110 under "existing facility."

- 1) Liners.
 - A) The liner system must include the following:
 - A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and postclosure care period; and
 - ii) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1×10⁻⁷ cm/sec.
 - B) The liners must comply with subsections (a)(1)(A), (a)(1)(B), and (a)(1)(C) of this Section.
- The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The Agency must specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must comply with subsections (c)(3)(C) and (c)(3)(D) of this Section.
- The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system (LDS). This LDS must be capable of detecting, collecting and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a LDS in this subsection (c) are satisfied by installation of a system that is, at a minimum, as follows:

- A) Constructed with a bottom slope of one percent or more;
- B) Constructed of granular drainage materials with a hydraulic conductivity of 1X10⁻² cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3X10⁻⁵ m²/sec or more;
- C) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;
- D) Designed and operated to minimize clogging during the active life and post-closure care period; and
- E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sumps. The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.
- 4) The owner or operator must collect and remove pumpable liquids in the LDS sumps to minimize the head on the bottom liner.
- 5) The owner or operator of a LDS that is not located completely above the seasonal high water table must demonstrate that the operation of the LDS will not be adversely affected by the presence of groundwater.
- d) The Agency must approve alternative design or operating practices to those specified in subsection (c) of this Section if the owner or operator demonstrates to the Agency, by way of permit or permit modification application, that such design or operating practices, together with location characteristics, will do the following:
 - Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in subsection (c) of this Section; and
 - 2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.
- e) Subsection (c) of this Section does not apply to monofills that are granted a

waiver by the Agency in accordance with Section 724.321(e).

- f) The owner or operator of any replacement waste pile unit is exempt from subsection (c) of this Section if the following are true:
 - 1) The existing unit was constructed in compliance with the design standards of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 USC 6901 et seq.); and

BOARD NOTE: The cited provisions required the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners, including a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period the facility remained in operation (including any post-closure monitoring period), and a lower liner to prevent the migration of any constituent through the liner during such period. The lower liner was deemed to satisfy the requirement if it was constructed of at least a 3-foot thick layer of recompacted clay or other natural material with a permeability of no more than 1 x 10⁻⁷ cm/sec.

- 2) There is no reason to believe that the liner is not functioning as designed.
- g) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.
- h) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- i) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.
- j) If the pile contains any particulate matter that may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.
- k) The Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

(Source: Amended at 32 Ill. Reg.	, effective	
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Section 724.352 Action Leakage Rate

a) The Agency must approve an action leakage rate for surface impoundment waste

pile units subject to Section 724.351(c) or (d). The action leakage rate is the maximum design flow rate that the LDS can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material, etc.), construction, operation, and location of the LDS; waste and leachate characteristics; likelihood and amounts of other sources of liquids in the LDS; and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).

b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under Section 724.354(c) to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period.

(Source: Amended at	32 Ill. Reg	, effective	
Section 724.353	Response Action Plan	L	

- a) The owner or operator of waste pile units subject to Section 724.351(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
 - 1) Notify the Agency in writing of the <u>exceedence exceedance</u> within seven days after the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days after the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size, and cause of any leak;
 - 4) Determine whether waste receipt should cease or be curtailed; whether any waste should be removed from the unit for inspection, repairs, or controls; and whether the unit should be closed;
 - 5) Determine any other short-term and long-term actions to be taken to

mitigate or stop any leaks; and

- Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and (b)(5) of this Section, the owner or operator must do either of the following:
 - 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

) D	Ocument w	hy	such	assessments	are	not	need	ed.
) [Document w) Document why	Document why such	Document why such assessments	Document why such assessments are	Document why such assessments are not	Document why such assessments are not need

(Source:	Amended at 32 Ill. R	Reg.,	effective)

SUBPART M: LAND TREATMENT

Section 724.380 Closure and Post-Closure Care

- a) During the closure period the owner or operator must do the following:
 - 1) Continue It must continue all operations (including pH control) necessary to maximize degradation, transformation, or immobilization of hazardous constituents within the treatment zone, as required under Section 724.373(a), except to the extent such measures are inconsistent with subsection (a)(8) of this Section;
 - 2) Continue It must continue all operations in the treatment zone to minimize run-off of hazardous constituents, as required under Section 724.373(b);
 - 3) <u>Maintain-It must maintain</u> the run-on control system required under Section 724.373(c);

- 4) <u>Maintain-It must maintain</u> the run-off management system required under Section 724.373(d);
- 5) Control It must control wind dispersal of hazardous waste if required under Section 724.373(f);
- 6) Continue It must continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 724.376;
- 7) Continue It must continue unsaturated zone monitoring in compliance with Section 724.378, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and
- 8) Establish It must establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.
- b) For the purpose of complying with Section 724.215, when closure is completed the owner or operator may submit to the Agency certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.
- c) During the post-closure care period the owner or operator must do the following:
 - 1) Continue It must continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;
 - 2) <u>Maintain It must maintain</u> a vegetative cover over closed portions of the facility;
 - 3) <u>Maintain-It must maintain</u> the run-on control system required under Section 724.373(c);
 - 4) <u>Maintain-It must maintain</u> the run-off management system required under Section 724.373(d);
 - 5) Control It must control wind dispersal of hazardous waste if required under Section 724.373(f);

- 6) Continue It must continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 724.376; and
- 7) Continue It must continue unsaturated zone monitoring in compliance with Section 724.378, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.
- d) The owner or operator is not subject to regulation under subsections (a)(8) and (c) of this Section if the Agency finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in subsection (d)(3) of this Section. The owner or operator may submit such a demonstration to the Agency at any time during the closure or post-closure care periods. For the purposes of this subsection (d), the owner or operator must do the following:
 - 1) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under Section 724.371.
 - A) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.
 - B) The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under subsection (d)(3) of this Section.
 - 2) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.
 - In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that does the following:
 - A) <u>Is It is appropriate</u> for the distribution of the data used to establish

background values; and

- B) Provides It provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.
- e) The owner or operator is not subject to regulation under Subpart F of this Part if the Agency finds that the owner or operator satisfies subsection (d) of this Section and if unsaturated zone monitoring under Section 724.378 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART N: LANDFILLS

Section 724.404 Response Actions

- a) The owner or operator of landfill units subject to Section 724.401(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
 - 1) Notify the Agency in writing of the <u>exceedence exceedance</u> within seven days of the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size, and cause of any leak;
 - 4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether the unit should be closed;
 - 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and

- Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and (b)(5) of this Section, the owner or operator must do either of the following:
 - 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or

(Source:	Amended at 32 Ill. Reg.	, effective)

Document why such assessments are not needed.

Section 724.414 Special Requirements for Bulk and Containerized Liquids

2)

- a) This subsection (a) corresponds with 40 CFR 264.314(a), which pertains to pre May 8, 1985 actions, a date long since passed. This statement maintains structural consistency with USEPA rules.
- ba) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
- eb) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- dc) Containers holding free liquids must not be placed in a landfill unless the following is true:
 - 1) All free-standing liquid fulfills one of the following:

- A) It has been removed by decanting or other methods;
- B) It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or
- C) It has been otherwise eliminated; or
- 2) The container is very small, such as an ampule; or
- The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or
- 4) The container is a lab pack as defined in Section 724.416 and is disposed of in accordance with Section 724.416.
- ed) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are the following: materials listed or described in subsection (e)(1) of this Section; materials that pass one of the tests in subsection (e)(2) of this Section; or materials that are determined by the Board to be nonbiodegradable through the adjusted standard procedure of 35 Ill. Adm. Code 104.
 - 1) Nonbiodegradable sorbents are the following:
 - A) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates (clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, etc.), calcium carbonate (organic free limestone), oxides/hydroxides (alumina, lime, silica (sand), diatomaceous earth, etc.), perlite (volcanic glass), expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal (activated carbon), etc.); or
 - B) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstrene and tertiary butyl copolymers, etc.). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or
 - C) Mixtures of these nonbiodegradable materials.
 - 2) Tests for nonbiodegradable sorbents are the following:

- A) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) (Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi), incorporated by reference in 35 Ill. Adm. Code 720.111(a);
- B) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) (Standard Practice for Determining Resistance of Plastics to Bacteria), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or
- C) The sorbent material is determined to be non-biodegradable under OECD Guideline for Testing of Chemicals, Method 301B (CO₂ Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- fe) The placement of any liquid that is not a hazardous waste in a hazardous waste landfill is prohibited (35 Ill. Adm. Code 729.311), unless the Board finds that the owner or operator has demonstrated the following in a petition for an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:
 - 1) The only reasonably available alternative to the placement in a hazardous waste landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, that contains or which may reasonably be anticipated to contain hazardous waste; and
 - 2) Placement in the hazardous waste landfill will not present a risk of contamination of any "underground source of drinking water" (as that term is defined in 35 Ill. Adm. Code 702.110).

(Source:	Amended at 32 Ill. Reg	, effective)
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SUBPART O: INCINERATORS

Section 724.443 Performance Standards

An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section 724.445, it will meet the following performance standards:

- a) Destruction and removal efficiency.
 - 1) Except as provided in subsection (a)(2) of this Section, an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous

constituent (POHC) designated (under Section 724.442) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = \frac{100 \times (N - O)}{N}$$

Where:

N = Mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator

O = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

- An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under Section 724.442) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetrapenta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1) of this Section.—In addition, the owner or operator of the incinerator must notify the Agency of its intent to incinerate hazardous wastes F020, F021, F022, F023, F026, or F027.
- An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.
- c) An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the following formula:

$$C = \frac{14 \times M}{21 - Y}$$

1) Where:

C = the corrected concentration of particulate matter

- M = the measured concentration of particulate matter
- Y = the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Method 3 in appendix A to 40 CFR 60 (Gas Analysis for the Determination of Dry Molecular Weight), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- 2) This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Agency must select an appropriate correction procedure, to be specified in the facility permit.
- d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 724.445) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this Section may be "information" justifying modification, revocation or reissuance of a permit under 35 Ill. Adm. Code 702.184.

(Source: Amended a	t 32 Ill. Reg.		effective _)
Section 724.447	Monitoring	and Inspect	ions	

- a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating hazardous waste:
 - 1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis.
 - 2) Carbon monoxide must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.
 - 3) Upon request by the Agency, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieved the performance standard of Section 724.443.
- b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions and signs of tampering.
- c) The emergency waste feed cutoff system and associated alarms must be tested at

least weekly to verify operability, unless the applicant demonstrates to the Agency that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.

d) This monitoring and inspection data must be recorded and the records must be placed in the operating <u>log record</u> required by Section 724.173 <u>and maintained in the operating record for five years</u>.

Source: Amended at 32 Ill. Reg, e	effective
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SUBPART S: SPECIAL PROVISIONS FOR CLEANUP

Section 724.652 Corrective Action Management Units

- a) To implement remedies pursuant to Section 724.201 or RCRA section 3008(h), or to implement remedies at a permitted facility that is not subject to Section 724.201, the Agency may designate an area at the facility as a corrective action management unit pursuant to the requirements in this Section. "Corrective action management unit" or "CAMU" means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at that facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.
 - 1) "CAMU-eligible waste" means the following:
 - A) All solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either hazardous or non-hazardous) from ongoing industrial operations at a site are not CAMU-eligible wastes.
 - B) Wastes that would otherwise meet the description in subsection (a)(1)(A) of this Section are not CAMU-eligible waste where the following is true:
 - i) The wastes are hazardous waste found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers, or non-land-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or
 - ii) The Agency makes the determination in subsection (a)(2) of this Section to prohibit the wastes from management in a

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CAMU.

- C) Notwithstanding subsection (a)(1)(A) of this Section, where appropriate, as-generated non-hazardous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.
- 2) The Agency must prohibit the placement of waste in a CAMU where the Agency determines that the wastes have not been managed in compliance with applicable land disposal treatment standards of 35 Ill. Adm. Code 728, applicable unit design requirements of this Part or 35 Ill. Adm. Code 725, or other applicable requirements of this Subtitle G, and that the non-compliance likely contributed to the release of the waste.
- 3) Prohibition against placing liquids in a CAMU.
 - A) The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.
 - B) The requirements in Section 724.414(d) for placement of containers holding free liquids in landfills apply to placement in a CAMU, except where placement facilitates the remedy selected for the waste.
 - C) The placement of any liquid that is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to Section 724.414(f).
 - D) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with Section 724.414(c). Sorbents used to treat free liquids in a CAMU must meet the requirements of Section 724.414(e).
- 4) Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous waste.
- 5) Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.
- b) Establishing a CAMU.

- 1) The Agency must designate a regulated unit (as defined in Section 724.190(a)(2)) as a CAMU or must incorporate a regulated unit into a CAMU, if it determines that the following is true of a regulated unit:
 - A) The regulated unit is closed or closing, meaning it has begun the closure process pursuant to Section 724.213 or 35 Ill. Adm. Code 725.213; and
 - B) Inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.
- 2) The Subpart F, G, and H requirements and the unit-specific requirements of this Part or 35 Ill. Adm. Code 265 that applied to the regulated unit will continue to apply to that portion of the CAMU after incorporation into the CAMU.
- c) The Agency must designate a CAMU that will be used for storage or treatment only in accordance with subsection (f) of this Section. The Agency must designate any other CAMU in accordance with the following requirements:
 - 1) The CAMU must facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
 - 2) Waste management activities associated with the CAMU must not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;
 - 3) The CAMU must include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility;
 - 4) Areas within the CAMU, where wastes remain in place after closure of the CAMU, must be managed and contained so as to minimize future releases, to the extent practicable;
 - 5) The CAMU must expedite the timing of remedial activity implementation, when appropriate and practicable;
 - The CAMU must enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and
 - 7) The CAMU must, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the

CAMU.

- d) The owner or operator must provide sufficient information to enable the Agency to designate a CAMU in accordance with the criteria in this Section. This must include, unless not reasonably available, information on the following:
 - 1) The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal or release);
 - 2) Whether the waste was listed or identified as hazardous at the time of disposal or release; and
 - 3) Whether the disposal or release of the waste occurred before or after the land disposal requirements of 35 Ill. Adm. Code 728 were in effect for the waste listing or characteristic.
- e) The Agency must specify, in the permit or order, requirements for the CAMU to include the following:
 - 1) The areal configuration of the CAMU.
 - 2) Except as provided in subsection (g) of this Section, requirements for CAMU-eligible waste management to include the specification of applicable design, operation, treatment, and closure requirements.
 - 3) Minimum Design Requirements: a CAMU, except as provided in subsection (f) of this Section, into which wastes are placed must be designed in accordance with the following:
 - A) Unless the Agency approves alternative requirements pursuant to subsection (e)(3)(B) of this Section, a CAMU that consists of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this Section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1x10⁻⁷ cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;
 - B) Alternative Requirements. The Agency must approve alternative

requirements if it determines that either of the following is true:

- i) The Agency determines that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the groundwater or surface water at least as effectively as the liner and leachate collection systems in subsection (e)(3)(A) of this Section; or
- ii) The CAMU is to be established in an area with existing significant levels of contamination, and the Agency determines that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.
- 4) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage or treatment only in accordance with subsection (f) of this Section, CAMU-eligible wastes that, absent this Section, would be subject to the treatment requirements of 35 Ill. Adm. Code 728, and that the Agency determines contain principal hazardous constituents must be treated to the standards specified in subsection (e)(4)(C) of this Section.
 - A) Principal hazardous constituents are those constituents that the Agency determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
 - i) In general, the Agency must designate as principal hazardous constituents those contaminants specified in subsection (e)(4)(H) of this Section.
 - BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(i)(A)(1) and (e)(4)(i)(A)(2) as subsections (e)(4)(H)(i) and (e)(4)(H)(ii) of this Section in order to comply with Illinois Administrative Code codification requirements.
 - ii) The Agency must also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to groundwater are substantially higher than cleanup levels or goals at the site. When making such a designation, the Agency must consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.

- iii) The Agency must also designate other constituents as principal hazardous constituents that the Agency determines pose a risk to human health and the environment substantially higher than that posed by the cleanup levels or goals at the site.
- B) In determining which constituents are "principal hazardous constituents," the Agency must consider all constituents that, absent this Section, would be subject to the treatment requirements in 35 Ill. Adm. Code 728.
- C) Waste that the Agency determines contains principal hazardous constituents must meet treatment standards determined in accordance with subsection (e)(4)(D) or (e)(4)(E) of this Section.
- D) Treatment standards for wastes placed in a CAMU.
 - i) For non-metals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by subsection (e)(4)(D)(iii) of this Section.
 - ii) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (e)(4)(D)(iii) of this Section.
 - iii) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in Table U to 35 Ill. Adm. Code 728.
 - iv) For waste exhibiting the hazardous characteristic of ignitability, corrosivity, or reactivity, the waste must also be treated to eliminate these characteristics
 - v) For debris, the debris must be treated in accordance with 35 Ill. Adm. Code 728.145, or by methods or to levels established pursuant to subsections (e)(4)(D)(i) through

- (e)(4)(D)(iv) or subsection (e)(4)(E) of this Section, whichever the Agency determines is appropriate.
- vi) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the Agency must specify a leaching test other than Method 1311 (Toxicity Characteristic Leaching Procedure), in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a) to measure treatment effectiveness, provided the Agency determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.
- E) Adjusted standards. The Board will grant an adjusted standard pursuant to Section 28.1 of the Act to adjust the treatment level or method in subsection (e)(4)(D) of this Section to a higher or lower level, based on one or more of the following factors, as appropriate, if the owner or operator demonstrates that the adjusted level or method would adequately protect human health and the environment, based on consideration of the following:
 - i) The technical impracticability of treatment to the levels or by the methods in subsection (e)(4)(D) of this Section;
 - ii) The levels or methods in subsection (e)(4)(D) of this Section would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated pursuant to State or federal law);
 - iii) The views of the affected local community on the treatment levels or methods in subsection (e)(4)(D) of this Section, as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;
 - iv) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in subsection (e)(4)(D) of this Section;
 - v) The long-term protection offered by the engineering design of the CAMU and related engineering controls under the circumstances set forth in subsection (e)(4)(I) of this Section.

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(v)(E)(1) through (e)(4)(v)(E)(5) as subsections (e)(4)(I)(i) through (e)(4)(I)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.

- F) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.
- G) For the purpose of determining whether wastes placed in a CAMU have met site-specific treatment standards, the Agency must specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents if it determines that the specification is appropriate based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.
- H) Principal hazardous constituents that the Agency must designate are the following:
 - i) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10⁻³; and
 - ii) Non-carcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.
- I) Circumstances relating to the long-term protection offered by engineering design of the CAMU and related engineering controls are the following:
 - i) Where the treatment standards in subsection (e)(4)(D) of this Section are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility;
 - ii) Where cost-effective treatment has been used and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);
 - iii) Where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not

- reasonably available, and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);
- iv) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or
- where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or a laterally expanded CAMU in subsections (e)(3)(A) and (e)(3)(B) of this Section or the CAMU provides substantially equivalent or greater protection.
- 5) Except as provided in subsection (f) of this Section, requirements for groundwater monitoring and corrective action that are sufficient to do the following:
 - A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU;
 - B) Detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and
 - C) Require notification to the Agency and corrective action as necessary to adequately protect human health and the environment for releases to groundwater from the CAMU.
- 6) Except as provided in subsection (f) of this Section, closure and postclosure requirements, as follows:
 - A) Closure of corrective action management units must do the following:
 - i) Minimize the need for further maintenance; and
 - ii) Control, minimize, or eliminate, to the extent necessary toadequately protect human health and the environment, for areas where wastes remain in place, post-closure escape of

hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.

- B) Requirements for closure of a CAMU must include the following, as appropriate and as deemed necessary by the Agency for a given CAMU:
 - i) Requirements for excavation, removal, treatment or containment of wastes; and
 - ii) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.
- C) In establishing specific closure requirements for a CAMU pursuant to this subsection (e), the Agency must consider the following factors:
 - i) CAMU characteristics;
 - ii) Volume of wastes that remain in place after closure;
 - iii) Potential for releases from the CAMU;
 - iv) Physical and chemical characteristics of the waste;
 - v) <u>Hydrological Hydrogeological and other relevant</u> environmental conditions at the facility that may influence the migration of any potential or actual releases; and
 - vi) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.
- D) Cap requirements:
 - i) At final closure of the CAMU, for areas in which wastes will remain with constituent concentrations at or above remedial levels or goals applicable to the site after closure of the CAMU, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the performance criteria listed in subsection (e)(6)(F) of this Section, except as provided in subsection (e)(6)(D)(ii) of this Section:

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(6)(iv)(A)(1) through (e)(6)(iv)(A)(5) as subsections (e)(6)(F)(i) through (e)(6)(F)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.

- ii) The Agency must apply cap requirements that deviate from those prescribed in subsection (e)(6)(D)(i) of this Section if it determines that the modifications are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).
- E) Post-closure requirements as necessary to adequately protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities must be performed to ensure the integrity of any cap, final cover, or other containment system.
- F) The final cover design and performance criteria are as follows:
 - i) Provide long-term minimization of migration of liquids through the closed unit;
 - ii) Function with minimum maintenance:
 - iii) Promote drainage and minimize erosion or abrasion of the cover;
 - iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and
 - v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
- f) A CAMU used for storage or treatment only is a CAMU in which wastes will not remain after closure. Such a CAMU must be designated in accordance with all of the requirements of this Section, except as follows:
 - A CAMU that is used for storage or treatment only and that operates in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i) is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c) and (e)(3) through (e)(6) of this Section.

- 2) A CAMU that is used for storage or treatment only and that does not operate in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i):
 - A) The owner or operator must operate in accordance with a time limit, established by the Agency, that is no longer than necessary to achieve a timely remedy selected for the waste and
 - B) The CAMU is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c), (e)(4), and (6) of this Section.
- g) A CAMU into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at subsection (e)(3)(A) of this Section, caps at subsection (e)(6)(D) of this Section, groundwater monitoring requirements at subsection (e)(5) of this Section or, for treatment or storage-only a CAMU, the design standards at subsection (f) of this Section.
- h) The Agency must provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice must include the rationale for any proposed adjustments pursuant to subsection (e)(4)(E) of this Section to the treatment standards in subsection (e)(4)(D) of this Section.
- i) Notwithstanding any other provision of this Section, the Agency must impose those additional requirements that it determines are necessary to adequately protect human health and the environment.
- j) Incorporation of a CAMU into an existing permit must be approved by the Agency according to the procedures for Agency-initiated permit modifications pursuant to 35 Ill. Adm. Code 703.270 through 703.273, or according to the permit modification procedures of 35 Ill. Adm. Code 703.280 through 703.283.
- k) The designation of a CAMU does not change the Agency's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

(Source: A	nended at 32 Ill. Reg, effective)
Section 724	Ctaging Dilag	
Section 724	Staging Piles	

a) Definition of a staging pile. A staging pile is an accumulation of solid, non-flowing remediation waste (as defined in 35 Ill. Adm. Code 720.110) that is not a containment building and which is used only during remedial operations for temporary storage at a facility. A staging pile must be located within the contiguous

property under the control of the owner or operator where the wastes to be managed in the staging pile originated. Staging piles must be designated by the Agency in accordance with the requirements in this Section.

- 1) For the purposes of this Section, storage includes mixing, sizing, blending, or other similar physical operations as long as they are intended to prepare the wastes for subsequent management or treatment.
- 2) This subsection (a)(2) corresponds with 40 CFR 264.554(a)(2), which USEPA has marked as "reserved." This statement maintains structural consistency with the federal regulations.
- b) Use of a staging pile. An owner or operator may use a staging pile to store hazardous remediation waste (or remediation waste otherwise subject to land disposal restrictions) only if an owner or operator follows the standards and design criteria the Agency has designated for that staging pile. The Agency must designate the staging pile in a permit or, at an interim status facility, in a closure plan or order (consistent with 35 Ill. Adm. Code 703.155(a)(5) and (b)(5)). The Agency must establish conditions in the permit, closure plan, or order that comply with subsections (d) through (k) of this Section.
- c) Information that an owner or operator must submit to gain designation of a staging pile. When seeking a staging pile designation, an owner or operator must provide the following:
 - Sufficient and accurate information to enable the Agency to impose standards and design criteria for the facility's staging pile according to subsections (d) through (k) of this Section;
 - 2) Certification by an independent, a qualified registered professional engineer Professional Engineer of technical data, such as design drawings and specifications, and engineering studies, unless the Agency determines, based on information that an owner or operator provides, that this certification is not necessary to ensure that a staging pile will adequately protect human health and the environment; and
 - 3) Any additional information the Agency determines is necessary to adequately protect human health and the environment.
- d) Performance criteria that a staging pile must satisfy. The Agency must establish the standards and design criteria for the staging pile in the permit, closure plan, or order
 - 1) The standards and design criteria must comply with the following:
 - A) The staging pile must facilitate a reliable, effective, and protective

remedy;

- B) The staging pile must be designed so as to prevent or minimize releases of hazardous wastes and hazardous constituents into the environment, and minimize or adequately control cross-media transfer, as necessary to adequately protect human health and the environment (for example, through the use of liners, covers, or runoff and runon controls, as appropriate); and
- C) The staging pile must not operate for more than two years, except when the Agency grants an operating term extension pursuant to subsection (i) of this Section. An owner or operator must measure the two-year limit or other operating term specified by the Agency in the permit, closure plan, or order from the first time an owner or operator places remediation waste into a staging pile. An owner or operator must maintain a record of the date when it first placed remediation waste into the staging pile for the life of the permit, closure plan, or order, or for three years, whichever is longer.
- 2) In setting the standards and design criteria, the Agency must consider the following factors:
 - A) The length of time the pile will be in operation;
 - B) The volumes of wastes the owner or operator intends to store in the pile;
 - C) The physical and chemical characteristics of the wastes to be stored in the unit;
 - D) The potential for releases from the unit;
 - E) The hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential releases; and
 - F) The potential for human and environmental exposure to potential releases from the unit.
- e) Receipt of ignitable or reactive remediation waste. An owner or operator must not place ignitable or reactive remediation waste in a staging pile unless the following is true:
 - 1) The owner or operator has treated, rendered, or mixed the remediation waste before it placed the waste in the staging pile so that the following is true of the waste:

- A) The remediation waste no longer meets the definition of ignitable or reactive pursuant to 35 Ill. Adm. Code 721.121 or 721.123; and
- B) The owner or operator has complied with Section 724.117(b); or
- 2) The owner or operator manages the remediation waste to protect it from exposure to any material or condition that may cause it to ignite or react.
- f) Managing incompatible remediation wastes in a staging pile. The term "incompatible waste" is defined in 35 Ill. Adm. Code 720.110. An owner or operator must comply with the following requirements for incompatible wastes in staging piles:
 - 1) The owner or operator must not place incompatible remediation wastes in the same staging pile unless an owner or operator has complied with Section 724.117(b);
 - 2) If remediation waste in a staging pile is incompatible with any waste or material stored nearby in containers, other piles, open tanks, or land disposal units (for example, surface impoundments), an owner or operator must separate the incompatible materials, or protect them from one another by using a dike, berm, wall, or other device; and
 - The owner or operator must not pile remediation waste on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to comply with Section 724.117(b).
- g) Staging piles are not subject to land disposal restrictions and federal minimum technological requirements. Placing hazardous remediation wastes into a staging pile does not constitute land disposal of hazardous wastes or create a unit that is subject to the federal minimum technological requirements of section 3004(o) of RCRA, 42 USC 6924(o).
- h) How long an owner or operator may operate a staging pile. The Agency may allow a staging pile to operate for up to two years after hazardous remediation waste is first placed into the pile. An owner or operator must use a staging pile no longer than the length of time designated by the Agency in the permit, closure plan, or order (the "operating term"), except as provided in subsection (i) of this Section.
- i) Receiving an operating extension for a staging pile.
 - 1) The Agency may grant one operating term extension of up to 180 days beyond the operating term limit contained in the permit, closure plan, or order (see subsection (l) of this Section for modification procedures). To

justify the need for an extension, an owner or operator must provide sufficient and accurate information to enable the Agency to determine that the following is true of continued operation of the staging pile:

- A) Continued operation will not pose a threat to human health and the environment; and
- B) Continued operation is necessary to ensure timely and efficient implementation of remedial actions at the facility.
- 2) The Agency must, as a condition of the extension, specify further standards and design criteria in the permit, closure plan, or order, as necessary, to ensure adequate protection of human health and the environment.
- j) The closure requirement for a staging pile located in a previously contaminated area.
 - 1) Within 180 days after the operating term of the staging pile expires, an owner or operator must close a staging pile located in a previously contaminated area of the site by removing or decontaminating all of the following:
 - A) Remediation waste;
 - B) Contaminated containment system components; and
 - C) Structures and equipment contaminated with waste and leachate.
 - 2) An owner or operator must also decontaminate contaminated subsoils in a manner and according to a schedule that the Agency determines will adequately protect human health and the environment.
 - 3) The Agency must include the above requirements in the permit, closure plan, or order in which the staging pile is designated.
- k) The closure requirement for a staging pile located in a previously uncontaminated area.
 - Within 180 days after the operating term of the staging pile expires, an owner or operator must close a staging pile located in an uncontaminated area of the site according to Sections 724.358(a) and 724.211 or according to 35 Ill. Adm. Code 725.358(a) and 725.211.
 - 2) The Agency must include the requirement of this Section stated in subsection (k)(1) in the permit, closure plan, or order in which the staging

pile is designated.

- l) Modifying an existing permit (e.g., a RAP), closure plan, or order to allow the use of a staging pile.
 - 1) To modify a permit, other than a RAP, to incorporate a staging pile or staging pile operating term extension, either of the following must occur:
 - A) The Agency must approve the modification pursuant to the procedures for Agency-initiated permit modifications in 35 Ill. Adm. Code 703.270 through 703.273; or
 - B) An owner or operator must request a Class 2 modification pursuant to 35 Ill. Adm. Code 703.280 through 703.283.
 - 2) To modify a RAP to incorporate a staging pile or staging pile operating term extension, an owner or operator must comply with the RAP modification requirements pursuant to 35 Ill. Adm. Code 703.304(a) and (b).
 - To modify a closure plan to incorporate a staging pile or staging pile operating term extension, an owner or operator must follow the applicable requirements pursuant to Section 724.212(c) or 35 Ill. Adm. Code 725.212(c).
 - 4) To modify an order to incorporate a staging pile or staging pile operating term extension, an owner or operator must follow the terms of the order and the applicable provisions of 35 Ill. Adm. Code 703.155(a)(5) or (b)(5).
- m) Public availability of information about a staging pile. The Agency must document the rationale for designating a staging pile or staging pile operating term extension and make this documentation available to the public.

(Source: Amended at 32 Ill. Reg, e	effective
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SUBPART W: DRIP PADS

Section 724.671 Assessment of Existing Drip Pad Integrity

a) For each existing drip pad, the owner or operator must evaluate the drip pad and determine that whether it meets all of the requirements of this Subpart W, except the requirements for liners and leak detection systems of Section 724.673(b). No later than June 6, 1991, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, a qualified registered professional engineer Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and re-certified annually until all upgrades, repairs or modifications

- necessary to achieve compliance with all of the standards of Section 724.673 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of Section 724.673, except the standards for liners and leak detection systems, specified in Section 724.673(b).
- b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of Section 724.673(b) and submit the plan to the Agency no later than two years before the date that all repairs, upgrades and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 724.673. The plan must be reviewed and certified by an independent a qualified, registered professional engineer Professional Engineer. All upgrades, repairs, and modifications must be completed in accordance with the following:
 - 1) For existing drip pads of known and documentable age, all upgrades, repairs, and modifications must have been completed by June 6, 1993, or when the drip pad has reached 15 years of age, whichever comes later.
 - 2) For existing drip pads for which the age cannot be documented, by June 6, 1999; but, if the age of the facility is greater than seven years, all upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by June 6, 1993, whichever comes later.
 - The owner or operator may petition the Board for an extension of the deadline in subsection (b)(1) or (b)(2) of this Section.
 - A) The owner or operator must file a petition for a RCRA variance, as specified in 35 Ill. Adm. Code 104.
 - B) The Board will grant the petition for extension if it finds the following:
 - i) The drip pad meets all of the requirements of Section 724.673, except those for liners and leak detection systems specified in Section 724.673(b); and
 - ii) That it will continue to adequately protect human health and the environment.
- c) Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the Agency, the as-built drawings for the drip pad, together with a certification by an independent, a qualified registered professional engineer Professional Engineer attesting that the drip pad conforms to the drawings.

d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of Section 724.672(m) or close the drip pad in accordance with Section 724.675.

Source:	Amended at 32 Ill. Reg.	, effective	

Section 724.673 Design and Operating Requirements

- a) Drip pads must fulfill the following:
 - 1) Not be constructed of <u>earthen-non-earthen materials</u>, wood, or asphalt, unless the asphalt is structurally supported;
 - 2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;
 - 3) Have a curb or berm around the perimeter;
 - 4) In addition, the drip pad must fulfill the following:
 - Have a hydraulic conductivity of less than or equal to 1×10^{-7} A) centimeters per second (cm/sec), e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} cm/sec such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to the existing drip pads and those drip pads for which the owner or operator elects to comply with Section 724.672(a) 724.672(b) instead of Section 724.672(b) 724.672(a).
 - B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent a qualified registered professional engineer

 Professional Engineer that attests to the results of the evaluation.

 The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for in subsection (b) of this Section.

- 5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.
 - BOARD NOTE: In judging the structural integrity requirement of this subsection (c), the Agency should generally consider applicable standards established by professional organizations generally recognized by the industry, including ACI 318 (Building Code Requirements for Reinforced Concrete), or ASTM C 94-90 (Standard Specification for Ready-Mixed Concrete), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- b) If an owner or operator elects to comply with Section 724.672(b) <u>724.672(a)</u> instead of Section 724.672(a) <u>724.672(b)</u>, the drip pad must have the following:
 - A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must fulfill the following:
 - A) It must be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation (including stresses from vehicular traffic on the drip pad);
 - B) It must be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
 - C) It must be installed to cover all surrounding earth that could come in contact with the waste or leakage; and
 - 2) A leakage detection system immediately above the liner that is designed, constructed, maintained, and operated to detect leakage from the drip pad. The leakage detection system must fulfill the following:
 - A) It must be constructed of materials that are as follows:

- i) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
- ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and
- B) It must be designed and operated to function without clogging through the scheduled closure of the drip pad; and
- C) It must be designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- A leaking collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.
 - A) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as to allow weekly inspections of the entire drip pad surface without interference of hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and cleaning procedure used in the facility's operating log. The owner or operator must determine if the residues are hazardous, as per 35 Ill. Adm. Code 722.111, and, if so, the owner or operator must manage them under 35 Ill. Adm. Code 721 through 728, and Section 3010 of RCRA.
 - B) The federal rules do not contain a 40 CFR 264.573(b)(3)(B). This subsection (b) is added to conform to Illinois Administrative Code rules.
- c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.
 - BOARD NOTE: See subsection (m) of this Section for remedial action required if deterioration or leakage is detected.
- d) The drip pad and associated collection system must be designed and operated to

- convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.
- e) Unless the drip pad is protected by a structure, as described in Section 724.670(b), the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system.
- f) Unless the drip pad is protected by a structure or cover, as described in Section 724.670(b), the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f) of this Section. The owner or operator must obtain a statement from an independent a qualified registered professional engineer Professional Engineer certifying that the drip pad design meets the requirements of this Section.
- h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator must document, in the facility's operating log, the date and time of each cleaning and the cleaning procedure used.
- j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad, in accordance with this Section, following treatment.
- Collection and holding units associated with run-on and run-off control systems
 must be emptied or otherwise managed as soon as possible after storms to
 maintain design capacity of the system.
- m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that could lead to or has caused a release of

hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:

- 1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must do the following:
 - A) Enter a record of the discovery in the facility operating log;
 - B) Immediately remove from service the portion of the drip pad affected by the condition;
 - C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
 - D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.
- The Agency must do the following: review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and elean up cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
- 3) Upon completing all repairs and clean up, the owner or operator must notify the Agency in writing and provide a certification, signed by an independent, qualified registered professional engineer, that the repairs and elean up cleanup have been completed according to the written plan submitted in accordance with subsection (m)(1)(D) of this Section.
- n) If a permit is necessary, the Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.
- o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(Source:	Amended at 32 Ill. Reg.	, effective	
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Section 724.674 Inspections

- a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified by a qualified Professional Engineer as meeting the requirements of set forth in Section 724.673 by an independent qualified registered professional engineer. The certification must be maintained at the facility as part of the facility operating record. After installation liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.
- b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
 - 1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;
 - 2) The presence of leakage in and proper functioning of leak detection system.
 - 3) Deterioration or cracking of the drip pad surface.

BOARD NOTE: See Section 724.672(m) for remedial action required if deterioration or leakage is detected.

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SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 724.936 Reporting Requirements

- a) A semiannual report must be submitted by owners and operators subject to the requirements of this Subpart AA to the Agency by dates specified in the RCRA permit. The report must include the following information:
 - 1) The USEPA identification number (35 III. Adm. Code 722.112), name, and address of the facility.
 - 2) For each month during the semiannual reporting period the following:
 - A) Dates when the control device did the following:
 - i) Exceeded or operated outside of the design specifications, as defined in Section 724.935(c)(4); and

- ii) Such exceedences exceedances were not corrected within 24 hours, or that a flare operated with visible emissions, as defined by Method 22 monitoring;
- B) The duration and cause of each <u>exceedence exceedance</u> or visible emissions; and
- C) Any corrective measures taken.
- b) If during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications, as defined in Section 724.935(c)(4), for more than 24 hours or a flare does not operate with visible emissions, as defined in Section 724.933(d), a report to the Agency is not required.

(Source:	Amended at 32 Ill. Reg.	, effective	,

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 724.961 Alternative Percentage Standard for Valves

- a) An owner or operator subject to the requirements of Section 724.957 may elect to have all valves within a hazardous waste management unit comply with an alternative standard that allows no greater than two percent of the valves to leak.
- b) The following requirements must be met if an owner or operator decides to comply with the alternative standard of allowing two percent of valves to leak:
 - 1) An owner or operator must notify the Agency that the owner or operator has elected to comply with the requirements of this Section.
 - 21) A performance test as specified in subsection (c) of this Section must be conducted initially upon designation, annually and other times specified in the RCRA permit.
 - 32) If a valve leak is detected it must be repaired in accordance with Section 724.957(d) and (e).
- c) Performance tests must be conducted in the following manner:
 - 1) All valves subject to the requirements in Section 724.957 within the hazardous waste management unit must be monitored within one week by the methods specified in Section 724.963(b).
 - 2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

- The leak percentage must be determined by dividing the number of valves subject to the requirements in Section 724.957 for which leaks are detected by the total number of valves subject to the requirements in Section 724.957 within the hazardous waste management unit.
- d) If an owner or operator decides to comply with this Section no longer, the owner or operator must notify the Agency in writing that the work practice standard described in Section 724.957(a) through (e) will be followed.

(Source: Amended at	32 Ill. Reg, effective
Section 724.962	Skip Period Alternative for Valves

- a) Election. An owner or operator subject to the requirements of Section 724.957 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3) of this Section.
- 4<u>a</u>) An owner or operator subject to the requirements of Section 724.957 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3) of this Section.
 - 2) An owner or operator must notify the Agency before implementing one of the alternative work practices.
- b) Reduced Monitoring.
 - 1) An owner or operator must comply with the requirements for valves, as described in Section 724.957, except as described in subsections (b)(2) and (b)(3).
 - After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every six months) for the valves subject to the requirements in Section 724.957.
 - After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every year) for the valves subject to the requirements in Section 724.957.
 - 4) If the percentage of valves leaking is greater than 2 percent, the owner or operator must monitor monthly in compliance with the requirements in

Section 724.957, but may again elect to use this Section after meeting the requirements of Section 724.957(c)(1).

(Source:	Amended	at 32 Ill	. Reg	, effective)
Section 72	24.965	Repo	rting Requ	irements	
a)	requ	irements	of this Su	-	hers and operators subject to the by dates specified in the RCRA information:
	1)			entification number (35 labels) the facility.	Ill. Adm. Code 722.112), name,
	2)	For e	ach month	during the semiannual i	reporting period, the following:
		A)	-	±	mber of each valve for which a ed in Section 724.957(d).
		B)	-	±	mber of each pump for which a ed in Section 724.952(c) and (d)(6).
		C)		-	mber of each compressor for s required in Section 724.953(g),
	3)			ous waste management annual reporting period.	unit shutdowns that occurred
	4)	contr 724.9 speci contr corre	ol device i 954, or 724 fications, a ol device r cted within	nstalled as required by S .955, exceeded or opera as defined in Section 724 monitoring required by S	reporting period, dates when the Sections 724.952, 724.953, ted outside of the design 4.964(e) and as indicated by the Section 724.960 and was not and cause of each-exceedence es taken.
b)	com (d)(e oper	pressors 6), and 7 ate outsi	are repaire 24.953(g), de of the d	ed as required in Section respectively, and the co	as from valves, pumps, and as 724.957(d), 724.952(c) and antrol device does not exceed or defined in Section 724.964(e) for ot required.
(Source:	Amended	at 32 III	. Reg	, effective)

SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1100 Applicability

The requirements of this Subpart DD apply to owners or operators who store or treat hazardous waste in units designed and operated under Section 724.1101. These provisions became effective on February 18, 1993. The owner or operator is not subject to the definition of land disposal in 35 Ill. Adm. Code 728.102 provided that the unit fulfills the following:

- a) It is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to the following:
 - 1) pressure gradients;
 - 2) settlement, compression, or uplift;
 - 3) physical contact with the hazardous wastes to which they are exposed;
 - 4) climatic conditions; or
 - 5) the stresses of daily operation including the movement of heavy equipment within the unit and contact of such equipment within the unit and contact of such equipment with containment walls.
- b) It has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit.
- c) If used to manage liquids, the unit has the following:
 - 1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;
 - 2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and
 - A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under Section 724.1101(b)(4);
- d) It has controls sufficient to permit fugitive dust emissions to meet the no visible emission standard in Section 724.1101(c)(1)(A); and

e)	It is designed and operated to ensure containment and prevent the tracking of
	materials from the unit by personnel or equipment.

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1101 Design and Operating Standards

- a) All containment buildings must comply with the following design and operating standards:
 - 1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g. precipitation, wind, run on) and to assure containment of managed wastes.
 - 2) The floor and containment walls of the unit, including the secondary containment system if required under subsection (b) of this Section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The containment building must meet the structural integrity requirements established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM). If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for lightweight doors and windows that meet the following criteria:
 - A) They provide an effective barrier against fugitive dust emissions under subsection (c)(1)(C) of this Section; and
 - B) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.
 - 3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

- 4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.
- b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include the following:
 - 1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).
 - 2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building, as follows:
 - A) The primary barrier must be sloped to drain liquids to the associated collection system; and
 - B) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.
 - A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
 - A) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, as follows:
 - i) It is constructed with a bottom slope of 1 percent or more; and
 - ii) It is constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more
 - B) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the

- release of liquids, wet materials, or liquid aerosols to other portions of the building.
- C) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Section—724.193(d)(1)—724.193(e)(1). In addition, the containment building must meet the requirements of Section 724.193(b) and Sections 724.193(c)(1) and (c)(2) to be an acceptable secondary containment system for a tank.)
- 4) For existing units other than 90-day generator units, USEPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart DD. In making this demonstration, the owner or operator must have done the following:
 - A) Provided written notice to USEPA of their request by Nov. 16, 1992. This notification must have described the unit and its operating practices with specific reference to the performance of existing systems, and specific plans for retrofitting the unit with secondary containment;
 - B) Responded to any comments from USEPA on these plans within 30 days; and
 - C) Fulfilled the terms of the revised plans, if such plans are approved by USEPA.
- c) An owner or operator of a containment building must do the following:
 - 1) Use It must use controls and practice to ensure containment of the hazardous waste within the unit, and at a minimum:
 - A) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be release from the primary barrier;
 - B) Maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any

containment wall is not exceeded;

- C) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and
- D) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator, etc.) must be operated and maintained with sound air pollution control practices (see 40 CFR 60 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.

BOARD NOTE: At 40 CFR 264.1101(c)(1)(iv) (2005), USEPA cites "40 CFR part 60, subpart 292." At 57 Fed. Reg. 37217 (Aug. 18, 1992), USEPA repeats this citation in the preamble discussion of adoption of the rules. No such provision exists in the Code of Federal Regulations. While section 40 CFR 60.292 of the federal regulations pertains to control of fugitive dust emissions, that provision is limited in its application to glass melting furnaces. The Board has chosen to use the general citation: "40 CFR 60."

- Obtain-It must obtain and keep on site a certification by a qualified registered professional engineer (PE) Professional Engineer that the containment building design meets the requirements of subsections (a) through (c) of this Section.—For units placed into operation prior to February 18, 1993, this certification must have been placed in the facility's operating record (on-site files for generators that are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification has been required prior to operation of the unit.
- Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, <u>it</u> must repair the condition promptly. <u>In addition</u>, <u>however the following is required</u>, in accordance with the following procedures:

- A) Upon detection of a condition that has <u>eaused led</u> to a release of hazardous wastes (e.g., upon detection of leakage from the primary barrier) the owner or operator must do the following:
 - i) Enter a record of the discovery in the facility operating record;
 - ii) Immediately remove the portion of the containment building affected by the condition from service;
 - iii) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
 - iv) Within seven days after the discovery of the condition, notify the Agency in writing of the condition, and within 14 working days, provide a written notice to the Agency with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.
- B) The Agency must review the information submitted, make a determination in accordance with Section 34 of the Act, regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
- C) Upon completing all repairs and cleanup the owner and operator must notify the Agency in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with subsection (c)(3)(A)(iv) of this Section.
- 4) Inspect It must inspect and record in the facility's operating record, at least once every seven days, except for the owner or operator of a Performance Track member facility, which must inspect the record at least once each month after approval by the Agency, data gathered from monitoring equipment and leak detection equipment, as well as the containment building and the area immediately surrounding the containment building, to detect signs of releases of hazardous waste. To apply for a reduced monitoring frequency, the owner or operator of a Performance Track member facility must follow the procedures described in Section 724.115(b)(5).

- d) For a containment buildings building that contain both areas both with and without secondary containment, the owner or operator must do the following:
 - 1) Design and operate each area in accordance with the requirements enumerated in subsections (a) through (c) of this Section;
 - 2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and
 - 3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.
- e) Notwithstanding any other provision of this Subpart DD, the Agency must, in writing, not require allow the use of alternatives to the requirements for secondary containment for a permitted containment building where the Agency has determined that the facility owner or operator demonstrates has adequately demonstrated that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

(Source: Amended at 32 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

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 14034, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11869, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1085, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14069, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6044, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338,

effective Nov. 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 III. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 III. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective Nov. 13, 1989; amended in R90-2 at 14 III. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective Sept. 25, 1990; amended in R90-11 at 15 Ill. Reg. 9398, effective June 17, 1991; amended in R91-1 at 15 III. Reg. 14534, effective October 1, 1991; amended in R91-13 at 16 III. Reg. 9578, effective June 9, 1992; amended in R92-1 at 16 III. Reg. 17672, effective Nov. 6, 1992; amended in R92-10 at 17 Ill. Reg. 5681, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20620, effective Nov. 22, 1993; amended in R93-16 at 18 Ill. Reg. 6771, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12190, effective July 29, 1994; amended in R94-17 at 18 III. Reg. 17548, effective Nov. 23, 1994; amended in R95-6 at 19 III. Reg. 9566, effective June 27, 1995; amended in R95-20 at 20 III. Reg. 11078, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 III. Reg. 369, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7620, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17620, effective Sept. 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1850, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9168, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1076, effective January 6, 2000; amended in R00-13 at 24 III. Reg. 9575, effective June 20, 2000; amended in R03-7 at 27 III. Reg. 4187, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6028, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6389, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3460, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 1031, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. _____, effective _____.

SUBPART B: GENERAL FACILITY STANDARDS

Section 725.115 General Inspection Requirements

- a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors and discharges that may be causing--or may lead to--the conditions listed below. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.
 - 1) Release of hazardous waste constituents to the environment, or
 - 2) A threat to human health.
- b) Written schedule.
 - The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

- 2) The owner or operator must keep this schedule at the facility.
- The schedule must identify the types of problems (e.g., malfunctions or deterioration) that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
- The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use, except for the owner or operator of a Performance Track member facility, which must inspect at least once each month after approval by the Agency, as described in subsection (b)(5) of this Section. At a minimum, the inspection schedule must include the items and frequencies called for in Sections 725.274, 725.293, 725.295, 725.326, 725.360, 725.378, 725.404, 725.447, 725.477, 725.503, 725.933, 725.952, 725.953, 725.958, and 725.984 through 725.990, where applicable.
- 5) The owner or operator of a Performance Track member facility that chooses to reduce its inspection frequency must fulfill the following requirements:
 - A) It must submit an application to the Agency. The application must identify its facility as a member of the National Environmental Performance Track Program, and it must identify the management units for reduced inspections and the proposed frequency of inspections. Inspections pursuant to this subsection (b)(5) must be conducted at least once each month.
 - B) Within 60 days, the Agency must notify the owner or operator of the Performance Track member facility, in writing, if the application submitted pursuant to subsection (b)(5)(A) of this Section is approved, denied, or if an extension to the 60-day deadline is needed. This notice must be placed in the facility's operating record. The owner or operator of the Performance Track member facility should consider the application approved if the Agency does not either deny the application or notify the owner or operator of the Performance Track member facility of an extension to the 60-day deadline. In these situations, the owner or operator of the Performance Track member facility must adhere to the revised inspection schedule outlined in its application and maintain a copy of the application in the facility's operating record.
 - C) Any owner or operator of a Performance Track member facility

that discontinues its membership or which USEPA terminates from the program must immediately notify the Agency of its change in status. The facility owner or operator must place in its operating record a dated copy of this notification and revert back to the non-Performance Track inspection frequencies within seven calendar days.

- c) The owner or operator must remedy any deterioration or malfunction of equipment or structure that the inspection reveals on a schedule that ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
- d) The owner or operator must record inspections in an inspection log or summary. The owner or operator must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date, and nature of any repairs or other remedial actions.

(Source: Amended a	t 32 Ill. Reg	_, effective _)
Section 725.116	Personnel Training		

- a) Personnel training program.
 - 1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this part. The owner or operator must ensure that this program includes all the elements described in the document required under subsection (d)(3) of this Section.
 - This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
 - At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including the following where applicable:
 - A) Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment;

- B) Key parameters for automatic waste feed cut-off systems;
- C) Communications or alarm systems;
- D) Response to fires or explosions;
- E) Response to groundwater contamination incidents; and
- F) Shutdown of operations.
- 4) For facility employees that receive emergency response training pursuant to the federal Occupational Safety and Health Administration (OSHA) regulations at 29 CFR 1910.120(p)(8) and 1910.120(q), the facility is not required to provide separate emergency response training pursuant to this section, provided that the overall facility OSHA emergency response training meets all the requirements of this Section.
- b) Facility personnel must successfully complete the program required in subsection (a) of this Section upon the effective date of these regulations or six months after the date of their employment or assignment to a facility or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of subsection (a) of this Section.
- c) Facility personnel must take part in an annual review of the initial training required in subsection (a) of this Section.
- d) The owner or operator must maintain the following documents and records at the facility:
 - 1) The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job;
 - A written job description for each position listed under subsection (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications and duties of facility personnel assigned to each position;
 - A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subsection (d)(1) of this Section;
 - 4) Records that document that the training or job experience required under subsections (a), (b), and (c) of this Section has been given to and

completed by facility personnel.

e) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

(Source: Amended at	32 Ill. Reg, effective)
Section 725.119	Construction Quality Assurance Program	

- a) CQA program.
 - 1) A construction quality assurance (CQA) program is required for all surface impoundment, waste pile and landfill units that are required to comply with Sections 725.321(a), 725.354, and 725.401(a). The program must ensure that the constructed unit meets or exceeds all design criteria and specifications in this Part. The program must be developed and implemented under the direction of a CQA officer that is a registered professional engineer.
 - 2) The CQA program must address the following physical components, where applicable:
 - A) Foundations;
 - B) Dikes:
 - C) Low-permeability soil liners;
 - D) Geomembranes (flexible membrane liners);
 - E) Leachate collection and removal systems and leak detection systems; and
 - F) Final cover systems.
- b) Written CQA plan. Before construction begins on a unit subject to the CQA program under subsection (a) of this Section, the owner or operator must develop a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include the following:
 - 1) Identification of applicable units and a description of how they will be constructed.

- 2) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.
- A description of inspection and sampling activities for all unit components identified in subsection (a)(2) of this Section, including observations and tests that will be used before, during and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under Section 725.173.
- c) Contents of program.
 - 1) The CQA program must include observations, inspections, tests and measurements sufficient to ensure the following:
 - A) Structural stability and integrity of all components of the unit identified in subsection (a)(2) of this Section;
 - B) Proper construction of all components of the liners, leachate collection and removal system, leak detection system, and final cover system, according to permit specifications and good engineering practices, and proper installation of all components (e.g., pipes) according to design specifications;
 - C) Conformity of all materials used with design and other material specifications under 35 Ill. Adm. Code 724.321, 724.351, and 724.401.
 - The CQA program must include test fills for compacted soil liners, using the same compaction methods as in the full-scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of 35 Ill. Adm. Code 724.321(c)(1), 724.351(c)(1), or 724.401(c)(1) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The test fill requirement is waived where data are sufficient to show that a constructed soil liner meets the hydraulic conductivity requirements of 35 Ill. Adm. Code 724.321(c)(1), 724.354(c)(1), 724.354(c)(1), or 724.401(c)(1) in the field.
- d) Certification. The owner or operator of units subject to this Section must submit to the Agency by certified mail or hand delivery, at least 30 days prior to receiving waste, a certification signed by the CQA officer that the CQA plan has been successfully carried out and that the unit meets the requirements of Sections

725.321(a), 725.354, or 725.401(a). The owner or operator may receive waste in the unit after 30 days from the Agency's receipt of the CQA certification unless the Agency determines in writing that the construction is not acceptable, or extends the review period for a maximum of 30 more days, or seeks additional information from the owner or operator during this period. Documentation supporting the CQA officer's certification must be furnished to the Agency upon request.

e) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act [415 ILCS 5/40].

Source:	Amended at 32 III. Reg.	, effective	
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SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 725.152 Content of Contingency Plan

- a) The contingency plan must describe the actions facility personnel must take to comply with Sections 725.151 and 725.156 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.
- b) If the owner or operator has already prepared a federal Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with 40 CFR Part 112 or 300, or some other emergency or contingency plan, it needs only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part. The owner or operator may develop one contingency plan that meets all regulatory requirements. USEPA has recommended that the plan be based on the National Response Team's Integrated Contingency Plan Guidance (One Plan). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

BOARD NOTE: The federal One Plan guidance appeared in the Federal Register at 61 Fed. Reg. 28642 (June 5, 1996), and was corrected at 61 Fed. Reg. 31103 (June 19, 1996). USEPA, Office of Solid Waste and Emergency Response, Chemical Emergency Preparedness and Prevention Office, has made these documents available on-line for examination and download at yosemite.epa.gov/oswer/Ceppoweb.nsf/content/serc-lepc-publications.htm.

- c) The plan must describe arrangements agreed to by local police department, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to Section 725.137.
- d) The plan must list names, addresses, and phone numbers (office and home) of all

persons qualified to act as emergency coordinator (see Section 725.155), and this list must be kept up to date. Where more than one person is listed one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

- e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment) where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.
- f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(Source: Amended at	32 Ill. Reg, effective)
Section 725.156	Emergency Procedures	

- a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately do the following:
 - 1) He or she must activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - 2) He or she must notify appropriate State or local agencies with designated response roles if their help is needed.
- b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real areal extent of any released materials. He or she may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosions).
- d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the

facility, he or she must report his findings as follows:

- 1) If his assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. He or she must be available to help appropriate officials decide whether local areas should be evacuated; and
- 2) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under federal 40 CFR 300), or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following:
 - A) The name and telephone number of reporter;
 - B) The name and address of facility;
 - C) The time and type of incident (e.g., release, fire, etc.);
 - D) The name and quantity of materials involved, to the extent known;
 - E) The extent of injuries, if any; and
 - F) The possible hazards to human health or the environment outside the facility.
- e) During an emergency the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.
- f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility.

BOARD NOTE: Unless the owner or operator can demonstrate in accordance with 35 Ill. Adm. Code 721.103(d) or (e) that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm.

Code 722, 723, and 725.

- h) The emergency coordinator must ensure that, in the affected areas of the facility, the following occur:
 - 1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
 - 2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- i) The owner or operator must notify the Agency and other appropriate State and local authorities that the facility is in compliance with subsection (h) of this Section before operations are resumed in the affected areas of the facility.
- <u>ji</u>) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, it must submit a written report on the incident to the Agency. The report must include the following information:
 - 1) The name, address, and telephone number of the owner or operator;
 - 2) The name, address, and telephone number of the facility;
 - 3) The date, time, and type of incident (e.g., fire, explosion, etc.);
 - 4) The name and quantity of materials involved;
 - 5) The extent of injuries, if any;
 - 6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
 - 7) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

Section 725.171 Use of Manifest System

- a) Receipt of manifested hazardous waste.
 - 1) The following requirements apply until Sept. 5, 2006: If a facility receives hazardous waste accompanied by a manifest, the owner or

operator or its agent must do each of the following:

- A) It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
- B) It must note any significant discrepancies in the manifest, as defined in Section 725.172(a), on each copy of the manifest;

BOARD NOTE: An owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the manifest and giving it to the transporter. Section 725.172(b), however, requires the owner or operator to report any unreconciled discrepancy discovered during later analysis.

- C) It must immediately give the transporter at least one copy of the signed manifest;
- D) It must send a copy of the manifest to the generator and the Agency within 30 days of the date of delivery; and
- E) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.
- 2) The following requirements apply effective Sept. 5, 2006:
- A1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator, or its agent must sign and date the manifest, as indicated in subsection (a)(2)(B) of this Section, to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- <u>B2</u>) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:
 - iA) It must sign and date, by hand, each copy of the manifest;
 - $\frac{\text{HB}}{\text{B}}$) It must note any discrepancies (as defined in Section 725.172(b)) on each copy of the manifest;
 - iiiC) It must immediately give the transporter at least one copy of the manifest;
 - <u>ivD</u>) It must send a copy of the manifest to the generator within 30 days

after delivery; and

- $\forall \underline{E}$) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.
- G3) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within 30 days after delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.

BOARD NOTE: Subsection (a)(1) of this Section corresponds with 40 CFR 265.71(a) (2004), effective until Sept. 5, 2006. Subsection (a)(2) of this Section corresponds with 40 CFR 265.71(a) (2005), effective Sept. 5, 2006.

- b) If a facility receives from a rail or water (bulk shipment) transporter hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification, and signatures), the owner or operator or its agent must do each of the following:
 - 1) It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;
 - 2) It must note any significant discrepancies, as defined in Section 725.172(a), in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;
 - BOARD NOTE: The owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the shipping paper and giving it to the transporter. Section 725.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.
 - 3) It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);
 - 4) Forwarding copies of the manifest.
 - A) Until Sept. 5, 2006: The facility owner or operator must send a copy of the signed and dated manifest to the generator and to the Agency within 30 days after the delivery; however, if the manifest has not been received within 30 days after delivery, the owner or

operator, or its agent, must send a copy of the shipping paper signed and dated to the generator; or

<u>B4</u>) <u>Effective Sept. 5, 2006:</u> The owner or operator must send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within 30 days after delivery) to the generator within 30 days after the delivery; and

BOARD NOTE: 35 III. Adm. Code 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment). Subsection (b)(4)(A) is derived from 40 CFR 265.74(b)(4) (2004), effective until Sept. 5, 2006. Subsection (b)(4)(B) is derived from 40 CFR 265.74(b)(4) (2005), effective Sept. 5, 2006.

- 5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.
- c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of 35 Ill. Adm. Code 722.134 apply only to owners or operators that are shipping hazardous waste which they generated at that facility.

d) Within three working days of the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier; to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460; to the Bureau of Land, Division of Land Pollution Control, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(Source: Amended	d at 32 Ill. Reg, effective)
Section 725.172	Manifest Discrepancies
a) The	following requirements apply until Sept. 5, 2005:
1) -	Manifest discrepancies are differences between the quantity or type of

hazardous waste designated on the manifest or shipping paper and the quantity or type of hazardous waste a facility actually receives.

- 2) Significant discrepancies in quantity are defined as follows:
 - A) For bulk waste, variations greater than 10 percent in weight, and
 - B) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload.
- Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid or toxic constituents not reported on the manifest or shipping paper.
- 4) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it and a copy of the manifest or shipping paper at issue.
- b) The following requirements apply effective Sept. 5, 2005:
- 4<u>a</u>) "Manifest discrepancies" are defined as any one of the following:
 - A1) Significant differences (as defined by subsection (b)(2) of this Section) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
 - <u>B2</u>) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or
 - Container residues, which are residues that exceed the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b).
- 2b) "Significant differences in quantity" are defined as the appropriate of the following: for bulk waste, variations greater than 10 percent in weight; or, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. "Significant differences in type" are defined as obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or as toxic constituents not reported on the manifest or shipping paper.

- <u>3c</u>) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- 4<u>d</u>) Rejection of hazardous waste.
 - A1) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within 60 days after the rejection or the container residue identification.
 - B2) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the waste to the first transporter designated on the manifest prepared under subsection (b)(5)(e) or (b)(6)(f) of this Section.
- Except as provided in subsection (b)(5)(G) (e)(7) of this Section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions set forth in subsections (e)(1) through (e)(6) of this Section:
 - A1) Write the generator's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.
 - B2) Write the name of the alternate designated facility and the facility's USEPA identification number in the designated facility block (Item 8) of the new manifest.
 - Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.

- D4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).
- E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
- <u>F6</u>) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- G7) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(5)(A) (e)(1) through (b)(5)(F) (e)(6) of this Section.
- Except as provided in subsection (b)(6)(G) (f)(7) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following instructions set forth in subsections (f)(1) through (f)(6) of this Section:
 - A1) Write the facility's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.
 - <u>B2</u>) Write the name of the initial generator and the generator's USEPA identification number in the designated facility block (Item 8) of the new manifest.
 - Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
 - D4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).

- E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
- F6) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- G7) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections (b)(6)(A) (f)(1) through (b)(6)(F) (f)(6) of this Section.
- If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

BOARD NOTE: Subsection (a) is derived from 40 CFR 265.72 (2004), effective until Sept. 5, 2006. Subsection (b) is derived from 40 CFR 265.72 (2005), effective Sept. 5, 2006.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 725.173 Operating Record

- a) The owner or operator must 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 for three years unless otherwise provided as follows:
 - 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 to this Part. This information

must be maintained in the operating record until closure of the facility;

- 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 that shows 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. This information must be maintained in the operating record until closure of the facility;
 - BOARD NOTE: See Sections 725.219, 725.379, and 725.409 for related requirements.
- 3) Records and results of waste analysis, waste determinations, and trial tests performed, as specified in Sections 725.113, 725.300, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475, 725.502, 725.934, 725.963, and 725.984 and 35 III. 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);
- Records and results of inspections, as required by Section 725.115(d) (except these data need be kept only three years);
- Monitoring, testing, or analytical data, where required by Subpart F of this Part or Sections 725.119, 725.190, 725.194, 725.291, 725.293, 725.295, 725.322, 725.323, 725.324, 725.326, 725.355, 725.359, 725.360, 725.376, 725.378, 725.380(d)(1), 725.402 through, 725.404, 725.447, 725.477, 725.934(c) through (f), 725.935, 725.963(d) through (i), 725.964, and 725.1083 through 725.990. Maintain in the operating record for three years, except for records and results pertaining to ground-water monitoring and cleanup, and response action plans for surface impoundments, waste piles, and landfills, which must be maintained in the operating record until closure of the facility;
 - 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 must be maintained in the operating record until closure of the facility;
- 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). All of this information must be maintained in the operating record until closure of the facility;

- 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;
- 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;
- 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 728.107 or 728.108;
- 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.
- Monitoring, testing or analytical data, and corrective action, where required by Sections 725.190 and 725.193(d)(2) and (d)(5), and the certification, as required by Section 725.196(f), must be maintained in the operating record until closure of the facility.

(Source: Amended at	32 Ill. Reg	, effective)
Section 725.176	Unmanifested W	/aste Report	

a) The following requirements apply until Sept. 5, 2005: If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest or without an accompanying shipping paper,

as described in 35 Ill. Adm. Code 723.120(e)(2), and, if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 721.105, then the owner or operator must prepare and submit a single copy of a report to the Agency within 15 days after receiving the waste. The unmanifested waste report must be submitted on USEPA form 8700-13B. Such report must be designated "Unmanifested Waste Report" and must include the following information:

- 1) The USEPA identification number, name, and address of the facility;
- 2) The date the facility received the waste;
- The USEPA identification number, name, and address of the generator and the transporter, if available;
- 4) A description and the quantity of each unmanifested hazardous waste the facility received;
- 5) The method of treatment, storage, or disposal for each hazardous waste;
- 6) The certification signed by the owner or operator of the facility or its authorized representative; and
- 7) A brief explanation of why the waste was unmanifested, if known.
- ba) The following requirements apply effective Sept. 5, 2005:—If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, as described by 35 Ill. Adm. Code 723.120(e), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 260 through 265, then the owner or operator must prepare and submit a letter to the Agency within 15 days after receiving the waste. The unmanifested waste report must contain the following information:
 - 1) The USEPA identification number, name, and address of the facility;
 - 2) The date the facility received the waste;
 - The USEPA identification number, name, and address of the generator and the transporter, if available;
 - 4) A description and the quantity of each unmanifested hazardous waste the facility received;
 - 5) The method of treatment, storage, or disposal for each hazardous waste;
 - 6) The certification signed by the owner or operator of the facility or its

authorized representative; and

- 7) A brief explanation of why the waste was unmanifested, if known.
- b) This subsection (b) corresponds with 40 CFR 265.76(b), which USEPA has marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

BOARD NOTE: Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility received unmanifested hazardous waste, USEPA has suggested that the owner or operator obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement. Subsection (a) is derived from 40 CFR 265.76 (2004), effective until Sept. 5, 2006. Subsection (b) is derived from 40 CFR 265.76 (2005), effective Sept. 5, 2006.

(Source: Amended at 32 Ill. Reg	, effective)
SUBPART F:	GROUNDWATER MONITORING	ļ

Section 725.190 Applicability

- a) The owner or operator of a surface impoundment, landfill, or land treatment facility that is used to manage hazardous waste must implement a groundwater monitoring program capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility, except as Section 725.101 and subsection (c) of this Section provide otherwise.
- b) Except as subsections (c) and (d) of this Section provide otherwise, the owner or operator must install, operate, and maintain a groundwater monitoring system that meets the requirements of Section 725.191 and must comply with Sections 725.192 through 725.194. This groundwater monitoring program must be carried out during the active life of the facility and for disposal facilities during the post-closure care period as well.
- c) All or part of the groundwater monitoring requirements of this Subpart F may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial, or agricultural) or to surface water. This demonstration must be in writing and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and must establish the following:
 - 1) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer by an evaluation of the following information:

- A) A water balance of precipitation, evapotranspiration, runoff, and infiltration; and
- B) Unsaturated zone characteristics (i.e., geologic materials, physical properties, and depth to ground water); and
- 2) The potential for hazardous waste or hazardous waste constituents that enter the uppermost aquifer to migrate to a water supply well or surface water by an evaluation of the following information:
 - A) Saturated zone characteristics (i.e., geologic materials, physical properties, and rate of groundwater flow); and
 - B) The proximity of the facility to water supply wells or surface water.
- d) If an owner or operator assumes (or knows) that groundwater monitoring of indicator parameters in accordance with Sections 725.191 and 725.192 would show statistically significant increases (or decreases in the case of pH) when evaluated pursuant to Section 725.193(b), it may install, operate, and maintain an alternate groundwater monitoring system (other than the one described in Sections 725.191 and 725.192). If the owner or operator decides to use an alternate groundwater monitoring system it must have done as follows:
 - By Nov. 19, 1981, the <u>The</u> owner or operator must have submitted to the <u>USEPA Region 5-develop</u> a specific plan, certified by a qualified geologist or geotechnical engineer, that satisfies the requirements of federal 40 CFR 265.93(d)(3) for an alternate groundwater monitoring system. <u>This plan is to be placed in the facility's operating record and maintained until closure of the facility;</u>
 - 2) By Nov. 19, 1981, the The owner or operator must have initiated the determinations specified in federal 40 CFR 265.93(d)(4);
 - The owner or operator must have prepared and submitted prepare a written report in accordance with Section 725.193(d)(5) and place it in the facility's operating record and maintain until closure of the facility;
 - 4) The owner or operator must continue to make the determinations specified in Section 725.193(d)(4) on a quarterly basis until final closure of the facility; and
 - 5) The owner or operator must comply with the recordkeeping and reporting requirements in Section 725.194(b).

- e) The groundwater monitoring requirements of this Subpart F may be waived with respect to any surface impoundment of which the following is true:
 - The impoundment is used to neutralize wastes that are hazardous solely because they exhibit the corrosivity characteristic pursuant to 35 Ill. Adm. Code 721.122 or which are listed as hazardous wastes in Subpart D of 35 Ill. Adm. Code 721 only for this reason; and
 - 2) The impoundment contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstration must establish, based upon consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity characteristic before they can migrate out of the impoundment. The demonstration must be in writing and must be certified by a qualified professional.
- f) A permit or enforceable document can contain alternative requirements for groundwater monitoring that replace all or part of the requirements of this Subpart F applicable to a regulated unit (as defined in 35 Ill. Adm. Code 724.190), as provided pursuant to 35 Ill. Adm. Code 703.161, where the Board has determined by an adjusted standard granted pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104 the following:
 - 1) The regulated unit is situated among solid waste management units (or areas of concern), a release has occurred, and both the regulated unit and one or more solid waste management units (or areas of concern) are likely to have contributed to the release; and
 - 2) It is not necessary to apply the groundwater monitoring requirements of this Subpart F because the alternative requirements will adequately protect human health and the environment. The alternative standards for the regulated unit must meet the requirements of 35 Ill. Adm. Code 724.201(a).

(Source: Amended at	at 32 Ill. Reg, effective)
Section 725.193	Preparation, Evaluation, and Response	

- a) By no later than Nov. 19, 1981, the owner or operator must have prepared an outline of a groundwater quality assessment program. The outline must describe a more comprehensive groundwater monitoring program (than that described in Sections 725.191 and 725.192) capable of determining each of the following:
 - 1) Whether hazardous waste or hazardous waste constituents have entered the groundwater;

- 2) The rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater; and
- 3) The concentrations of hazardous waste or hazardous waste constituents in the groundwater.
- b) For each indicator parameter specified in Section 725.192(b)(3), the owner or operator must calculate the arithmetic mean and variance, based on at least four replicate measurements on each sample, for each well monitored in accordance with Section 725.192(d)(2) and compare these results with its initial background arithmetic mean. The comparison must consider individually each of the wells in the monitoring system and must use the Student's t-test at the 0.01 level of significance (see Appendix D) to determine statistically significant increases (and decreases, in the case of pH) over initial background.
- c) Well comparisons.
 - 1) If the comparisons for the upgradient wells made under subsection (b) of this Section show a significant increase (or pH decrease) the owner or operator must submit this information in accordance with Section 725.194(a)(2)(B).
 - 2) If the comparisons for downgradient wells made under subsection (b) of this Section show a significant increase (or pH decrease) the owner or operator must then immediately obtain additional groundwater samples for those downgradient wells where a significant difference was detected, split the samples in two and obtain analyses of all additional samples to determine whether the significant difference was a result of laboratory error.
- d) Notice to the Agency.
 - 1) If the analyses performed under subsection (c)(2) of this Section confirm the significant increase (or pH decrease) the owner or operator must provide written notice to the Agency--within seven days after the date of such confirmation--that the facility may be affecting groundwater quality.
 - Within 15 days after the notification under subsection (d)(1) of this Section, the owner or operator must develop and submit to the Agency a specific plan, based on the outline required under subsection (a) of this Section and certified by a qualified geologist or geotechnical engineer for a groundwater quality assessment program at the facility. This plan must be placed in the facility operating record and be maintained until closure of the facility.

- 3) The plan to be submitted under Section 725.190(d)(1) or subsection (d)(2) of this Section must specify all of the following:
 - A) The number, location, and depth of wells;
 - B) Sampling and analytical methods for those hazardous wastes or hazardous waste constituents in the facility;
 - C) Evaluation procedures, including any use of previously gathered groundwater quality information; and
 - D) A schedule of implementation.
- 4) The owner or operator must implement the groundwater quality assessment plan that satisfies the requirements of subsection (d)(3) of this Section and, at a minimum, determine each of the following:
 - A) The rate and extent of migration of the hazardous waste or hazardous waste constituents in the groundwater; and
 - B) The concentrations of the hazardous waste or hazardous waste constituents in the groundwater.
- The owner or operator must make his first determination under subsection (d)(4) of this Section, as soon as technically feasible and, within 15 days after that determination, submit to the Agency a written and prepare a report containing an assessment of the groundwater quality. This report must be placed in the facility operating record and be maintained until closure of the facility.
- 6) If the owner or operator determines, based on the results of the first determination under subsection (d)(4) of this Section, that no hazardous waste or hazardous waste constituents from the facility have entered the groundwater, then he may reinstate the indicator evaluation program described in Section 725.192 and subsection (b) of this Section. If the owner or operator reinstates the indicator evaluation program, he must so notify the Agency in the report submitted under subsection (d)(5) of this Section.
- 7) If the owner or operator determines, based on the first determination under subsection (d)(4) of this Section, that hazardous waste or hazardous waste constituents from the facility have entered the groundwater, then the owner or operator must do either of the following:
 - A) It must continue to make the determinations required under subsection (d)(4) of this Section on a quarterly basis until final

- closure of the facility if the groundwater quality assessment plan was implemented prior to final closure of the facility; or
- B) It may cease to make the determinations required under subsection (d)(4) of this Section if the groundwater quality assessment plan was implemented during the post-closure care period.
- e) Notwithstanding any other provision of this Subpart F, any groundwater quality assessment to satisfy the requirements of subsection (d)(4) of this Section that is initiated prior to final closure of the facility must be completed and reported in accordance with subsection (d)(5) of this Section.
- f) Unless the groundwater is monitored to satisfy the requirements of subsection (d)(4) of this Section at least annually the owner or operator must evaluate the data on groundwater surface elevations obtained under Section 725.192(e) to determine whether the requirements under Section 725.191(a) for locating the monitoring wells continues to be satisfied. If the evaluation shows that Section 725.191(a) is no longer satisfied, the owner or operator must immediately modify the number, location, or depth of the monitoring wells to bring the groundwater monitoring system into compliance with this requirement.

(Source: Amended at 32 Ill. Reg.	, effective
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SUBPART G: CLOSURE AND POST-CLOSURE CARE

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, the owner or operator of a hazardous waste management facility must 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 the following minimal information:
 - 1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 725.211;
 - 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 that will be unclosed during the active

life of the facility;

- 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 types of off-site hazardous waste management units to be used, if applicable;
- 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;
- A detailed description of other activities necessary during the partial and final closure <u>period periods</u> to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and runon and runoff control;
- 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 that 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.);
- 7) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under Section 725.243 or 725.245 and whose remaining operating life is less than twenty years, and for facilities without approved closure plans; and
- 8) For a facility where alternative requirements are established at a regulated unit under Section 725.190(f), 725.210(d), or 725.240(d), as provided under 35 Ill. Adm. Code 703.161, either the alternative requirements applying to the regulated unit or a reference to the enforceable document containing those alternative requirements.
- 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 must 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 must amend the closure plan whenever any of the following occurs:
 - A) Changes in the operating plans or facility design affect the closure plan;
 - B) Whenever there is a change in the expected year of closure, if applicable;
 - C) In conducting partial or final closure activities, unexpected events require a modification of the closure plan; or
 - D) The owner or operator requests the establishment of alternative requirements, as provided under 35 Ill. Adm. Code 703.161, to a regulated unit under Section 725.190(f), 725.210(c), or 725.240(d).
- 2) The owner or operator must 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 that has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator must 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 that intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with Section 725.410.
- An owner or operator with an approved closure plan must 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 that has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator must 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 that 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 703.280, the modification to the plan must be approved according to the procedures in subsection (d)(4) of this Section.
- 4) The Agency may request modifications to the plan under the conditions described in subsection (c)(1) of this Section. An owner or operator with an approved closure plan must submit the modified plan within 60 days

after 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 703.280, the modification to the plan must be approved in accordance with the procedures in subsection (d)(4) of this Section.

- d) Notification of partial closure and final closure.
 - 1) When notice is required.
 - A) The owner or operator must 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 if it involves such a unit, whichever is earlier.
 - B) The owner or operator must 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 must 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) An owner or operator with an approved closure plan must 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) An owner or operator with an approved closure plan must 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) An owner or operator with an approved closure plan must 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 of the following dates:
 - A) 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 must 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 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 must approve an extension to this one-year limit.
- The owner or operator must submit the closure plan to the Agency no later than 15 days after occurrence of either of the following events:
 - 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 to close the facility or unit.
- 4) The Agency must 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 must 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 must 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 must approve, modify, or disapprove the plan within 90 days after its receipt. If the Agency does not approve the plan, the Agency must provide the owner or operator with a detailed written statement of reasons for the refusal, and the owner or operator must modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The Agency must 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 must 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, 725.504, and 724.1102 725.1102. 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 32 Ill. Reg.	, effective	
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- 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) of this Section at a hazardous waste management unit or facility, or 90 days after approval of the closure plan, whichever is later, the owner or operator must treat, remove from the unit or facility, or dispose of on-site all hazardous wastes in accordance with the approved closure plan. The Agency must approve a longer period if the owner or operator demonstrates the following:
 - 1) The need to remain in operation by showing either of the following conditions exists:
 - A) The activities required to comply with this subsection (a) will, of necessity, take longer than 90 days to complete; or
 - B) All of the following conditions are true:
 - 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) of this

Section;

- 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 has 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 must 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 applicable requirements of subsections (d) and (e) of this Section at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The Agency must approve an extension to the closure period if the owner or operator demonstrates the following:
 - 1) The need to remain in operation by showing either of the following conditions exists:
 - A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
 - B) All of the following conditions are true:
 - 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) of this Section; 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 or operator has 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) of this Section must be made as follows:
 - 1) The demonstration in subsection (a)(1) of this Section must be made at least 30 days prior to the expiration of the 90-day period in subsection (a) of this Section; and
 - The demonstrations in subsection (b)(1) of this Section must be made at least 30 days prior to the expiration of the 180-day period in subsection (b) of this Section, unless the owner or operator is otherwise subject to deadlines in subsection (d) of this Section.
- d) Continued receipt of non-hazardous waste. The Agency must 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 the following are true:
 - 1) The owner or operator submits an amended Part B application, or a new Part B application if none was previously submitted, and demonstrates the following:
 - A) The unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes;
 - 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;
 - 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 pursuant to this Part;
 - 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;
 - 2) The Part B application includes an amended waste analysis plan, groundwater monitoring and response program, human exposure

assessment required pursuant to 35 III. Adm. Code 703.186, closure and post-closure care plans, 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 pursuant to Section 725.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes;

- 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
- The Part B application and the demonstrations referred to in subsections (d)(1) and (d)(2) of this Section 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 this Section applies to the facility, whichever is later.
- e) Surface impoundments. In addition to the requirements in subsection (d) of this Section, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in Section 725.321(a) must receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection (e).
 - 1) The petition for adjusted standard must include the following:
 - A) A plan for removing hazardous wastes; and
 - B) A contingent corrective measures plan.
 - 2) The removal plan must provide for the following:
 - A) Removing all hazardous liquids;
 - 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 the following:
 - i) That the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete; and
 - ii) That an extension will not pose a threat to human health

and the environment.

- 3) The following is required of contingent corrective measures plan:
 - A) It must meet the requirements of a corrective action plan pursuant to Section 724.199, based upon the assumption that a release has been detected from the unit.
 - B) It may be a portion of a corrective action plan previously submitted pursuant to Section 724.199.
 - C) It 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) It 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 of this Part.
- 5) In the event of a release, the owner or operator of the unit must perform the following actions:
 - A) Within 35 days, the owner or operator must file with the Board a petition for adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104. If the Board finds that it is necessary to do so in order to adequately protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to perform either of the following actions:
 - 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) of this Section;

- B) The owner or operator must implement the contingent corrective measures plan; and
- C) The owner or operator may continue to receive wastes at the unit if authorized by the approved contingent measures plan.
- 6) Semi-annual Annual report. During the period of corrective action, the owner or operator must provide semi-annual reports to the Agency that fulfill the following requirements:
 - A) They <u>must</u> describe the progress of the corrective action program;
 - B) They <u>must compile</u> all groundwater monitoring data; and
 - C) They <u>must</u> 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 must 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.
 - 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.
 - 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 or terminating an adjusted standard pursuant to this subsection
 - A) Except as otherwise provided, the owner or operator must follow the procedures of Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104 to petition the Board for an

adjusted standard.

- B) Initial justification. The Board will grant an adjusted standard, pursuant to subsection (e)(1) of this Section, if the owner or operator demonstrates that the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (e)(3) of this Section.
- C) The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1) of this Section:
 - i) A plan for removing hazardous wastes;
 - ii) A requirement that the owner or operator 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 must, 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; and
 - vi) A requirement that, in the event the adjusted standard is terminated, the owner or operator must 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 pursuant to subsection (e)(5)(A) of this Section, as provided in that subsection or in subsection (e)(7) of this Section.
- 9) The owner or operator may file a revised closure plan within 15 days after an adjusted standard is terminated.

(Source: Amended at	32 Ill. Reg, effective)
Section 725.215	Certification of Closure

Within 60 days after completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, and landfill unit, and within 60 days after completion of final closure, the

owner or operator must submit to the Agency, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer a qualified Professional Engineer. Documentation supporting independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for closure under Section 725.243(h).

(Source: Amended	at 32 Ill. Reg	, effective)
Section 725.220	Certification of	f Completion of Post-Clos	sure Care

No later than 60 days after the completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Agency, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer a qualified Professional Engineer. Documentation supporting the independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for post-closure care under Section 725.245(h).

(Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART H: FINANCIAL REQUIREMENTS

Section 725.240 Applicability

- a) The requirements of Sections 725.242, 725.243, and 725.247 through 725.250 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this Section or in Section 725.101.
- b) The requirements of Sections 725.244 and 725.246 apply only to owners and operators of any of the following:
 - 1) Disposal facilities;
 - 2) Tank systems that are required pursuant to Section 725.297 to meet the requirements for landfills; or
 - 3) Containment buildings that are required pursuant to Section 725.1102 to meet the requirements for landfills.
- c) States and the federal government are exempt from the requirements of this Subpart H.

- d) A permit or enforceable document can contain alternative requirements that replace all or part of the financial assurance requirements of this Subpart H applying to a regulated unit, as provided in 35 Ill. Adm. Code 703.161, where the Board or Agency has done the following:
 - The Board, by an adjusted standard granted pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104, has established alternative requirements for the regulated unit established pursuant to Section 725.190(f) or Section 724.210(d); and
 - 2) The Board has determined that it is not necessary to apply the financial assurance requirements of this Subpart H because the alternative financial assurance requirements will adequately protect human health and the environment.

(Source: Amended at	32 Ill. Reg	, effective)
Section 725.242	Cost Estimate	for Closure	

- a) The owner or operator must have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 725.211 through 725.215 and applicable closure requirements of Sections 725.278, 725.297, 725.328, 725.358, 725.380, 725.410, 725.451, 725.481, 725.504, and 725.1102.
 - 1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see Section 725.212(b)); and
 - The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party that is neither a parent nor a subsidiary of the owner or operator. (See definition of "parent corporation" in Section 725.241(d).) The owner or operator may use costs for on-site disposal if the owner or operator demonstrates that on-site disposal capacity will exist at all times over the life of the facility.
 - The closure cost estimate must not incorporate any salvage value that may be realized by the sale of hazardous wastes, or non-hazardous wastes if applicable under Section 725.213(d), facility structures or equipment, land or other facility assets at the time of partial or final closure.
 - 4) The owner or operator must not incorporate a zero cost for hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), that

may have economic value.

- During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with Section 725.243. For an owner or operator using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Agency, as specified in Section 725.243(e)(5). The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent annual Implicit Price Deflator for Gross National Product, as published by the U.S. Department of Commerce in its Survey of Current Business as specified in subsections (b)(1) and (b)(2) of this Section. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.
 - 1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.
 - 2) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.
- c) During the active life of the facility, the owner or operator must revise the closure cost estimate no later than 30 days after a revision has been made to the closure plan that increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the Agency has approved the request to modify the closure plan if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in subsection (b) of this Section.
- d) The owner or operator must keep the following at the facility during the operating life of the facility: the latest closure cost estimate prepared in accordance with subsections (a) and (c) of this Section, and, when this estimate has been adjusted in accordance with subsection (b) of this Section, the latest adjusted closure cost estimate.

(Source: Amended a	t 32 III. Reg, effective)
Section 725.243	Financial Assurance for Closure	

An owner or operator of each facility must establish financial assurance for closure of the facility. The owner or operator must choose from the options specified in subsections (a) through (e) of this Section.

a) Closure trust fund.

- An owner or operator may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the requirements of this subsection and submitting an original, signed duplicate of the trust agreement to the Agency. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.
- The wording of the trust agreement must be as specified in 35 Ill. Adm. Code 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment as specified in 35 Ill. Adm. Code 724.251. Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.
- Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning May 19, 1981, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:
 - A) The first payment must be made before May 19, 1981, except as provided in subsection (a)(5) of this Section. The first payment must be at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section, divided by the number of years in the pay-in period.
 - B) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by this formula:

$$Next\ Payment = \frac{CE - CV}{Y}$$

Where:

CE = the current closure cost estimate

CV= the current value of the trust fund

Y = the number of years remaining in the pay-in period.

4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.

- 5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this Section, the owner or operator's first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in subsection (a)(3) of this Section.
- 6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate, or obtain other financial assurance, as specified in this Section, to cover the difference.
- 7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance, as specified in this Section, for all or part of the trust fund, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.
- 10) After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (h) of this Section, that the owner or operator is no longer required to maintain financial assurance for

final closure of the facility. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator a detailed written statement of reasons.

- 11) The Agency must agree to termination of the trust when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- b) Surety bond guaranteeing payment into a closure trust fund.
 - An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be as specified in 35 Ill. Adm. Code 724.251.
- The owner or operator that uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
 - B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a);

- ii) Updating of Schedule A of the trust agreement (see 35 Ill. Adm. Code 724.251(a)) to show current closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will:
 - A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;
 - B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin final closure is issued by the Board or a court of competent jurisdiction; or
 - C) Provide alternate financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- 6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section.
- Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.

- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance, as specified in this Section.
- c) Closure letter of credit.
 - An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (c) and submitting the letter to the Agency. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.
 - 2) The wording of the letter of credit must be as specified in 35 Ill. Adm. Code 724.251.
 - An owner or operator that uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
 - B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.251) to show current closure cost estimates;
 - iii) Annual valuations, as required by the trust agreement; and
 - iv) Notices of nonpayment as required by the trust agreement.
 - 4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification

- number, name, and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.
- The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.
- 6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section.
- Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the approved closure plan when required to do so, the Agency may draw on the letter of credit.
- 9) If the owner or operator does not establish alternate financial assurance, as specified in this Section, and obtain written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.
- 10) The Agency must return the letter of credit to the issuing institution for termination when one of the following occurs:

- A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.

d) Closure insurance.

- An owner or operator may satisfy the requirements of this Section by obtaining closure insurance that conforms to the requirements of this subsection and submitting a certificate of such insurance to the Agency. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.
- 2) The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251.
- The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in subsection (f) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies.
- After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with

subsection (h) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the particular facility. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

- The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator as specified in subsection (d)(10) of this Section. Failure to pay the premium, without substitution of alternate financial assurance as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur and the policy will remain in full force and effect in the event that, on or before the date of expiration, one of the following occurs:
 - A) The Agency deems the facility abandoned;
 - B) Interim status is terminated or revoked;
 - C) Closure is ordered by the Board or a court of competent jurisdiction;
 - D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
 - E) The premium due is paid.

- Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 10) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- e) Financial test and corporate guarantee for closure.
 - An owner or operator may satisfy the requirements of this Section by demonstrating that the owner or operator passes a financial test as specified in this subsection. To pass this test the owner or operator must meet the criteria of either subsection (e)(1)(A) or (e)(1)(B) of this Section:
 - A) The owner or operator must have all of the following:
 - i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;
 - ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible net worth of at least \$10 million; and
 - iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the

current plugging and abandonment cost estimates.

- B) The owner or operator must have all of the following:
 - i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;
 - ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible net worth of at least \$10 million; and
 - iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- The phrase "current closure and post-closure cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 704.240).
- To demonstrate that the owner or operator meets this test, the owner or operator must submit each of the following items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in 35 Ill. Adm. Code 724.251;
 - B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
 - C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
 - i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in

such financial statements; and

- ii) In connection with that procedure, that no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.
- This subsection (e)(4) corresponds with 40 CFR 265.143(e)(4), a federal provision relating to an extension of the time to file the proofs of financial assurance required by this subsection (e) granted by USEPA. This statement maintains structural consistency with the corresponding federal regulations.
- After the initial submission of items specified in subsection (e)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (e)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternate financial assurance as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.
- The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (e)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (e)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must provide alternate financial assurance as specified in this Section within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (e)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance as specified in this Section within 30 days after notification of the disallowance.

- 9) The owner or operator is no longer required to submit the items specified in subsection (e)(3) of this Section when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- 10) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (e)(1) through (e)(8) of this Section, and must comply with the terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in 35 Ill. Adm. Code 724.251. The corporate guarantee must accompany the items sent to the Agency as specified in subsection (e)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide the following:
 - A) That, if the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section, in the name of the owner or operator.
 - B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
 - C) That, if the owner or operator fails to provide alternate financial assurance as specified in this Section and obtain the written

approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.

- f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in subsections (a) through (d) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, the owner or operator may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for closure of the facility.
- g) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- h) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that final closure has been completed in accordance with the approved closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain financial assurance for closure of the facility, unless the Agency determines that closure has not been in accordance with the approved closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that closure has not been in accordance with the approved closure plan.
- i) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code

702.184(e)(3)):

- 1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance; or
- 2) Requiring alternate assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source:	Amended at 32 Ill. Reg.	, effective)
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Section 725.245 Financial Assurance for Post-Closure Monitoring and Maintenance

An owner or operator of a facility with a hazardous waste disposal unit must establish financial assurance for post-closure care of the disposal units. The owner or operator must choose from the following options:

- a) Post-closure trust fund.
 - An owner or operator may satisfy the requirements of this Section by establishing a post-closure trust fund that conforms to the requirements of this subsection and submitting an original, signed duplicate of the trust agreement to the Agency. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.
 - The wording of the trust agreement must be as specified in 35 Ill. Adm. Code 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment (as specified in 35 Ill. Adm. Code 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.
 - Payments into the trust fund must be made annually by the owner or operator over the 20 years beginning May 19, 1981, or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:
 - A) The first payment must have been made before May 19, 1981, except as provided in subsection (a)(5) of this Section. The first payment must be at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section, divided by the number of years in the pay-in period.
 - B) Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each

subsequent payment must be determined by this formula:

$$Next\ Payment = \frac{CE - CV}{Y}$$

Where:

CE = the current closure cost estimate CV= the current value of the trust fund

Y = the number of years remaining in the pay-in period.

- 4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current post-closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.
- If the owner or operator establishes a post-closure trust fund after having used one or more alternate mechanisms specified in this Section, the owner or operator's first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made as specified in subsection (a)(3) of this Section.
- After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance as specified in this Section to cover the difference.
- During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance as specified in this Section for all or part of the trust fund, owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section,

- the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.
- During the period of post-closure care, the Agency must approve a release of funds if the owner or operator demonstrates to the Agency that the value of the trust fund exceeds the remaining cost of post-closure care.
- An owner or operator or any other person authorized to perform postclosure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- 12) The Agency must agree to termination of a trust when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- b) Surety bond guaranteeing payment into a post-closure trust fund.
 - An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.
 - BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.
 - 2) The wording of the surety bond must be as specified in 35 Ill. Adm. Code 724.251.
 - 3) The owner or operator that uses a surety bond to satisfy the requirements

of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:

- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
 - i) Payments into the trust fund, as specified in subsection (a) of this Section;
 - ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.251) to show current post-closure cost estimates;
 - iii) Annual valuations, as required by the trust agreement; and
 - iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will perform the following acts:
 - A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility; or
 - B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Board or a court of competent jurisdiction; or
 - C) Provide alternate financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond
- 6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section.

- Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this Section.
- c) Post-closure letter of credit.
 - An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (c) and submitting the letter to the Agency. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.
 - 2) The wording of the letter of credit must be as specified in 35 Ill. Adm. Code 724.251.
 - An owner or operator that uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:
 - A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
 - B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by

these regulations:

- i) Payments into the trust fund, as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (as specified in 35 Ill. Adm. Code 724.151) to show current post-closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The letter of credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name, and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.
- The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.
- 6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (f) of this Section.
- Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) During the period of post-closure care, the Agency must approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of

post-closure care.

- 9) Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other interim status requirements, the Agency may draw on the letter of credit.
- If the owner or operator does not establish alternate financial assurance, as specified in this Section, and obtain written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days after any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.
- 11) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- d) Post-closure insurance.
 - An owner or operator may satisfy the requirements of this Section by obtaining post-closure insurance that conforms to the requirements of this subsection and submitting a certificate of such insurance to the Agency. At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.
 - 2) The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251.
 - The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure estimate, except as provided in subsection (f) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer's will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

- 4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of facility whenever the post-closure period begins. The policy must also guarantee that, once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency, to such party or parties as the Agency specifies.
- An owner or operator or any other person authorized to perform postclosure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing, if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator, as specified in subsection (d)(11) of this Section. Failure to pay the premium, without substitution of alternate financial assurance, as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect in the event that, on or before the date of expiration, one of the following

occurs:

- A) The Agency deems the facility abandoned;
- B) Interim status is terminated or revoked;
- C) Closure is ordered by the Board or a court of competent jurisdiction;
- D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
- E) The premium due is paid.
- Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.
- 11) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- e) Financial test and corporate guarantee for post-closure care.
 - 1) An owner or operator may satisfy the requirements of this Section by

demonstrating that the owner or operator passes a financial test, as specified in this subsection (e). To pass this test the owner or operator must meet the criteria of either subsection (e)(1)(A) or (e)(1)(B) of this Section:

- A) The owner or operator must have each of the following:
 - i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;
 - ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible new worth of at least \$10 million; and
 - iv) Assets in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the plugging and abandonment cost estimates.
- B) The owner or operator must have each of the following:
 - i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;
 - ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
 - iii) Tangible net worth of at least \$10 million; and
 - iv) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- 2) The phrase "current closure and post-closure cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 724.251). The

phrases "current plugging and abandonment cost estimates," as used in subsection (e)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 704.240).

- To demonstrate that it meets this test, the owner or operator must submit each of the following items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in 35 Ill. Adm. Code 724.251;
 - B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
 - C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating both of the following:
 - i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
 - ii) In connection with that procedure, that no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.
- 4) This subsection (e)(4) corresponds with 40 CFR 265.143(e)(4), a federal provision relating to an extension of the time to file the proofs of financial assurance required by this subsection (e) granted by USEPA. This statement maintains structural consistency with the corresponding federal regulations.
- After the initial submission of items specified in subsection (e)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (e)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternate financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show

that the owner or operator no longer meets the requirements. The owner or operator must provide the alternate financial assurance within 120 days after the end of such fiscal year.

- The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (e)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (e)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (e)(1) of this Section, the owner or operator must provide alternate financial assurance, as specified in this Section, within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (e)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternate financial assurance, as specified in this Section, within 30 days after notification of the disallowance.
- 9) During the period of post-closure care, the Agency must approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Agency that the amount of the cost estimate exceeds the remaining cost of post-closure care.
- 10) The owner or operator is no longer required to submit the items specified in subsection (e)(3) of this Section when either of the following occurs:
 - A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
 - B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (h) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (e)(1) through (e)(9) of this Section, and must comply with the

terms of the corporate guarantee. The wording of the corporate guarantee must be identical to the wording specified in 35 Ill. Adm. Code 724.251. The corporate guarantee must accompany the items sent to the Agency as specified in subsection (e)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:

- A) That, if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other interim status requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section, in the name of the owner or operator.
- B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- C) That, if the owner or operator fails to provide alternate financial assurance, as specified in this Section, and obtain the written approval of such alternate assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternate financial assurance in the name of the owner or operator.
- f) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds, letters of credit, and insurance. The mechanisms must be as specified in subsections (a) through (d) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for

post-closure care of the facility.

- Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA Identification Number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to provide post-closure care for all of the owner or operator's facilities. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- h) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that the post-closure care period has been completed in accordance with the approved post-closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain financial assurance for post-closure care of that unit, unless the Agency determines that post-closure care has not been in accordance with the approved post-closure-plan. The Agency must provide the owner or operator a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan.
- i) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):
 - 1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance; or
 - 2) Requiring alternate assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source: Amended a	t 32 Ill. Reg	effective)
Section 725 247	Liability Requirement	S	

a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property

damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated, as specified in subsections (a)(1) through (a)(6) of this Section:

- 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (a)(1).
 - A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement and of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251. The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy.
 - B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Financial and Professional Regulation, Division of Insurance.
- 2) An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- 3) An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of

the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances pursuant to this subsection (b)(6), the owner or operator must specify at least one such assurance as "primary" coverage, and must specify other such assurance as "excess" coverage.

- 7) An owner or operator must notify the Agency within 30 days whenever one of the following occurs:
 - A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (a)(1) through (a)(6) of this Section;
 - B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section; or
 - C) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section.
- b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment, landfill, or land treatment facility that is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator meeting the requirements of this Section may combine the required per-occurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. An owner or operator that combines coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be

demonstrated, as specified in subsections (b)(1) through (b)(6) of this Section:

- 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (b)(1).
 - A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be as specified in 35 Ill. Adm. Code 724.251. The wording of the certificate of insurance must be as specified in 35 Ill. Adm. Code 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy.
 - B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Financial and Professional Regulation, Division of Insurance.
- 2) An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section.
- 5) An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances pursuant to this subsection, the owner or operator must specify at least one such assurance as "primary" coverage, and must

- specify other such assurance as "excess" coverage.
- 7) An owner or operator must notify the Agency within 30 days whenever one of the following occurs:
 - A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (b)(1) through (b)(6) of this Section;
 - B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section; or
 - C) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section.
- Request for adjusted level of required liability coverage. If an owner or operator c) demonstrates to the Agency that the levels of financial responsibility required by subsections (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain an adjusted level of required liability coverage from the Agency. The request for an adjusted level of required liability coverage must be submitted in writing to the Agency. If granted, the Agency's action must take the form of an adjusted level of required liability coverage, such level to be based on the Agency assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Agency may require an owner or operator that requests an adjusted level of required liability coverage to provide such technical and engineering information as is necessary to determine a level of financial responsibility other than that required by subsection (a) or (b) of this Section. The Agency must process any request for an adjusted level of required liability coverage as if it were a permit modification request pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128. Notwithstanding any other provision, the Agency must hold a public hearing whenever it finds, on the basis of requests, a significant degree of public interest in a tentative decision to grant an adjusted level of required liability insurance. The Agency may also hold a public hearing at its discretion whenever such a hearing might clarify one or more issues involved in the tentative decision.

- d) Adjustments by the Agency. If the Agency determines that the levels of financial responsibility required by subsection (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Agency must adjust the level of financial responsibility required pursuant to subsection (a) or (b) of this Section as may be necessary to adequately protect human health and the environment. This adjusted level must be based on the Agency's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Agency determines that there is a significant risk to human health and the environment from non-sudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill or land treatment facility, the Agency may require that an owner or operator of the facility comply with subsection (b) of this Section. An owner or operator must furnish to the Agency, within a time specified by the Agency in the request, which must not be less than 30 days, any information that the Agency requests to determine whether cause exists for such adjustments of level or type of coverage. The Agency must process any request for an adjusted level of required liability coverage as if it were a permit modification request pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128. Notwithstanding any other provision, the Agency must hold a public hearing whenever it finds, on the basis of requests, a significant degree of public interest in a tentative decision to grant an adjusted level of required liability insurance. The Agency may also hold a public hearing at its discretion whenever such a hearing might clarify one or more issues involved in the tentative decision.
- e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that final closure has been completed in accordance with the approved closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain liability coverage for that facility, unless the Agency determines that closure has not been in accordance with the approved closure plan.
- f) Financial test for liability coverage.
 - An owner or operator may satisfy the requirements of this Section by demonstrating that the owner or operator passes a financial test, as specified in this subsection (f)(1). To pass this test the owner or operator must meet the criteria of subsection (f)(1)(A) or (f)(1)(B) of this Section:
 - A) The owner or operator must have each of the following:
 - i) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test;

- ii) Tangible net worth of at least \$10 million; and
- iii) Assets in the United States amounting to either: at least 90 percent of total assets; or at least six times the amount of liability coverage to be demonstrated by this test.
- B) The owner or operator must have each of the following:
 - i) A current rating for the owner or operator's most recent bond issuance of AAA, AA, A, or BBB, as issued by Standard and Poor's, or Aaa, Aa, A, or Baa, as issued by Moody's;
 - ii) Tangible net worth of at least \$10 million;
 - iii) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and
 - iv) Assets in the United States amounting to either of the following: at least 90 percent of total assets or at least six times the amount of liability coverage to be demonstrated by this test.
- 2) The phrase "amount of liability coverage," as used in subsection (f)(1) of this Section, refers to the annual aggregate amounts for which coverage is required pursuant to subsections (a) and (b) of this Section.
- To demonstrate that the owner or operator meets this test, the owner or operator must submit each of the following three items to the Agency:
 - A) A letter signed by the owner's or operator's chief financial officer and worded as specified in 35 Ill. Adm. Code 724.251. If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by 35 Ill. Adm. Code 724.243(f) and 724.245(f), or by Sections 725.243(e) and 725.245(e), and liability coverage, it must submit the letter specified in 35 Ill. Adm. Code 724.251 to cover both forms of financial responsibility; a separate letter, as specified in 35 Ill. Adm. Code 724.251 is not required.
 - B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.
 - C) A special report from the owner's or operator's independent

certified public accountant to the owner or operator stating as follows:

- i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
- ii) In connection with that procedure, that no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.
- After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage, as specified in this Section. Evidence of insurance must be submitted to the Agency within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.
- The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion is cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage, as specified in this Section, within 30 days after notification of disallowance.
- g) Guarantee for liability coverage.
 - Subject to subsection (g)(2) of this Section, an owner or operator may meet the requirements of this Section by obtaining a written guarantee, referred to as a "guarantee." The guarantor must be the direct or highertier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners and operators in

subsections (f)(1) through (f)(6) of this Section. The wording of the guarantee must be as specified in 35 Ill. Adm. Code 724.251. A certified copy of the guarantee must accompany the items sent to the Agency as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide as follows:

- A) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be), arising from the operation of facilities covered by this guarantee, or fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, the guarantor will do so up to the limits of coverage.
- B) The guarantee remains in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. The guarantee must not be terminated unless and until the Agency approves alternate liability coverage complying with Section 725.247 or 35 Ill. Adm. Code 724.247.
- 2) The guaranter must execute the guarantee in Illinois. The guarantee must be accompanied by a letter signed by the guaranter that states as follows:
 - A) The guarantee was signed in Illinois by an authorized agent of the guarantor;
 - B) The guarantee is governed by Illinois law; and
 - C) The name and address of the guarantor's registered agent for service of process.
- 3) The guarantor must have a registered agent pursuant to Section 5.05 of the Business Corporation Act of 1983 [805 ILCS 5/5.05] or Section 105.05 of the General Not-for-Profit Corporation Act of 1986 [805 ILCS 105/105.05].
- h) Letter of credit for liability coverage.
 - 1) An owner or operator may satisfy the requirements of this Section by

- obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection, and submitting a copy of the letter of credit to the Agency.
- 2) The financial institution issuing the letter of credit must be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies.
- 3) The wording of the letter of credit must be as specified in 35 Ill. Adm. Code 724.251.
- An owner or operator that uses a letter of credit to satisfy the requirements of this Section may also establish a trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust will be deposited by the issuing institution into the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or that complies with the Corporate Fiduciary Act [205 ILCS 620].
- 5) The wording of the standby trust fund must be identical to the wording specified in 35 Ill. Adm. Code 724.251(n).
- i) Surety bond for liability coverage.
 - 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (i) and submitting a copy of the bond to the Agency.
 - 2) The surety company issuing the bond must be licensed by the Illinois Department of Financial and Professional Regulation, Division of Insurance.
 - 3) The wording of the surety bond must be as specified in 35 Ill. Adm. Code 724.251.
- j) Trust fund for liability coverage.
 - An owner or operator may satisfy the requirements of this Section by establishing a trust fund that conforms to the requirements of this subsection and submitting a signed, duplicate original of the trust agreement to the Agency.
 - 2) The trustee must be an entity that has the authority to act as a trustee and

whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or that complies with the Corporate Fiduciary Act [205 ILCS 620].

- The trust fund for liability coverage must be funded for the full amount of 3) the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this Section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of liability coverage to be provided, the owner or operator, by the anniversary of the date of establishment of the fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance, as specified in this Section, to cover the difference. For purposes of this subsection, "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and nonsudden accidental occurrences required to be provided by the owner or operator by this Section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.
- 4) The wording of the trust fund must be as specified in 35 Ill. Adm. Code 724.251.

Source: Am	ended at 32 III. Reg.	, effective		_)
	SUBPART I: USE ANI	O MANAGEMENT	OF CONTAINERS	

Section 725.274 Inspections

The At least weekly, the owner or operator must inspect areas where containers are stored at least weekly, looking except for the owner or operator of a Performance Track member facility, which must conduct inspections at least once each month after approval by the Agency. To apply for reduced inspection frequency, the owner or operator of the Performance Track member facility must follow the procedures described in Section 725.115(b)(5). The owner or operator must look for leaking containers and for deterioration of containers leaks and for deterioration caused by corrosion or other factors.

BOARD detected.	NOTE: See Section	725.271	for remedial acti	on required if	deterioration	or leaks are
(Source:	Amended at 32 Ill. I	Reg	, effective _)

SUBPART J: TANK SYSTEMS

Section 725.291 Assessment of Existing Tank System Integrity

- a) For each existing tank system that does not have secondary containment meeting the requirements of Section 725.293, the owner or operator must determine either that the tank system is not leaking or that it is unfit for use. Except as provided in subsection (c), the owner or operator must, after January 12, 1988, obtain and keep on file at the facility a written assessment reviewed and certified by an independent, a qualified, registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that attests to the tank system's integrity.
- b) This assessment must determine whether the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:
 - 1) Design standards, if available, according to which the tank and ancillary equipment were constructed;
 - 2) Hazardous characteristics of the wastes that have been or will be handled;
 - 3) Existing corrosion protection measures;
 - 4) Documented age of the tank system, if available, (otherwise, an estimate of the age); and
 - 5) Results of a leak test, internal inspection, or other tank integrity examination, such that the following conditions are met:
 - A) For non-enterable underground tanks, this assessment must consist of a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pocket, and high water table effects.
 - B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must be either a leak test, as described above, or an internal inspection or other tank integrity examination certified by an independent, a qualified, registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that addresses cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, "Guide for Inspection of Refinery

Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in conducting the integrity examination of an other than non-enterable underground tank system.

- c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986 must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.
- d) If, as a result of the assessment conducted in accordance with subsection (a) of this Section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of Sections 725.296.

(Source: Amended	at 32 Ill. Reg	, effective)
Section 725.292	Design and In	nstallation of New Tank System	ns or Components

- An owner or operator of a new tank system or component must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner or operator must obtain a written assessment reviewed and certified by an independent, a qualified, registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. This assessment must include, at a minimum, the following information:
 - 1) Design standards according to which the tanks and ancillary equipment is or will be constructed.
 - 2) Hazardous characteristics of the wastes to be handled.
 - 3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system is or will be in contact with the soil or with water, a determination by a corrosion expert of the following:
 - A) Factors affecting the potential for corrosion, including but not limited to the following:
 - i) Soil moisture content;
 - ii) Soil pH;

- iii) Soil sulfides level;
- iv) Soil resistivity;
- v) Structure to soil potential;
- vi) Influence of nearby underground metal structures (e.g., piping);
- vii) Stray electric current;
- viii) Existing corrosion-protection measures (e.g., coating, cathodic protection, etc.); and
- B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:
 - i) Corrosion-resistant materials of construction such as special alloys, or fiberglass-reinforced plastic;
 - ii) Corrosion-resistant coating (such as epoxy, fiberglass, etc.) with cathodic protection (e.g., impressed current or sacrificial anodes); and
 - iii) Electrical isolation devices such as insulating joints and flanges, etc.

BOARD NOTE: The practices described in the National Association of Corrosion Engineers (NACE) Standard, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285, and "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

- 4) For underground tank system components that are likely to be affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and
- 5) Design considerations to ensure the following:
 - A) Tank foundations will maintain the load of a full tank;

- B) Tank systems will be anchored to prevent flotation or dislodgement where the tank system is placed in a saturated zone, or is located within a seismic fault zone; and
- C) Tank systems will withstand the effects of frost heave.
- b) The owner and operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent, qualified installation inspector or an independent, a qualified, registered professional engineer Professional Engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system or component for the presence of any of the following items:
 - 1) Weld breaks;
 - 2) Punctures;
 - 3) Scrapes of protective coatings;
 - 4) Cracks;
 - 5) Corrosion; and
 - 6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.
- c) New tank systems or components and piping that are placed underground and which are backfilled must be provided with a backfill material that is a noncorrosive, porous, and homogeneous substance which is carefully installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
- d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed, or placed in use.
- e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.
 - BOARD NOTE: The piping system installation procedures described in "Installation of Underground Petroleum Storage Systems," API Recommended

Practice 1615, or "Chemical Plant and Petroleum Refinery Piping," ASME/ANSI Standard B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used where applicable, as guidelines for proper installation of piping systems.

- f) The owner and operator must provide the type and degree of corrosion protection necessary, based on the information provided under subsection (a)(3) of this Section, to ensure the integrity of the tank system during use of the tanks system. An independent corrosion expert must supervise the installation of a corrosion protection system that is field fabricated to ensure proper installation.
- g) The owner and operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (b) through (f) of this Section to attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (b) and (d) of this Section were performed. These written statements must also include the certification statement, as required in 35 Ill. Adm. Code 702.126(d).

(Source: Amended at	32 Ill. Reg, effective
Section 725.293	Containment and Detection of Releases

- a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in subsections (f) and (g) of this Section).
 - 1) For a new <u>or existing tank</u> system or component, prior to its being put into service;
 - 2) For all existing tanks used to store or treat USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, and F027, as defined in 35 Ill. Adm. Code 721.131, within two years after January 12, 1987;
 - For those existing tank systems of known and documentable age, within two years after January 12, 1987, or when the tank systems have reached 15 years of age, whichever come later;
 - 4) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age or within two years of January 12, 1987, whichever comes later; and
 - 52) For <u>a tank systems system that store stores or treat treats materials that become hazardous wastes subsequent to January 12, 1987</u>, within the time

intervals required in subsections (a)(1) through (a)(4) of this Section, except that the date that a material becomes a hazardous waste must be used in place of January 12, 1987 two years of the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

- b) Secondary containment systems must be as follows:
 - 1) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and
 - 2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
- c) To meet the requirements of subsection (b) of this Section, secondary containment systems must be at a minimum as follows:
 - 1) Constructed of or lined with materials that are compatible with the wastes to be placed in the tank system and of sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic);
 - 2) Placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift;
 - 3) Provided with a leak detection system that is designed and operated so that it will detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that the existing detection technology or site conditions will not allow detection of a release within 24 hours;
 - 4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

BOARD NOTE: If the collected material is a hazardous waste under 35 Ill. Adm. Code 721, it is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the State, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6.

- d) Secondary containment for tanks must include one or more of the following devices:
 - 1) A liner (external to the tank);
 - 2) A vault;
 - 3) A double-walled tank; or
 - 4) An equivalent device as approved by the Board in an adjusted standards proceeding.
- e) In addition to the requirements of subsections (b), (c), and (d), secondary containment systems must satisfy the following requirements:
 - 1) External liner systems must be as follows:
 - A) Designed or operated to contain 100 percent of the capacity of the largest tank within the liner system's boundary;
 - B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
 - C) Free of cracks or gaps; and
 - D) Designed and installed to completely surround the tank and to cover all surrounding earth likely to come into contact with the waste if released from the tanks (i.e., capable of preventing lateral as well as vertical migration of the waste).
 - 2) Vault systems must be as follows:

- A) Designed or operated to contain 100 percent of the capacity of the largest tank within the vault system's boundary;
- B) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
- C) Constructed with chemical-resistant water stops in place at all joints (if any);
- D) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;
- E) Provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated:
 - i) Meets the definition of ignitable waste under 35 Ill. Adm. Code 721.121; or
 - ii) Meets the definition of reactive waste under 35 Ill. Adm. Code 721.123 and may form an ignitable or explosive vapor; and
- F) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.
- 3) Double-walled tanks must be as follows:
 - A) Designed as an integral structure (i.e., an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell;
 - B) Protected, if constructed of metal, from both corrosion of the primary tank interior and the external surface of the outer shell; and
 - C) Provided with a built-in continuous leak detection system capable of detecting a release within 24 hours or as otherwise provided in the RCRA permit if the operator has demonstrated to the Agency, by way of permit application, that the existing leak detection

technology or site conditions will not allow detection of a release within 24 hours.

BOARD NOTE: The provisions outlined in the Steel Tank Institute (STI) document "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used as guidelines for aspects of the design of underground steel double-walled tanks.

- f) Ancillary equipment must be provided with full secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (c) and (h) of this Section, except for the following:
 - 1) Aboveground piping (exclusive of flanges, joints, valves, and connections) that are visually inspected for leaks on a daily basis;
 - 2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;
 - 3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and
 - 4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.
- g) Pursuant to Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1], and in accordance with Subpart D of 35 Ill. Adm. Code 104, an adjusted standard will be granted by the Board regarding alternative design and operating practices only if the Board finds either that the alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not receive an adjusted standard from the secondary containment requirements of this Section through a justification in accordance with subsection (g)(2) of this Section.
 - 1) When determining whether to grant alternative design and operating practices based on a demonstration of equivalent protection of groundwater and surface water, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:

- A) The nature and quantity of the waste;
- B) The proposed alternate design and operation;
- C) The hydrogeologic setting of the facility, including the thickness of soils between the tank system and groundwater; and
- D) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.
- 2) In deciding whether to grant alternative design and operating practices based on a demonstration of no substantial present or potential hazard, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:
 - A) The potential adverse effects on groundwater, surface water, and land quality taking the following into account:
 - i) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;
 - ii) The hydrogeological characteristics of the facility and surrounding land;
 - iii) The potential for health risks caused by human exposure to waste constituents;
 - iv) The potential for damage to wildlife; crops, vegetation, and physical structures caused by exposure to waste constituents; and
 - v) The persistence and permanence of the potential adverse effects;
 - B) The potential adverse effects of a release on groundwater quality, taking the following into account:
 - i) The quantity and quality of groundwater and the direction of groundwater flow;
 - ii) The proximity and withdrawal rates of water in the area;
 - iii) The current and future uses of groundwater in the area; and
 - iv) The existing quality of groundwater, including other

sources of contamination and their cumulative impact on the groundwater quality;

- C) The potential adverse effects of a release on surface water quality, taking the following into account:
 - i) The quantity and quality of groundwater and the direction of groundwater flow;
 - ii) The patterns of rainfall in the region;
 - iii) The proximity of the tank system to surface waters;
 - iv) The current and future uses of surface waters in the area and water quality standards established for those surface waters; and
 - v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; and
- D) The potential adverse effects of a release on the land surrounding the tank system, taking the following into account:
 - i) The patterns of rainfall in the region; and
 - ii) The current and future uses of the surrounding land.
- The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1), at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must fulfill the following requirements:
 - A) It must comply with the requirements of Section 725.296, except Section 725.296(d); and
 - B) It must decontaminate or remove contaminated soil to the extent necessary to assure the following:
 - i) It must enable the tank system, for which alternative design and operating practices were granted, to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release; and

- ii) It must prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water.
- C) If contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B), it must comply with the requirements of Section 725.297(b).
- 4) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the alternative design and operating practices, must fulfill the following requirements:
 - A) It must comply with the requirements of Section 725.296(a), (b), (c), and (d); and
 - B) It must prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of Section 725.297(b);
 - C) If repairing, replacing, or reinstalling the tank system, it must provide secondary containment in accordance with the requirements of subsections (a) through (f) of this Section, or make the alternative design and operating practices demonstration to the Board again with respect to secondary containment and meet the requirements for new tank systems in Section 725.292 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil is decontaminated or removed, and groundwater or surface water has not been contaminated.
- h) In order to make an alternative design and operating practices demonstration, the owner or operator must follow the following procedures, in addition to those specified in Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104:
 - 1) The owner or operator must file a petition for approval of alternative design and operating practices according to the following schedule:
 - A) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with

- subsection (a) of this Section; and
- B) For new tank systems, at least 30 days prior to entering into a contract for installation of the tank system.
- 2) As part of the petition, the owner or operator must also submit the following to the Board:
 - A) A description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in subsection (g)(1) or (g)(2) of this Section; and
 - B) The portion of the Part B permit application specified in 35 Ill. Adm. Code 703.202.
- 3) The owner or operator must complete its showing within 180 days after filing its petition for approval of alternative design and operating practices.
- 4) The Agency must issue or modify the RCRA permit so as to require the permittee to construct and operate the tank system in the manner that was provided in any Board order approving alternative design and operating practices.
- i) All tank systems, until such time as secondary containment meeting the requirements of this Section is provided, must comply with the following:
 - 1) For non-enterable underground tanks, a leak test that meets the requirements of Section 725.291(b)(5) must be conducted at least annually.
 - 2) For other than non-enterable underground tanks and for all ancillary equipment, an annual the owner or operator must either conduct a leak test, as described in subsection (i)(1) of this Section, or an internal inspection or other tank integrity examination, by an independent, a qualified, registered professional engineer Professional Engineer, that addresses cracks, leaks, and corrosion and or erosion must be conducted at least annually. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed.

BOARD NOTE: The practices described in API Publication "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, when applicable, as guidelines for assessing the

overall condition of the tank system.

- The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(1) through (i)(3) of this Section.
- 4) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(1) through (i)(3) of this Section, the owner or operator must comply with the requirements of Section 725.296.

(Source: Amended	at 32 Ill. Reg	, effective)
Section 725.295	Inspections		

- a) The owner or operator must inspect the following, where present, at least once each operating day: data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design.
- b) Except as noted under the subsection (c) of this Section, the owner or operator must inspect the following at least once each operating day:
 - 1) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;
 - 2) The aboveground portion Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and
 - Data gathered from monitoring equipment (e.g., pressure and temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design; and
 - 4<u>3</u>) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including <u>the secondary</u> containment <u>structures system</u> (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.);

BOARD NOTE: Section 725.115(c) requires the owner or operator to remedy any deterioration or malfunction the owner or operator finds. Section 725.296 requires the owner or operator to notify the Agency within 24 hours of confirming a release. Also, federal 40 CFR 302 may require the owner or operator to notify the National Response Center of a release.

c) The owner or operator of a tank system that either uses leak detection equipment to alert facility personnel to leaks or implements established workplace practices

to ensure leaks are promptly identified must inspect at least weekly those areas described in subsections (b)(1) through (b)(3) of this Section. Use of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.

- d) The owner or operator of a Performance Track member facility may inspect on a less frequent basis, after approval by the Agency, but it must inspect at least once each month. To apply for a less than weekly inspection frequency, the owner or operator of the Performance Track member facility must follow the procedures described in Section 725.115(b)(5).
- e) Ancillary equipment that is not provided with secondary containment, as described in Section 725.293(f)(1) through (f)(4), must be inspected at least once each operating day.
- b<u>f</u>) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:
 - 1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation, and annually thereafter; and
 - 2) All sources of impressed current must be inspected or tested, as appropriate, at least every other month.

BOARD NOTE: The practices described in "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85, or "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

eg) The owner or operator must document in the operating record of the facility an inspection of those items in subsections (a) and (b) of this Section.

(Source: Amended a	at 32 Ill. Reg	, e	ffective)
Section 725.296	Response to	Leaks or Sp	oills and Dis	sposition o	f Tank Sy	stems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately. The owner or operator must satisfy the following requirements:

a) Cease using; prevent flow or addition of wastes. The owner or operator must

immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

- b) Removal of waste from tank system or secondary containment system.
 - 1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
 - 2) If the release was to a secondary containment system, all released materials must be removed within 24 hours to prevent harm to human health and the environment
- c) Containment of visible releases to the environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection, do the following:
 - 1) Prevent further migration of the leak or spill to soils or surface water; and
 - 2) Remove and properly dispose of any visible contamination of the soil or surface water
- d) Notifications; reports.
 - 1) Any release to the environment, except as provided in subsection (d)(2) of this Section, must be reported to the Agency within 24 hours after detection
 - 2) A leak or spill of hazardous waste is exempted from the requirements of this subsection (d) if the following occur:
 - A) The spill is less than or equal to a quantity of one pound; and
 - B) The spill is immediately contained and cleaned-up.
 - Within 30 days after detection of a release to the environment, a report containing the following information must be submitted to the Agency:
 - A) Likely route of migration of the release;
 - B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate, etc.);
 - C) Results of any monitoring or sampling conducted in connection

- with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency as soon as they become available;
- D) Proximity to downgradient drinking water, surface water, and population areas; and
- E) Description of response actions taken or planned.
- e) Provision of secondary containment, repair, or closure.
 - 1) Unless the owner or operator satisfies the requirements of subsections (e)(2) through (e)(4) of this Section, the tank system must be closed in accordance with Section 725.297.
 - 2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
 - 3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.
 - If the source of the release was a leak to the environment from a 4) component of a tank system without secondary containment, the owner or operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 725.293 before it is returned to service, unless the source of the leak is an aboveground portion of a tank system. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of subsection (f) of this Section are satisfied. If a component is replaced to comply with the requirements of this subsection (e)(4), that component must satisfy the requirements for new tank systems or components in Sections 725.292 and 725.293. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with Section 725.293 prior to being returned to use.
- f) Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (e) of this Section, and the repair has been extensive (e.g., installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel, etc.), the tank system must not be returned to service unless the owner or operator has obtained a certification by—an

independent a qualified, registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Agency within seven days after returning the tank system to use placed in the operating record and maintained until closure of the facility.

BOARD NOTE: See Section 725.115(c) for the requirements necessary to remedy a failure. Also, federal 40 CFR 302.6 requires the owner or operator to notify the National Response Center of a release of any "reportable quantity."

(Source: Ame	ended at 32 Ill. Reg.	, effective)
Section 725.30)1 Generators of 10	0 to 1 000 Kilograms of H	azardous Waste Per Month

- a) The requirements of this Section apply to small quantity generators that generate more than 100 kg but less than 1,000 kg of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than 180 days (or 270 days if the generator must ship the waste greater than 200 miles), and that do not accumulate over 6,000 kg on-site at any time.
- b) A generator of between 100 and 1,000 kg/mo hazardous waste must comply with the following general operating requirements:
 - 1) Treatment or storage of hazardous waste in tanks must comply with Section 725.117(b);
 - 2) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life;
 - Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank; and
 - 4) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).
 - BOARD NOTE: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).
- c) A Except as noted in subsection (d) of this Section, a generator of between 100

and 1,000 kg/mo accumulating hazardous waste in tanks must inspect the following, where present:

- 1) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;
- 2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;
- The level of waste in the tank at least once each operating day to ensure compliance with subsection (b)(3) of this Section;
- 4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and
- 5) The construction materials of and the area immediately surrounding discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).
 - BOARD NOTE: As required by Section 725.115(c), the owner or operator must remedy any deterioration or malfunction the owner or operator finds.
- d) A generator that accumulates between 100 and 1,000 kg/mo of hazardous waste in tanks or tank systems which have full secondary containment and which either uses leak detection equipment to alert facility personnel to leaks or implements established workplace practices to ensure leaks are promptly identified must inspect at least weekly, where applicable, the areas identified in subsections (c)(1) through (c)(5) of this Section. Use of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.
- e) The owner or operator of a Performance Track member facility may inspect on a less frequent basis after approval by the Agency, but it must inspect at least once each month. To apply for a less than weekly inspection frequency, the owner or operator of the Performance Track member facility must follow the procedures described in Section 725.115(b)(5).
- A generator of between 100 and 1,000 kg/mo accumulating hazardous waste in tanks must, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures.
 - BOARD NOTE: At closure, as throughout the operating period, unless the owner or operator demonstrates, in accordance with 35 Ill. Adm. Code 721.103(d) or (e),

that any solid waste removed from the tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

- eg) A generator of between 100 and 1,000 kg/mo must comply with the following special requirements for ignitable or reactive waste:
 - 1) Ignitable or reactive waste must not be placed in a tank unless one of the following conditions are fulfilled:
 - A) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that the following is true of the waste:
 - i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 35 Ill. Adm. Code 721.121 or 721.123, and
 - ii) Section 725.117(b) is complied with;
 - B) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or
 - C) The tank is used solely for emergencies.
 - The owner or operator of a facility that treats or stores ignitable or reactive waste in covered tanks must comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of "Flammable and Combustible Liquids Code," NFPA 30, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- f) A generator of between 100 and 1,000 kg/mo must comply with the following special requirements for incompatible wastes:
 - Incompatible wastes or incompatible wastes and materials (see appendix V of 40 CFR 265 (Examples of Potentially Incompatible Waste), incorporated by reference in 35 Ill. Adm. Code 720.111(b), for examples) must not be placed in the same tank unless Section 725.117(b) is complied with.
 - 2) Hazardous waste must not be placed in an unwashed tank that previously held an incompatible waste or material unless Section 725.117(b) is complied with.

(Source:	Amended at 32 Ill. Reg.	effective)

SUBPART K: SURFACE IMPOUNDMENTS

Section 725.321 Design and Operating Requirements

- The owner or operator of each new surface impoundment unit-on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit-on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit-that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners, and operate the leachate collection and removal system, in accordance with 35 Ill. Adm. Code 724.321(c), unless exempted under 35 Ill. Adm. Code 724.321(d), (e), or (f). "Construction commences" is as defined in 35 Ill. Adm. Code 720.110 under "existing facility."
- b) The owner or operator of each unit referred to in subsection (a) of this Section must notify the Agency at least sixty days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six months of the receipt of such notice.
- c) The owner or operator of any replacement surface impoundment unit is exempt from subsection (a) of this Section if the following conditions are fulfilled:
 - 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.321(c), (d), and (e); and
 - BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 USC 6924(o)(1)(A)(i) and (o)(5)).
 - 2) There is no reason to believe that the liner is not functioning as designed.
- d) The Agency must not require a double liner as set forth in subsection (a) of this Section for any monofill, if the following conditions are fulfilled:
 - The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents that render the wastes hazardous for reasons other than the toxicity characteristic in 35 Ill. Adm. Code 721.124, with USEPA hazardous waste numbers D004 through D017; and
 - 2) No migration demonstration.
 - A) Design and location requirements.

- i) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this subsection (d)(2)(A)(i) the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active life of the facility. In the case of any surface impoundment that has been exempted from the requirements of subsection (a) of this Section, of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment the owner or operator must remove or decontaminate all waste residues, all contaminated liner material and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment must comply with appropriate post-closure requirements, including but not limited to groundwater monitoring and corrective action;
- ii) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 35 Ill. Adm. Code 702.110); and
- iii) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with RCRA permits; or
- B) The owner or operator demonstrates to the Board that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.
- e) In the case of any unit in which the liner and leachate collection system have been installed pursuant to the requirements of subsection (a) of this Section, and in good faith compliance with subsection (a) of this Section and with guidance documents governing liners and leachate collection systems under subsection (a) of this Section, the Agency must not require a liner or leachate collection system that is different from that which was so installed pursuant to subsection (a) of this Section when issuing the first permit to such facility, except that the Agency is not precluded from requiring installation of a new liner when the Agency finds that any liner installed pursuant to the requirements of subsection (a) of this Section is leaking.

- f) A surface impoundment must maintain enough freeboard to prevent any overtopping of the dike by overfilling, wave action, or a storm. Except as provided in subsection (g) of this Section, there must be at least 60 centimeters (two feet) of freeboard.
- g) A freeboard level less than 60 centimeters (two feet) may be maintained if the owner or operator obtains certification by a qualified engineer that alternate design features or operating plans will, to the best of the engineer's knowledge and opinion, prevent overtopping of the dike. The certification, along with a written identification of alternate design features or operating plans preventing overtopping, must be maintained at the facility.

BOARD NOTE: Any point source discharge from a surface impoundment to waters of the State is subject to the requirements of Section 12 of the Environmental Protection Act [415 ILCS 5/12]. Spills may be subject to Section 311 of the Clean Water Act (33 USC 1321).

- h) Surface impoundments that are newly subject to this Part due to the promulgation of additional listings or characteristics for the identification of hazardous waste must be in compliance with subsections (a), (c), or (d) of this Section not later than 48 months after the promulgation of the additional listing or characteristic. This compliance period must not be cut short as the result of the promulgation of land disposal prohibitions under 35 Ill. Adm. Code 728 or the granting of an extension to the effective date of a prohibition pursuant to 35 Ill. Adm. Code 728.105, within this 48 month period.
- i) Refusal to grant an exemption or waiver, or grant with conditions, may be appealed to the Board.

(Source: Amended at 32 Ill. Reg, effective)
Section-725.324_725.323 Containment System
An earthen dike must have a protective cover, such as grass, shale, or rock to minimize wind an water erosion and to preserve its structural integrity.
BOARD NOTE: Two versions of 40 CFR 265.223 exist in the federal regulations. USEPA added the second at 57 Fed. Reg. 3486, January 29, 1992. Section 725.324 is derived from the original version of 40 CFR 265.223.
(Source: Renumbered from Section 725.324 and amended at 32 III. Reg, effective

Section 725.323 725.324 Response Actions

- a) The owner or operator of surface impoundment units subject to Section 725.321(a) must submit develop and keep on site a response action plan to the Agency when submitting the proposed action leakage rate under Section 725.322. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
 - 1) Notify the Agency in writing of the exceedence exceedance within seven days after the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days of the determination, as to the amount of liquids; likely sources of liquids; possible location, size, and cause of any leaks; and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size, and cause of any leak;
 - 4) Determine whether waste receipt should cease or be curtailed; whether any waste should be removed from the unit for inspection, repairs, or controls; and whether or not the unit should be closed;
 - 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
 - Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3) through (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3) through (b)(5) of this Section, the owner or operator must do either of the following:
 - 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent, or other analyses of

the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and

- C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.
- d) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act [415 ILCS 5/40].

(Source:	Renumbered from	Section	725.323	and amende	ed at 32 Ill.	Reg	, effective
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SUBPART L: WASTE PILES

Section 725.355 Action Leakage Rates

- a) The owner or operator of waste pile units subject to Section 725.354 must submit a proposed action leakage rate to the Agency when submitting the notice required under Section 725.354. Within 60 days after receipt of the notification, the Agency must either establish an action leakage rate, either as proposed by the owner or operator or modified using the criteria in this Section, or it must extend the review period for up to 30 days. If no action is taken by the Agency before the original 60 or extended 90 day review period, the action leakage rate must be approved as proposed by the owner or operator.
- b) The Agency must approve an action leakage rate for surface impoundment waste pile units subject to Section 725.354. The action leakage rate is the maximum design flow rate that the LDS can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material, etc.), construction, operation, and location of the LDS; waste and leachate characteristics; the likelihood and amounts of other sources of liquids in the LDS; and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover, and creep of synthetic components of the system; overburden pressures; etc.).
- c) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly flow rate from the monitoring data obtained under Section 725.360, to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period.

d) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act [415 ILCS 5/40].

(Source: Amended a	t 32 Ill. Reg	_, effective _)
Section 725 359	Response Actions		

- a) The owner or operator of waste pile units subject to Section 725.354 must submit a response action plan to the Agency when submitting the proposed action leakage rate under Section 725.355. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the leak determination system exceeds the action leakage rate for any sump, the owner or operator must do the following:
 - 1) Notify the Agency in writing of the <u>exceedence exceedance</u> within seven days after the determination;
 - 2) Submit a preliminary written assessment to the Agency within 14 days after the determination as to the amount of liquids; likely sources of liquids; possible location, size, and cause of any leaks; and short-term actions taken and planned;
 - 3) Determine to the extent practicable the location, size, and cause of any leak;
 - 4) Determine whether waste receipts should cease or be curtailed; whether any waste should be removed from the unit for inspection, repairs, or controls; and whether or not the unit should be closed;
 - 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
 - Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3) through (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3) through

(b)(5) of this Section, the owner or operator must do either of the following:

- 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.
- d) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act [415 ILCS 5/40].

Source:	Amended at 32 Ill. Reg.	, effective)

SUBPART M: LAND TREATMENT

Section 725.380 Closure and Post-Closure Care

- a) In the closure plan under Section 725.212 and the post-closure plan under Section 725.218 the owner or operator must address the following objectives and indicate how they will be achieved:
 - 1) Control of the migration of hazardous waste and hazardous waste constituents from the treated area into the groundwater;
 - 2) Control of the release of contaminated runoff from the facility into surface water;
 - 3) Control of the release of airborne particulate contaminants caused by wind erosion; and
 - 4) Compliance with Section 725.376 concerning the growth of food-chain crops.
- b) The owner or operator must consider at least the following factors in addressing the closure and post-closure care objectives of subsection (a) of this Section:
 - 1) The type and amount of hazardous waste and hazardous waste constituents

- applied to the land treatment facility;
- 2) The mobility and the expected rate of migration of the hazardous waste and hazardous waste constituents;
- The site location, topography, and surrounding land use with respect to the potential effects of pollutant migration (e.g., proximity to groundwater, surface water, and drinking water sources);
- 4) Climate, including amount, frequency, and pH of precipitation;
- 5) Geological and soil profiles and surface and subsurface hydrology of the site and soil characteristics, including cation exchange capacity, total organic carbon, and pH;
- 6) Unsaturated zone monitoring information obtained under Section 725.378; and
- 7) The type, concentration, and depth of migration of hazardous waste constituents in the soil, as compared to their background concentrations.
- c) The owner or operator must consider at least the following methods in addressing the closure and post-closure care objectives of subsection (a) of this Section:
 - 1) Removal of contaminated soils;
 - 2) Placement of a final cover, considering the following:
 - A) Functions of the cover (e.g., infiltration control, erosion and runoff control, and wind erosion control); and
 - B) Characteristics of the cover, including material, final surface contours, thickness, porosity and permeability, slope, length of run of slope, and type of vegetation on the cover; and
 - 3) Monitoring of groundwater.
- d) In addition to the requirements of Subpart G of this Part during the closure period the owner or operator of a land treatment facility must do the following:
 - 1) It must continue unsaturated zone monitoring in a manner and frequency specified in the closure plan, except that soil pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone;
 - 2) It must maintain the run-on control system required under Section

725.372(b);

- 3) It must maintain the run-off management system required under Section 725.372(c); and
- 4) It must control wind dispersal of particulate matter that may be subject to wind dispersal.
- e) For the purpose of complying with Section 725.215, when closure is completed the owner or operator may submit to the Agency certification both by the owner or operator and by an independent, qualified soil scientist, in lieu of an independent registered professional engineer a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.
- f) In addition to the requirements of Section 725.217, during the post-closure care period the owner or operator of a land treatment unit must fulfill the following requirements:
 - 1) It must continue soil-core monitoring by collecting and analyzing samples in a manner and frequency specified in the post-closure plan;
 - 2) It must restrict access to the unit as appropriate for its post-closure use;
 - 3) It must assure that growth of food chain crops complies with Section 725.376; and
 - 4) It must control wind dispersal of hazardous waste.

(Source:	Amended at 32 Ill. Reg.	, effective)
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SUBPART N: LANDFILLS

Section 725.401 Design Requirements

- a) The owner or operator of each new landfill unit-on which construction commences after January 29, 1992, each lateral expansion of a landfill unit-on which construction commences after July 29, 1992, and each replacement of an existing landfill unit-that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners, and operate the leachate collection and removal-systems system, in accordance with 35 Ill. Adm. Code 724.401(c), unless exempted by 35 Ill. Adm. Code 724.401(d), (e) or (f). "Construction commences" is as defined in 35 Ill. Adm. Code 720.110 under "existing facility."
- b) The owner or operator of each unit referred to in subsection (a) of this Section

- must notify the Agency at least 60 days prior to receiving waste. The owner or operator of each facility submitting notice must file a Part B application within six months of the receipt of such notice.
- c) The owner or operator of any replacement landfill unit is exempt from subsection (a) of this Section if both of the following are true:
 - 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.401(c), (d), and (e); and
 - BOARD NOTE: The cited subsections implemented the design standards of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and Recovery Act (42 USC 6924(o)(1)(A)(i) and (o)(5)).
 - 2) There is no reason to believe that the liner is not functioning as designed.
- d) The Agency must not require a double liner as set forth in subsection (a) of this Section for any monofill, if the following conditions are fulfilled:
 - The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such waste does wastes do not contain constituents that render the wastes hazardous for reasons other the toxicity characteristic in 35 Ill. Adm. Code 721.124, with hazardous waste number numbers D004 through D017; and
 - 2) Alternative demonstration.
 - A) Liner and location requirements.
 - i) The monofill has at least one liner for which there is no evidence that such liner is leaking;
 - ii) The monofill is located more than one-quarter mile from an underground source of drinking water (as that term is defined in 35 Ill. Adm. Code 702.110); and
 - iii) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with RCRA permits; or
 - B) The owner or operator demonstrates to the Board that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.
- e) In the case of any unit in which the liner and leachate collection system have been

installed pursuant to the requirements of subsection (a) of this Section, and in good faith compliance with subsection (a) of this Section and with guidance documents governing liners and leachate collection systems under subsection (a) of this Section, the Agency must not require a liner or leachate collection system that is different from that which was so installed pursuant to subsection (a) of this Section when issuing the first permit to such facility, except that the Agency is not precluded from requiring installation of a new liner when the Agency finds that any liner installed pursuant to the requirements of subsection (a) of this Section is leaking.

- f) The owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from at least a 25-year storm.
- g) The owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24 hour, 25-year storm.
- h) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.
- i) The owner or operator of a landfill containing hazardous waste that is subject to dispersal by wind must cover or otherwise manage the landfill so that wind dispersal of the hazardous waste is controlled.

BOARD NOTE: As required by Section 725.113, the waste analysis plan must include analyses needed to comply with Sections 725.412, 725.413, and 725.414. As required by Section 725.173, the owner or operator must place the results of these analyses in the operating record of the facility.

(Source: Amended a	nt 32 Ill. Reg	, effective)
Section 725.403	Response Actions		

- a) The owner or operator of landfill units subject to Section 725.401(a) must submit develop and keep on site until closure of the facility a response action plan to the Agency when submitting the proposed action leakage rate under Section 725.402. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do each of the following:
 - 1) Notify the Agency in writing of the exceedence exceedance within seven

- days after the determination;
- 2) Submit a preliminary written assessment to the Agency within 14 days after the determination, as to the amount of liquids; likely sources of liquids; possible location, size, and cause of any leaks; and short-term actions taken and planned;
- 3) Determine to the extent practicable the location, size, and cause of any leak;
- 4) Determine whether waste receipt should cease or be curtailed; whether any waste should be removed from the unit for inspection, repairs ,or controls; and whether or not the unit should be closed;
- 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
- Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3) through (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3) through (b)(5) of this Section, the owner or operator must do either of the following:
 - 1) Perform the following assessments:
 - A) Assess the source of liquids and amounts of liquids by source;
 - B) Conduct a fingerprint, hazardous constituent or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
 - C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
 - 2) Document why such assessments are not needed.
- d) Final Agency determinations pursuant to this Section are deemed to be permit denials for purposes of appeal to the Board pursuant to Section 40 of the Environmental Protection Act [415 ILCS 5/40].

(Source:	Amended at 32 Ill. Reg.	, effective)
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Section 725.414 Special Requirements for Liquid Wastes

- a) This subsection (a) corresponds with 40 CFR 265.314(a), which pertains to the placement of bulk or non-containerized liquid waste or waste containing free liquids in a landfill prior to May 8, 1985. This statement maintains structural consistency with USEPA rules.
- ba) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
- eb) Containers holding free liquids must not be placed in a landfill unless one of the following conditions is fulfilled:
 - 1) One of the following occurs with regard to all free-standing liquid:
 - A) It has been removed by decanting or other methods;
 - B) It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or
 - C) It has been otherwise eliminated;
 - 2) The container is very small, such as an ampule;
 - The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or
 - 4) The container is a lab pack, as defined in Section 724.416, and is disposed of in accordance with Section 724.416.
- dc) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- ed) The placement of any liquid that is not a hazardous waste in a landfill is prohibited (35 Ill. Adm. Code 729.311). This subsection (d) corresponds with 40 CFR 265.314(d), which recites a past effective date. This statement maintains sturctural parity with the federal regulations.
- <u>fe</u>) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are one of the following:

materials listed or described in subsection (f)(1) of this Section; materials that pass one of the tests in subsection (f)(2) of this Section; or materials that are determined by the Board to be nonbiodegradable through the adjusted standard procedure of Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104.

- 1) Nonbiodegradable sorbents are the following:
 - A) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates, clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calcined montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, calcium carbonate (organic free limestone), oxides/hydroxides, alumina, lime, silica (sand), diatomaceous earth, perlite (volcanic glass), expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal/activated carbon, etc.); or
 - B) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystyrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked allylstyrene, and tertiary butyl copolymers). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or
 - C) Mixtures of these nonbiodegradable materials.
- 2) Tests for nonbiodegradable sorbents.
 - A) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) (Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi), incorporated by reference in 35 Ill. Adm. Code 720.111(a);
 - B) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) (Standard Practice for Determining Resistance of Plastics to Bacteria), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or
 - C) The sorbent material is determined to be non-biodegradable under OECD Guideline for Testing of Chemicals, Method 301B (CO₂ Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- f) The placement of any liquid that is not a hazardous waste in a landfill is prohibited. (See 35 Ill. Adm. Code 729.311.)

(Source: Ame	ended at 32	2 Ill. Reg	, effective)			
SUBPART Q: CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT							
Section 725.505		Special Requirements for Ignitable or Reactive Wastes					
Ignitable or reactive waste must not be placed in a treatment process or equipment unless either of the following conditions exists:							
a)	The waste is treated, rendered, or mixed before or immediately after placement the treatment process or equipment so that both of the following conditions are fulfilled:						
	th	•	nixture, or dissolution of a able or reactive waste und 123, and	<u> </u>			
	2) S	ection 725.117(b) is	complied with; or				
b)	The waste is treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react.						
(Source: Amended at 32 Ill. Reg, effective)							

SUBPART W: DRIP PADS

Section 725.541 Assessment of Existing Drip Pad Integrity

- a) For each existing drip pad, the owner or operator must evaluate the drip pad and determine that it meets all of the requirements of this Subpart W, except the requirements for liners and leak detection systems of Section 725.543(b). No later than June 6, 1991, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, a qualified registered professional engineer Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and re-certified annually until all upgrades, repairs, or modifications necessary to achieve compliance with all of the standards of Section 725.543 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of Section 725.543, except the standards for liners and leak detection systems specified in Section 725.543(b).
- b) The owner or operator must develop a written plan for upgrading, repairing and modifying the drip pad to meet the requirements of Section 725.543(b) and submit the plan to the Agency no later than two years before the date that all repairs, upgrades, and modifications will be complete. This written plan must

describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 725.543. The plan must be reviewed and certified by an independent a qualified, registered professional engineer. All upgrades, repairs, and modifications must be completed in accordance with the following:

- 1) For existing drip pads of known and documentable age, all upgrades, repairs, and modifications must be completed by June 6, 1993, or when the drip pad has reached 15 years of age, whichever comes later.
- 2) For existing drip pads for which the age cannot be documented, by June 6, 1999; but, if the age of the facility is greater than seven years, all upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by June 6, 1993, whichever comes later.
- The owner or operator may petition the Board for an extension of the deadline in subsection (b)(1) or (b)(2) of this Section.
 - A) The owner or operator must file a petition for a RCRA variance, as specified in Subpart B of 35 III. Adm. Code 104.
 - B) The Board will grant the petition for extension if it finds the following:
 - i) The drip pad meets all of the requirements of Section 725.543, except those for liners and leak detection systems specified in Section 725.543(b); and
 - ii) That it will continue to adequately protect human health and the environment.
- c) Upon completion of all repairs and modifications, the owner or operator must submit to the Agency, the as-built drawings for the drip pad, together with a certification by an independent, a qualified, registered professional engineer Professional Engineer attesting that the drip pad conforms to the drawings.
- d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of Section 725.543(m) or close the drip pad in accordance with Section 725.545.

(Source: Amended a	t 32 Ill. Reg	, effective _))
Section 725.543	Design and Oper	rating Requireme	nts	

a) Drip pads must fulfill the following requirements:

- 1) Not-It must not be constructed of earthen materials, wood, or asphalt, unless the asphalt is structurally supported;
- 2) Be-It must be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;
- 3) Have It must have a curb or berm around the perimeter;
- 4) In addition, the drip pad must fulfill the following requirements:
 - A) Have It must have a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second, e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1×10^{-7} centimeters per second such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to the existing drip pads and those drip pads for which the owner or operator elects to comply with Section 725.542(a) 725.542(b) instead of Section-725.542(b) 725.542(a).
 - B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent a qualified registered professional engineer

 Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for in subsection (b) of this Section.
- 5) Be It must be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

BOARD NOTE: In judging the structural integrity requirement of this subsection (a), the Agency should generally consider applicable standards established by professional organizations generally recognized by the industry, including ACI 318-83 (Building Code Requirements for Reinforced Concrete) or ASTM C 94-90, (Standard Specification for Ready-Mixed Concrete), incorporated by

- reference in 35 Ill. Adm. Code 720.111(a).
- b) If an owner or operator elects to comply with Section 725.542(b) <u>725.542(a)</u> instead of Section 725.542(a) <u>725.542(b)</u>, the drip pad must have the following features:
 - A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be constructed as follows:
 - A) Constructed It must be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from vehicular traffic on the drip pad);
 - B) Placed It must be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
 - C) <u>Installed It must be installed to cover all surrounding earth that could come in contact with the waste or leakage; and</u>
 - 2) A leakage detection system immediately above the liner that is designed, constructed, maintained, and operated to detect leakage from the drip pad. The leakage detection system must be constructed as follows:
 - A) Constructed It must be constructed of materials that fulfill the following requirements:
 - i) They are chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
 - ii) They are of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and

- B) Designed It must be designed and operated to function without clogging through the scheduled closure of the drip pad; and
- C) Designed It must be designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- A leakage collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.
- c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.
 - BOARD NOTE: See subsection (m) of this Section for remedial action required if deterioration or leakage is detected.
- d) The drip pad and associated collection system must be designed and operated to convey, drain and collect liquid resulting from drippage or precipitation in order to prevent run-off.
- e) Unless the drip pad is protected by a structure, as described in Section 725.540(b), the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system.
- f) Unless the drip pad is protected by a structure or cover, as described in Section 725.540(b), the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f) of this Section. The owner or operator must obtain a statement from an independent, a qualified, registered professional engineer Professional Engineer certifying that the drip pad design meets the requirements of this Section.
- h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- i) The drip pad surface must be cleaned thoroughly at least once every seven days using an appropriate and effective cleaning technique, including but not limited

to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning, with residues being properly managed, such that accumulated residues of hazardous waste or other materials are removed as to allow weekly inspections of the entire drip pad surface without interference or hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document, in the facility's operating log, the date and time of each cleaning and the cleaning procedure.

- j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad, in accordance with this Section, following treatment.
- Collection and holding units associated with run-on and run-off control systems
 must be emptied or otherwise managed as soon as possible after storms to
 maintain design capacity of the system.
- m) Throughout the active life of the drip pad, if the owner or operator detects a condition that may have caused or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:
 - 1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must perform the following acts:
 - A) Enter It must enter a record of the discovery in the facility operating log;
 - B) Immediately It must immediately remove from service the portion of the drip pad affected by the condition;
 - C) Determine It must determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
 - D) Within 24 hours after discovery of the condition, the owner or operator must notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this

work.

- 2) The Agency must: review the information submitted; make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete; and notify the owner or operator of the determination and the underlying rationale in writing.
- 3) Upon completing all repairs and clean up, the owner or operator must notify the Agency in writing and provide a certification, signed by an independent, qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with subsection (m)(1)(D) of this Section.
- n) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices and a description of treated wood storage and handling practices.

Source:	Amended at 32 Ill. Reg.	, effective	

Section 725.544 Inspections

- a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of Section 725.543 by an independent, a qualified, registered professional engineer Professional Engineer. The This certification must be maintained at the facility as part of the facility operating record. After installation, liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.
- b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
 - 1) Deterioration, malfunctions, or improper operation of run-on and run-off control systems;
 - 2) The presence of leakage in and proper functioning of leak detection system.
 - 3) Deterioration or cracking of the drip pad surface.

BOARD NOTE: See Section 725.543(m) for remedial action required if deterioration or leakage

is detected.		
(Source: Am	ended a	t 32 Ill. Reg, effective)
SUI	BPART	BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS
Section 725.9	061	Percent Leakage Alternative for Valves
a)	have a	orner or operator subject to the requirements of Section 725.957 may elect to all valves within a hazardous waste management unit comply with an ative standard that allows no greater than two percent of the valves to leak.
b)		ollowing requirements must be met if an owner or operator decides to y with the alternative standard of allowing two percent of valves to leak:
	1)	An owner or operator must notify the Agency that the owner or operator has elected to comply with the requirements of this Section;
	<u>21</u>)	A performance test as specified in subsection (c) of this Section must be conducted initially upon designation, annually and other times as specified by the Agency pursuant to Section 725.950(e); and
	<u>32</u>)	If a valve leak is detected it must be repaired in accordance with Section 725.957(d) and (e).
c)	Perfor	mance tests must be conducted in the following manner:
	1)	All valves subject to the requirements in Section 725.957 within the hazardous waste management unit must be monitored within 1 week by the methods specified in Section 725.963(b);
	2)	If an instrument reading of 10,000 ppm or greater is measured, a leak is detected; and
	3)	The leak percentage must be determined by dividing the number of valves subject to the requirements in Section 725.957 for which leaks are detected by the total number of valves subject to the requirements in Section 725.957 within the hazardous waste management unit.
d)	or ope	owner or operator decides no longer to comply with this Section, the owner or operator must notify the Agency in writing that the work practice standard bed in Section 725.957(a) through (e) will be followed.
(Source: Am	ended a	t 32 Ill. Reg. , effective)

Section 725.962 Skip Period Alternative for Valves

- a) Election.
- 4<u>a</u>) An owner or operator subject to the requirements of Section 725.957 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3) of this Section.
 - 2) An owner or operator must notify the Agency before implementing one of the alternative work practices.
- b) Reduced Monitoring.
 - 1) An owner or operator must comply with the requirements for valves, as described in Section 725.957, except as described in subsections (b)(2) and (b)(3) of this Section.
 - After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every six months) for the valves subject to the requirements in Section 725.957.
 - After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every year) for the valves subject to the requirements in Section 725.957.
 - 4) If the percentage of valves leaking is greater than two percent, the owner or operator must monitor monthly in compliance with the requirements in Section 725.957, but may again elect to use this Section after meeting the requirements of Section 725.957(c)(1).

((Source:	Amended at 32 Ill. Reg.	, effective

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section 725.990 Recordkeeping Requirements

a) Each owner or operator of a facility subject to the requirements in this Subpart CC must record and maintain the information specified in subsections (b) through (j) of this Section, as applicable to the facility. Except for air emission control equipment design documentation and information required by subsection (j) of

this Section, records required by this Section must be maintained in the operating record for a minimum of three years. Air emission control equipment design documentation must be maintained in the operating record until the air emission control equipment is replaced or is otherwise no longer in service. Information required by subsections (i) and (j) of this Section must be maintained in the operating record for as long as the waste management unit is not using air emission controls specified in Sections 725.985 through 725.988, in accordance with the conditions specified in Section 725.980(d) or (b)(7), respectively.

- b) The owner or operator of a tank using air emission controls in accordance with the requirements of Section 725.985 must prepare and maintain records for the tank that include the following information:
 - 1) For each tank using air emission controls in accordance with the requirements of Section 725.985 of this Subpart CC, the owner or operator must record the following information:
 - A) A tank identification number (or other unique identification description as selected by the owner or operator); and
 - B) A record for each inspection required by Section 725.985 that includes the following information:
 - i) Date inspection was conducted; and
 - ii) For each defect detected during the inspection, the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 725.985, the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected; and
 - 2) In addition to the information required by subsection (b)(1) of this Section, the owner or operator must record the following information, as applicable to the tank:
 - A) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 725.985(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Section 725.985(c). The records must include the date and time the samples were collected, the analysis method used, and the analysis results;

- B) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Section 725.985(e) must prepare and maintain documentation describing the floating roof design;
- C) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 725.985(f) must prepare and maintain the following records:
 - i) Documentation describing the floating roof design and the dimensions of the tank; and
 - ii) Records for each seal gap inspection required by Section 725.985(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 725.985(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.
- D) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Section 725.985(i) must prepare and maintain the following records:
 - i) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T--Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b); and
 - ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.
- c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section 725.986 must prepare and maintain records for the surface impoundment that include the following information:
 - 1) A surface impoundment identification number (or other unique

- identification description as selected by the owner or operator);
- 2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Section 725.986(c);
- 3) A record for each inspection required by Section 725.986 that includes the following information:
 - A) Date inspection was conducted; and
 - B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 725.986(f), the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected; and
- 4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator must prepare and maintain the records specified in subsection (e) of this Section.
- d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section 725.987 must prepare and maintain records that include the following information:
 - Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T—Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency); and
 - 2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.
- e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section 725.988 must prepare and maintain records that include the following information:
 - 1) Documentation for the closed-vent system and control device that includes the following:

- A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in subsection (e)(1)(B) of this Section or by performance tests as specified in subsection (e)(1)(C) of this Section when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur;
- B) If a design analysis is used, then design documentation, as specified in Section 725.935(b)(4). The documentation must include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 725.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications;
- C) If performance tests are used, then a performance test plan as specified in Section 725.935(b)(3) and all test results;
- D) Information as required by Section 725.935(c)(1) and (c)(2), as applicable;
- E) An owner or operator must record, on a semiannual basis, the following information for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable:
 - i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods; and
 - ii) A description of the planned routine maintenance that was performed for the control device during the previous sixmonth period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance;
- F) An owner or operator must record the following information for those unexpected control device system malfunctions that would

require the control device not to meet the requirements of Section 725.988(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable:

- i) The occurrence and duration of each malfunction of the control device system;
- ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning; and
- iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation; and
- G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 725.988(c)(3)(B).
- f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Section 725.983(c) must prepare and maintain the following records, as applicable:
 - 1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Section 725.983 (c)(1) or 725.984(e)(2)(A) 725.983(c)(2)(A) through (c)(2)(F), the owner or operator must record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator must record the date, time, and location that each waste sample is collected in accordance with the applicable requirements of Section 725.984; and
 - 2) For tanks, surface impoundments, or containers exempted under the provisions of Section 725.983(c)(2)(G) or (c)(2)(H), the owner or operator must record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.
- g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to Section 725.985(1) must record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

- h) The owner or operator of a facility that is subject to this Subpart CC and to the control device standards in federal subpart VV of 40 CFR 60 (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry), or subpart V of 40 CFR 61 (National Emission Standard for Equipment Leaks (Fugitive Emission Sources), each incorporated by reference in 35 Ill. Adm. Code 270.111, may elect to demonstrate compliance with the applicable Sections of this Subpart by documentation either pursuant to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60 or subpart V of 40 CFR 61, to the extent that the documentation required by 40 CFR 60 or 61 duplicates the documentation required by this Section.
- i) For each tank or container not using air emission controls specified in Sections 725.985 through 725.988 in accordance with the conditions specified in Section 725.980(d), the owner or operator must record and maintain the following information:
 - 1) A list of the individual organic peroxide compounds manufactured at the facility that meet the conditions specified in Section 725.980(d)(1);
 - A description of how the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) are managed at the facility in tanks and containers. This description must include the following information:
 - A) For the tanks used at the facility to manage this hazardous waste, sufficient information must be provided to describe each tank: a facility identification number for the tank, the purpose and placement of this tank in the management train of this hazardous waste, and the procedures used to ultimately dispose of the hazardous waste managed in the tanks; and
 - B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to describe the following for each container: a facility identification number for the container or group of containers; the purpose and placement of this container or group of containers in the management train of this hazardous waste; and the procedures used to ultimately dispose of the hazardous waste handled in the containers; and
 - An explanation of why managing the hazardous waste containing the organic peroxide compounds identified pursuant to subsection (i)(1) of this Section in the tanks or containers identified pursuant to subsection (i)(2) of this Section would create an undue safety hazard if the air emission controls specified in Sections 725.985 through 725.988 were installed and operated on these waste management units. This explanation

must include the following information:

- A) For tanks used at the facility to manage this hazardous waste, sufficient information must be provided to explain: how use of the required air emission controls on the tanks would affect the tank design features and facility operating procedures currently used to prevent an undue safety hazard during the management of this hazardous waste in the tanks; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of tanks equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides; and
- B) For containers used at the facility to manage this hazardous waste, sufficient information must be provided to explain: how use of the required air emission controls on the containers would affect the container design features and handling procedures currently used to prevent an undue safety hazard during management of this hazardous waste in the containers; and why installation of safety devices on the required air emission controls, as allowed under this Subpart CC, would not address those situations in which evacuation of containers equipped with these air emission controls is necessary and consistent with good engineering and safety practices for handling organic peroxides.
- j) For each hazardous waste management unit not using air emission controls specified in Sections 725.985 through 725.988 in accordance with the provisions of Section 725.980(b)(7), the owner and operator must record and maintain the following information:
 - 1) The certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63; and
 - 2) An identification of the specific federal requirements codified under 40 CFR 60, 61, or 63 with which the waste management unit is in compliance.

(Source:	Amended at 32 Ill. Reg.	effective
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SUBPART DD: CONTAINMENT BUILDINGS

Section 725.1100 Applicability

The requirements of this Subpart DD apply to owners or operators that store or treat hazardous waste in units designed and operated under Section 725.1101. These provisions will become effective on February 18, 1993. The owner or operator is not subject to the definition of land disposal in 35 Ill. Adm. Code 728.102 provided that the following is true of the unit:

- a) It is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to any of the following causes:
 - 1) Pressure gradients;
 - 2) Settlement, compression, or uplift;
 - 3) Physical contact with the hazardous wastes to which they are exposed;
 - 4) Climatic conditions; or
 - 5) The stresses of daily operation including the movement of heavy equipment within the unit and contact of such equipment with containment walls:
- b) It has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit;
- c) If used to manage liquids, the unit has the following design features:
 - 1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;
 - 2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and
 - A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest possible time, unless the unit has been granted a variance from the secondary containment system requirements under subsection 725.1101(b)(4);
- d) It has controls sufficient to <u>permit prevent fugitive</u> dust emissions to meet the no visible emission standard in subsection 725.1101(c)(1)(D); and

e) It is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

(Source: Amended a	at 32 III. Reg	, effective)
Section 725 1101	Design and Or	perating Standards	

- a) All containment buildings must comply with the following design and operating standards:
 - 1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g. precipitation, wind, run on) and to assure containment of managed wastes;
 - 2) The floor and containment walls of the unit, including the secondary containment system if required under subsection (b) of this Section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The containment building must meet the structural integrity requirements established by professional organizations generally recognized by the industry such as the American Concrete Institute [ACI] and the American Society of Testing Materials [ASTM]. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for lightweight doors and windows that meet these criteria:
 - A) They provide an effective barrier against fugitive dust emissions under subsection (c)(1)(D) of this Section; and
 - B) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings;
 - 3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail; and
 - 4) A containment building must have a primary barrier designed to withstand

the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

- b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include the following design features:
 - 1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).
 - 2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building:
 - A) The primary barrier must be sloped to drain liquids to the associated collection system; and
 - B) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.
 - A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
 - A) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, as follows:
 - i) It is constructed with a bottom slope of 1 percent or more; and
 - ii) It is constructed of a granular drainage material with a hydraulic conductivity of 1×10^{-2} cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3×10^{-5} m²/sec or more.
 - B) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.

- C) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Section—725.293(d)(1) 725.293(e)(1). In addition, the containment building must meet the requirements of subsections 725.293(b) and (c) to be an acceptable secondary containment system for a tank.)
- 4) For existing units other than 90-day generator units, USEPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart DD. In making this demonstration, the owner or operator must do each of the following:
 - A) Provide written notice to USEPA of their request by Nov. 16, 1992. This notification must describe the unit and its operating practices with specific reference to the performance of existing systems, and specific plans for retrofitting the unit with secondary containment;
 - B) Respond to any comments from USEPA on these plans within 30 days; and
 - C) Fulfill the terms of the revised plans, if such plans are approved by USEPA.
- c) Owners or operators of all containment buildings must do each of the following:
 - 1) Use It must use controls and practice to ensure containment of the hazardous waste within the unit, and at a minimum do each of the following:
 - A) Maintain It must maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;
 - B) Maintain It must maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;

- C) Take It must take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and
- D) Take It must take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) must be operated and maintained with sound air pollution control practices (see 40 CFR 60 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit;

BOARD NOTE: At 40 CFR 264.1101(c)(1)(iv)-(2005), USEPA cites "40 CFR part 60, subpart 292." At 57 Fed. Reg. 37217 (Aug. 18, 1992), USEPA repeats this citation in the preamble discussion of adoption of the rules. No such provision exists in the Code of Federal Regulations. While section 40 CFR 60.292 of the federal regulations pertains to control of fugitive dust emissions, that provision is limited in its application to glass melting furnaces. The Board has chosen to use the general citation: "40 CFR 60."

- Obtain It must obtain and keep on-site a certification by a qualified registered professional engineer (PE) Professional Engineer that the containment building design meets the requirements of subsections (a) through (c) of this Section. For units placed into operation prior to February 18, 1993, this certification must be placed in the facility's operating record (on-site files for generators that are not formally required to have operating records) no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification will be required prior to operation of the unit;
- Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, it must repair the condition promptly. In addition, however, the owner or operator must do the following, in accordance with the following procedures:

- A) Upon detection of a condition that has caused to a release of hazardous wastes (e.g., upon detection of leakage from the primary barrier) the owner or operator must do the following:
 - i) Enter a record of the discovery in the facility operating record;
 - ii) Immediately remove the portion of the containment building affected by the condition from service;
 - iii) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
 - iv) Within seven days after the discovery of the condition, notify the Agency in writing of the condition, and within 14 working days, provide a written notice to the Agency with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work;
- B) The Agency must review the information submitted, make a determination regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing; and
- C) Upon completing all repairs and cleanup the owner and operator must notify the Agency in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with subsection (c)(3)(A)(iv) of this Section; and
- 4) Inspect It must inspect and record in the facility's operating record, at least once every seven days, except for the owner or operator of a Performance Track member facility, which must inspect the record at least once each month after approval of the Agency, data gathered from monitoring equipment and leak detection equipment as well as the containment building and the area immediately surrounding the containment building to detect signs of releases of hazardous waste. To apply for a reduced inspection frequency, the owner or operator of a Performance Track member facility must follow the procedures described in Section 725.115(b)(5).
- d) For a containment buildings building that contain areas both with and without

secondary containment, the owner or operator must do the following:

- 1) Design and operate each area in accordance with the requirements enumerated in subsections (a) through (c) of this Section;
- 2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and
- 3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.
- e) Notwithstanding any other provision of this Subpart DD, the Agency must, in writing, not require allow the use of alternatives to the requirements for secondary containment for a permitted containment building where the Agency has determined that the facility owner or operator demonstrates has adequately demonstrated that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

(Source: Amended at 32 Ill. Reg. , effective) Compounds with Henry's Law Constant Less Than 0.1 Y/X (at 25° Section 725. Appendix F C) Compound name CAS No. Acetaldol 107-89-1 Acetamide 60-35-5 2-Acetylaminofluorene 53-96-3 3-Acetyl-5-hydroxypiperidine 3-Acetylpiperidine 618-42-8 1-Acetyl-2-thiourea 591-08-2 Acrylamide 79-06-1 Acrylic acid 79-10-7 Adenine 73-24-5 Adipic acid 124-04-9 Adiponitrile 111-69-3 Alachlor 15972-60-8 Aldicarb 116-06-3 834-12-8 Ametrvn 4-Aminobiphenyl 92-67-1 4-Aminopyridine 504-24-5 Aniline 62-53-3 90-04-0 o-Anisidine

84-65-1

Anthraquinone

A	1012 24 0
Atrazine	1912-24-9
Benzenearsonic acid	98-05-5
Benzenesulfonic acid	98-11-3
Benzidine	92-87-5
Benzo(a)anthracene	56-55-3
Benzo(k)fluoranthene	207-08-9
Benzoic acid	65-85-0
Benzo(g,h,i)perylene	191-24-2
Benzo(a)pyrene	50-32-8
Benzyl alcohol	100-51-6
у-ВНС	58-89-9
Bis(2-ethylhexyl)phthalate	117-81-7
Bromochloromethyl acetate	
Bromoxynil (3,5-Dibromo-4-hydroxybenzonitrile)	1689-84-5
Butyric acid	107-92-6
Caprolactam (hexahydro-2H-azepin-2-one)	105-60-2
Catechol (o-dihydroxybenzene)	120-80-9
Cellulose	9004-34-6
Cell wall	7001310
Chlorhydrin (3-Chloro-1,2-propanediol)	96-24-2
Chloroacetic acid	79-11-8
2-Chloroacetophenone	93-76-5
p-Chloroaniline	106-47-8
p-Chlorobenzophenone	134-85-0
Chlorobenzilate	510-15-6
	59-50-7
p-Chloro-m-cresol (6-chloro-m-cresol)	39-30-7
3-Chloro-2,5-diketopyrrolidine	
Chloro-1,2-ethane diol	107 40 0
4-Chlorophenol	106-48-9
Chlorophenol polymers (2-chlorophenol & 4-chlorophenol)	95-57-8 & 106-
	48-9
1-(o-Chlorophenyl)thiourea	5344-82-1
Chrysene	218-01-9
Citric acid	77-92-9
Creosote	8001-58-9
m-Cresol	108-39-4
o-Cresol	95-48-7
p-Cresol	106-44-5
Cresol (mixed isomers)	1319-77-3
4-Cumylphenol	27576-86
Cyanide	57-12-5
4-Cyanomethyl benzoate	
Diazinon	333-41-5
Dibenzo(a,h)anthracene	53-70-3
Dibutylphthalate	84-74-2
2,5-Dichloroaniline (N,N'-dichloroaniline)	95-82-9

2,6-Dichlorobenzonitrile	1194-65-6
2,6-Dichloro-4-nitroaniline	99-30-9
2,5-Dichlorophenol	333-41-5
3,4-Dichlorotetrahydrofuran	3511-19
Dichlorvos (DDVP)	62-73-7
Diethanolamine	111-42-2
N,N-Diethylaniline	91-66-7
Diethylene glycol	111-46-6
Diethylene glycol dimethyl ether (dimethyl Carbitol)	111-96-6
Diethylene glycol monobutyl ether (butyl Carbitol)	112-34-5
Diethylene glycol monoethyl ether acetate (Carbitol acetate)	112-15-2
Diethylene glycol monoethyl ether (Carbitol Cellosolve)	111-90-0
Diethylene glycol monomethyl ether (methyl Carbitol)	111-77-3
N,N'-Diethylhydrazine	1615-80-1
Diethyl(4-methylumbelliferyl)thionophosphate	299-45-6
Diethylphosphorothioate	126-75-0
N,N'-Diethylpropionamide	15299-99-7
, , , , , , , , , , , , , , , , , , , ,	60-51-5
2,3-Dimethoxystrychnidin-10-one	357-57-3
	60-11-7
7,12-Dimethylbenz(a)anthracene	57-97-6
3,3-Dimethylbenzidine	119-93-7
Dimethylcarbamoyl chloride	79-44-7
	624-92-0
	68-12-2
·	57-14-7
Dimethylphthalate	131-11-3
· ·	67-71-0
· · · · · · · · · · · · · · · · · · ·	67-68-5
4,6-Dinitro-o-cresol	534-52-1
1,2-Diphenylhydrazine	122-66-7
	110-98-5
Dipropylene glycol (1,1'-oxydi-2-propanol)	
Endrin	72-20-8
Epinephrine	51-43-4
mono-Ethanolamine	141-43-5
Ethyl carbamate (urethane)	51-79-6
Ethylene glycol	107-21-1
Ethylene glycol monobutyl ether (butyl Cellosolve)	111-76-2
Ethylene glycol monoethyl ether (Cellosolve)	110-80-5
Ethylene glycol monoethyl ether acetate (Cellosolve acetate)	111-15-9
Ethylene glycol monomethyl ether (methyl Cellosolve)	109-86-4
Ethylene glycol monophenyl ether (phenyl Cellosolve)	122-99-6
Ethylene glycol monopropyl ether (propyl Cellosolve)	2807-30-9
<i>y</i>	9-64-57
	96-45-7
4-Ethylmorpholine	100-74-3

3-Ethylphenol	620-17-7
Fluoroacetic acid, sodium salt	62-74-8
Formaldehyde	50-00-0
Formamide	75-12-7
Formic acid	64-18-6
Fumaric acid	110-17-8
Glutaric acid	110-94-1
Glycerin (Glycerol)	56-81-5
Glycidol	556-52-5
Glycinamide	598-41-4
Glyphosate	1071-83-6
Guthion	86-50-0
Hexamethylene-1,6-diisocyanate (1,6-diisocyanatohexane)	822-06-0
	680-31-9
Hexamethyl phosphoramide Hexanoic acid	142-62-1
Hydrazine	302-01-2
Hydrocyanic acid	74-90-8
Hydroquinone	123-31-9
Hydroxy-2-propionitrile (hydracrylonitrile)	109-78-4
Indeno(1,2,3-cd)pyrene	193-39-5
Lead acetate	301-04-2
Lead subacetate (lead acetate, monobasic)	1335-32-6
Leucine	61-90-5
Malathion	121-75-5
Maleic acid	110-16-7
Maleic anhydride	108-31-6
Mesityl oxide	141-79-7
Methane sulfonic acid	75-75-2
Methomyl	16752-77-5
p-Methoxyphenol	150-76-5
Methylacrylate	96-33-3
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4
4,4'-Methylenediphenyl diisocyanate (diphenyl methane diisocyanate)	101-68-8
4,4'-Methylenedianiline	101-77-9
Methylene diphenylamine (MDA)	
5-Methylfurfural	620-02-0
Methylhydrazine	60-34-4
Methyliminoacetic acid	
Methyl methane sulfonate	66-27-3
1-Methyl-2-methoxyaziridine	
Methylparathion	298-00-0
Methyl sulfuric acid (sulfuric acid, dimethyl ester)	77-78-1
4-Methylthiophenol	106-45-6
Monomethylformamide (N-methylformamide)	123-39-7
Nabam	142-59-6
α-Naphthol	90-15-3
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0.37 1.4 1	125 10 2
β-Naphthol	135-19-3
α-Naphthylamine	134-32-7
β-Naphthylamine	91-59-8
Neopentyl glycol	126-30-7
Niacinamide	98-92-0
o-Nitroaniline	88-74-4
Nitroglycerin	55-63-0
2-Nitrophenol	88-75-5
4-Nitrophenol	100-02-7
N-Nitrosodimethylamine	62-75-9
Nitrosoguanidine	674-81-7
N-Nitroso-n-methylurea	684-93-5
N-Nitrosomorpholine (4-nitrosomorpholine)	59-89-2
Oxalic acid	144-62-7
Parathion	56-38-2
Pentaerythritol	115-77-5
Phenacetin	62-44-2
Phenol	108-95-2
Phenylacetic acid	103-93-2
m-Phenylene diamine	103-82-2
o-Phenylene diamine	95-54-5
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p-Phenylene diamine	106-50-3
Phenyl mercuric acetate	62-38-4
Phorate	298-02-2
Phthalic anhydride	85-44-9
α-Picoline (2-methyl pyridine)	109-06-8
1,3-Propane sulfone	1120-71-4
β-Propiolactone	57-57-8
Proporur (Baygon)	
Propylene glycol	57-55-6
Pyrene	129-00-0
Pyridinium bromide	39416-48-3
Quinoline	91-22-5
Quinone (p-benzoquinone)	106-51-4
Resorcinol	108-46-3
Simazine	122-34-9
Sodium acetate	127-09-3
Sodium formate	141-53-7
Strychnine	57-24-9
Succinic acid	110-15-6
Succinimide	123-56-8
Sulfanilic acid	121-47-1
Terephthalic acid	100-21-0
Tetraethyldithiopyrophosphate	3689-24-5
Tetraethylenepentamine	112-57-2
Thiofanox	39196-18-4

Thiosemicarbazide		79-19-6
2,4-Toluenediamine		95-80-7
2,6-Toluenediamine		823-40-5
3,4-Toluenediamine		496-72-0
2,4-Toluene diisocyanate		584-84-9
p-Toluic acid		99-94-5
m-Toluidine		108-44-1
1,1,2-Trichloro-1,2,2-trifluoroethane		76-13-1
Triethanolamine		102-71-6
Triethylene glycol dimethyl ether		
Tripropylene glycol		24800-44-0
Warfarin		81-81-2
3,4-Xylenol (3,4-dimethylphenol)		95-65-8
(Source: Amended at 32 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

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	CONSTITUTING DISPOSAL
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	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
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Standards applicable to generators of hazardous waste fuel (Repealed)

Applicability (Repealed)

Prohibitions (Repealed)

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726.142	Standards applicable to generators of used oil burned for energy recovery
70(14)	(Repealed)
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	SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED
Section	SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED
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AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4 and 27].

SOURCE: Adopted in R85-22 at 10 Ill. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 Ill. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 Ill. Reg. 18606, effective Nov. 13, 1989; amended in R90-2 at 14 III. Reg. 14533, effective August 22, 1990; amended in R90-11 at 15 III. Reg. 9727, effective June 17, 1991; amended in R91-13 at 16 Ill. Reg. 9858, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20904, effective Nov. 22, 1993; amended in R94-7 at 18 Ill. Reg. 12500, effective July 29, 1994; amended in R95-6 at 19 III. Reg. 10006, effective June 27, 1995; amended in R95-20 at 20 III. Reg. 11263, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 754, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 18042, effective Sept. 28, 1998; amended in R99-15 at 23 Ill. Reg. 9482, effective July 26, 1999; amended in R00-13 at 24 III. Reg. 9853, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6667, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 4200, effective February 14, 2003; amended in R03-18 at 27 III. Reg. 12916, effective July 17, 2003; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3700, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 III. Reg. 1096, effective December 20, 2006; amended in R07-5/R07-14 at 32 III. Reg. _____, effective _

SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED

Section 726.180 Applicability and Requirements

a) Extent of exemption for spent lead-acid batteries from hazardous waste management requirements. If an owner or operator generates, collects, transports, stores, or regenerates lead-acid batteries for reclamation purposes, the owner or operator may be exempt from certain hazardous waste management requirements. Subsections (a)(1) though (a)(5) of this Section indicate which requirements apply to the owner or operator. Alternatively, the owner or operator may choose to manage its spent lead-acid batteries under the "Universal Waste" rule in 35 Ill. Adm. Code 733.

- 1) If the batteries will be reclaimed through regeneration (such as by electrolyte replacement), the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, 722 through 726 (except for 35 Ill. Adm. Code 722.111), and 728 and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111.
- If the batteries will be reclaimed other than through regeneration, and the owner or operator generates, collects, or transports the batteries, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
- 3) If the batteries will be reclaimed other than through regeneration, and the owner or operator stores the batteries, but the owner or operator is not the reclaimer, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
- 4) If the batteries will be reclaimed other than through regeneration, and the owner or operator stores the batteries before the owner or operator reclaims them, the owner or operator must comply with Section 726.180(b) and other requirements described in that subsection, and the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
- If the batteries will be reclaimed other than through regeneration, and the owner or operator does not store the batteries before the owner or operator reclaims them, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, and the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
- b) Exemption for spent lead-acid batteries stored before reclamation other than through regeneration. The requirements of this subsection (b) apply to an owner or operator that stores spent lead-acid batteries before it reclaims them, where the owner or operator does not reclaim them through regeneration. The requirements are slightly different depending on the owner's or operator's RCRA permit status.
 - 1) For an interim status facility, the owner or operator must comply with the following requirements:

- A) The notification requirements under Section 3010 of the Resource Conservation and Recovery Act (RCRA);
- B) All applicable provisions in Subpart A of 35 Ill. Adm. Code 725;
- C) All applicable provisions in Subpart B of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.113 (waste analysis);
- D) All applicable provisions in Subparts C and D of 35 Ill. Adm. Code 725;
- E) All applicable provisions in Subpart E of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.171 and 725.172 (dealing with the use of the manifest and manifest discrepancies);
- F) All applicable provisions in Subparts F through L of 35 Ill. Adm. Code 725; and
- G) All applicable provisions in 35 Ill. Adm. Code 702 and 703.
- 2) For a permitted facility, the following requirements:
 - A) The notification requirements under section 3010 of RCRA;
 - B) All applicable provisions in Subpart A of 35 Ill. Adm. Code 724;
 - C) All applicable provisions in Subpart B of 35 Ill. Adm. Code 724, except 35 Ill. Adm. Code 724.113 (waste analysis);
 - D) All applicable provisions in Subparts C and D of 35 Ill. Adm. Code 724;
 - E) All applicable provisions in Subpart E of 35 Ill. Adm. Code 724, except 35 Ill. Adm. Code 724.171 or 724.172 (dealing with the use of the manifest and manifest discrepancies);
 - F) All applicable provisions in Subparts F through L of 35 Ill. Adm. Code 724; and

	G)	All applicable	provisions in 35	Ill. Adm.	Code 702	and	703.
(Source:	Amended at 32 Ill.	Reg.	, effective)	

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

Section 726.200 Applicability

- a) The regulations of this Subpart H apply to hazardous waste burned or processed in a boiler or industrial furnace (BIF) (as defined in 35 Ill. Adm. Code 720.110) irrespective of the purpose of burning or processing, except as provided by subsections (b), (c), (d), (g), and (h) of this Section. In this Subpart H, the term "burn" means burning for energy recovery or destruction or processing for materials recovery or as an ingredient. The emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 apply to facilities operating under interim status or under a RCRA permit, as specified in Sections 726.202 and 726.203.
- b) Integration of the MACT standards.
 - 1) Except as provided by subsections (b)(2), (b)(3), and (b)(4) of this Section, the standards of this Part do not apply to a new hazardous waste boiler or industrial furnace unit that becomes subject to RCRA permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing hazardous waste boiler or industrial furnace unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of federal subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, pursuant to 40 CFR 63.1207(j) (What are the performance testing requirements?) and 63.1210(d) (What are the notification requirements?), documenting compliance with the requirements of federal subpart EEE of 40 CFR 63. Nevertheless, even after this demonstration of compliance with the MACT standards. RCRA permit conditions that were based on the standards of this Part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.
 - 2) The following standards continue to apply:
 - A) If an owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Section 726.202(e)(1), requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Section 726.202(e)(2)(C), requiring compliance with the emission standards and operating requirements, during startup and shutdown if hazardous waste is in the combustion chamber, except

- for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;
- B) The closure requirements of Sections 726.202(e)(11) and 726.203(l);
- C) The standards for direct transfer of Section 726.211;
- D) The standards for regulation of residues of Section—726.312 726.212; and
- E) The applicable requirements of Subparts A through H, BB, and CC of 35 Ill. Adm. Code 724 and 725.
- The owner or operator of a boiler or hydrochloric acid production furnace that is an area source under 40 CFR 63.2, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as 40 CFR 63), that has not elected to comply with the emission standards of 40 CFR 63.1216, 63.1217, and 63.1218, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as subpart EEE of 40 CFR 63), for particulate matter, semivolatile and low volatile metals, and total chlorine, also remains subject to the following requirements of this Part:
 - A) Section 726.205 (Standards to Control PM);
 - B) Section 726.206 (Standards to Control Metals Emissions); and
 - C) Section 726.207 (Standards to Control HCl and Chlorine Gas Emissions).
- 4) The particulate matter standard of Section 726.205 remains in effect for a boiler that elects to comply with the alternative to the particulate matter standard under 40 CFR 63.1216(e), incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as subpart EEE of 40 CFR 63).

BOARD NOTE: Sections 9.1 and 39.5 of the Environmental Protection Act [415 ILCS 5/9.1 and 39.5] make the federal MACT standards directly applicable to entities in Illinois and authorize the Agency to issue permits based on the federal standards. In adopting this subsection (b), USEPA stated as follows (at 64 Fed Reg. 52828, 52975 (Sept. 30, 1999)):

Under [the approach adopted by USEPA as a] final rule, MACT air emissions and related operating requirements are to be included in title V permits; RCRA permits will continue to be required for all other aspects of the combustion unit and the facility that are governed by RCRA (e.g., corrective action, general facility

standards, other combustor-specific concerns such as materials handling, risk-based emissions limits and operating requirements, as appropriate, and other hazardous waste management units).

- c) The following hazardous wastes and facilities are not subject to regulation pursuant to this Subpart H:
 - 1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Such used oil is subject to regulation pursuant to 35 Ill. Adm. Code 739, rather than this Subpart H;
 - 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 pursuant to 35 Ill. Adm. Code 721.104 and 721.106(a)(3)(C) and (a)(3)(D) and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators pursuant to 35 Ill. Adm. Code 721.105; and
 - 4) Coke ovens, if the only hazardous waste burned is USEPA hazardous waste no. K087 decanter tank tar sludge from coking operations.
- d) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices, such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation pursuant to this Subpart H, except for Sections 726.201 and 726.212.
 - To be exempt from Sections 726.202 through 726.211, an owner or operator of a metal recovery furnace or mercury recovery furnace must comply with the following requirements, except that an owner or operator of a lead or a nickel-chromium recovery furnace or a metal recovery furnace that burns baghouse bags used to capture metallic dust emitted by steel manufacturing must comply with the requirements of subsection (d)(3) of this Section, and an owner or operator of a lead recovery furnace that is subject to regulation under the Secondary Lead Smelting NESHAP of federal subpart X of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) must comply with the requirements of subsection (h) of this Section:
 - A) Provide a one-time written notice to the Agency indicating the following:
 - i) The owner or operator claims exemption pursuant to this

subsection (d);

- ii) The hazardous waste is burned solely for metal recovery consistent with the provisions of subsection (d)(2) of this Section;
- iii) The hazardous waste contains recoverable levels of metals; and
- iv) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this subsection (d);
- B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection (d) by using appropriate methods; and
- C) Maintain at the facility for at least three years records to document compliance with the provisions of this subsection (d), including limits on levels of toxic organic constituents and Btu value of the waste and levels of recoverable metals in the hazardous waste compared to normal non-hazardous waste feedstocks.
- 2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:
 - A) The hazardous waste has a total concentration of organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 exceeding 500 ppm by weight, as fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited, and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section; or
 - B) The hazardous waste has a heating value of 5,000 Btu/lb or more, asfired, and is so considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section.
- 3) To be exempt from Sections 726.202 through 726.211, an owner or operator

of a lead, nickel-chromium, or mercury recovery furnace, except for an owner or operator of a lead recovery furnace that is subject to regulation pursuant to the Secondary Lead Smelting NESHAP of subpart X of 40 CFR 63, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must provide a one-time written notice to the Agency identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste pursuant to this subsection (d)(3) or subsection (d)(1) of this Section. The owner or operator must comply with the requirements of subsection (d)(1) of this Section for those wastes claimed to be exempt pursuant to that subsection and must comply with the following requirements for those wastes claimed to be exempt pursuant to this subsection (d)(3):

- A) The hazardous wastes listed in Appendices K, L, and M of this Part and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (d)(1) of this Section, provided the following are true:
 - i) A waste listed in Appendix K of this Part must contain recoverable levels of lead, a waste listed in Appendix L of this Part must contain recoverable levels of nickel or chromium, a waste listed in Appendix M of this Part must contain recoverable levels of mercury and contain less than 500 ppm of Appendix H to 35 Ill. Adm. Code 721 organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;
 - ii) The waste does not exhibit the toxicity characteristic of 35 Ill. Adm. Code 721.124 for an organic constituent;
 - iii) The waste is not a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 because it is listed for an organic constituent, as identified in Appendix G of 35 Ill. Adm. Code 721; and
 - iv) The owner or operator certifies in the one-time notice that hazardous waste is burned pursuant to the provisions of subsection (d)(3) of this Section and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis must be conducted according to subsection (d)(1)(B) of this Section, and records to document compliance with subsection (d)(3) of this Section must be kept for at least three years.

- B) The Agency may decide, on a case-by-case basis, that the toxic organic constituents in a material listed in Appendix K, Appendix L, or Appendix M of this Part that contains a total concentration of more than 500 ppm toxic organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart H. Under these circumstances, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart H when burning that material. In making the hazard determination, the Agency must consider the following factors:
 - i) The concentration and toxicity of organic constituents in the material;
 - ii) The level of destruction of toxic organic constituents provided by the furnace; and
 - iii) Whether the acceptable ambient levels established in Appendix D or E of this Part will be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.
- e) The standards for direct transfer operations pursuant to Section 726.211 apply only to facilities subject to the permit standards of Section 726.202 or the interim status standards of Section 726.203.
- f) The management standards for residues pursuant to Section 726.212 apply to any BIF burning hazardous waste.
- g) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals are conditionally exempt from regulation pursuant to this Subpart H, except for Section 726.212. To be exempt from Sections 726.202 through 726.211, an owner or operator must do the following:
 - 1) Provide a one-time written notice to the Agency indicating the following:
 - A) The owner or operator claims exemption pursuant to 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 the metals and that the treatment recovers economically significant amounts of precious metal; and
- 3) Maintain, at the facility for at least three years, records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.
- h) An owner or operator of a lead recovery furnace that processes hazardous waste for recovery of lead and which is subject to regulation pursuant to the Secondary Lead Smelting NESHAP of subpart X of 40 CFR 63, is conditionally exempt from regulation pursuant to this Subpart H, except for Section 726.201. To become exempt, an owner or operator must provide a one-time notice to the Agency identifying each hazardous waste burned and specifying that the owner or operator claims an exemption pursuant to this subsection (h). The notice also must state that the waste burned has a total concentration of non-metal compounds listed in Appendix H to 35 Ill. Adm. Code 721 of less than 500 ppm by weight, as fired and as provided in subsection (d)(2)(A) of this Section, or is listed in Appendix K to this Part.
- i) Abbreviations and definitions. The following definitions and abbreviations are used in this Subpart H:

"APCS" means air pollution control system.

"BIF" means boiler or industrial furnace.

"Carcinogenic metals" means arsenic, beryllium, cadmium, and chromium.

"CO" means carbon monoxide.

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

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(i)(B)(1)(i) and (e)(6)(ii)(B)(1).

"DRE" means destruction or removal efficiency.

"cu m" or "m³" means cubic meters.

"E" means "ten to the power." For example, "XE-Y" means "X times ten to the -Y power."

"Feed rates" are measured as specified in Section 726.202(e)(6).

"Good engineering practice stack height" is as defined by federal 40 CFR 51.100(ii) (Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"Hourly rolling average" means the arithmetic mean of the 60 most recent one-minute average values recorded by the continuous monitoring system. BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(i)(B)(1)(ii).

"K" means Kelvin.

"kVA" means kilovolt amperes.

"MEI" means maximum exposed individual.

"MEI location" means the point with the maximum annual average off-site (unless on-site is required) ground level concentration.

"Noncarcinogenic metals" means antimony, barium, lead, mercury, thallium, and silver.

"One hour block average" means the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of the preceding clock hour.

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(ii)(B)(2).

"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. BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(ii)(B)(2).

"RAC" means reference air concentration, the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart. RACs are specified in Appendix D of this Part.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E of this Part.

"SSU" means "Saybolt Seconds Universal," a unit of viscosity measured by ASTM D 88-87 (Standard Test Method for Saybolt Viscosity) or D 2161-87 (Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"TCLP test" means Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), as used for the purposes of 35 Ill. Adm. Code 721.124.

"TESH" means terrain-adjusted effective stack height (in meters).

"Tier I." See Section 726.206(b).

"Tier II." See Section 726.206(c).

"Tier III." See Section 726.206(d).

"Toxicity equivalence" is estimated, pursuant to Section 726.204(e), using section 4.0 (Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners) in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part).

"mg" means microgram.

(Source:	Amended at 32 Ill. Reg.	, effective	
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Section 726.202 Permit Standards for Burners

a) Applicability.

- General. An owner or operator of a BIF that burns hazardous waste and which does not operate under interim status must comply with the requirements of this Section and 35 Ill. Adm. Code 703.208 and 703.232, unless exempt pursuant to the small quantity burner exemption of Section 726.208.
- 2) Applicability of 35 Ill. Adm. Code 724 standards. An owner or operator of a BIF that burns hazardous waste is subject to the following provisions of 35 Ill. Adm. Code 724, except as provided otherwise by this Subpart H:
 - A) In Subpart A (General), 35 Ill. Adm. Code 724.104;
 - B) In Subpart B (General facility standards), 35 Ill. Adm. Code 724.111 through 724.118;
 - C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 724.131 through 724.137;
 - D) In Subpart D (Contingency plan and emergency procedures), 35 Ill. Adm. Code 724.151 through 724.156;
 - E) In Subpart E (Manifest system, recordkeeping and reporting), the applicable provisions of 35 Ill. Adm. Code 724.171 through 724.177;
 - F) In Subpart F-(Corrective Action) (Releases from Solid Waste Management Units), 35 Ill. Adm. Code 724.190 and 724.201;
 - G) In Subpart G (Closure and post-closure), 35 Ill. Adm. Code 724.211 through 724.215;
 - H) In Subpart H (Financial requirements), 35 Ill. Adm. Code 724.241, 724.242, 724.243, and 724.247 through 724.251, except that the State of Illinois and the federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 724; and
 - I) Subpart BB (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 724.950(a).
- b) Hazardous waste analysis.
 - The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in Appendix H of 35 Ill. Adm. Code 721 that is reasonably expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by using appropriate analytical methods. The constituents listed in Appendix H of 35 Ill. Adm. Code 721 that are excluded from this analysis

must be identified and the basis for their exclusion explained. This analysis must provide all information required by this Subpart H and 35 Ill. Adm. Code 703.208 and 703.232 and must enable the Agency to prescribe such permit conditions as are necessary to adequately protect human health and the environment. Such analysis must be included as a portion of the Part B permit application, or, for facilities operating under the interim status standards of this Subpart H, as a portion of the trial burn plan that may be submitted before the Part B application pursuant to provisions of 35 Ill. Adm. Code 703.232(g), as well as any other analysis required by the Agency. The owner or operator of a BIF not operating under the interim status standards must provide the information required by 35 Ill. Adm. Code 703.208 and 703.232 in the Part B application to the greatest extent possible.

- 2) Throughout normal operation, the owner or operator must conduct sampling and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the BIF are within the physical and chemical composition limits specified in the permit.
- c) Emissions standards. An owner or operator must comply with emissions standards provided by Sections 726.204 through 726.207.
- d) Permits.
 - 1) The owner or operator must burn only hazardous wastes specified in the facility permit and only under the operating conditions specified pursuant to subsection (e) of this Section, except in approved trial burns under the conditions specified in 35 Ill. Adm. Code 703.232.
 - 2) Hazardous wastes not specified in the permit must not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes must be based on either trial burn results or alternative data included with Part B of a permit application pursuant to 35 Ill. Adm. Code 703.208.
 - 3) BIFs operating under the interim status standards of Section 726.203 are permitted pursuant to procedures provided by 35 Ill. Adm. Code 703.232(g).
 - A permit for a new BIF (those BIFs not operating under the interim status standards) must establish appropriate conditions for each of the applicable requirements of this Section, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of subsection (e) of this Section, in order to comply with the following standards:
 - A) For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum

time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the operating requirements must be those most likely to ensure compliance with the emission standards of Sections 726.204 through 726.207, based on the Agency's engineering judgment. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation must include those specified by the applicable provisions of Section 726.204, Section 726.205, Section 726.206, or Section 726.207. The Agency must extend the duration of this period for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

- B) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the emissions standards of Sections 726.204 through 726.207 and must be in accordance with the approved trial burn plan;
- C) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, submission of the trial burn results by the applicant, review of the trial burn results, and modification of the facility permit by the Agency to reflect the trial burn results, the operating requirements must be those most likely to ensure compliance with the emission standards Sections 726.204 through 726.207 based on the Agency's engineering judgment.
- D) For the remaining duration of the permit, the operating requirements must be those demonstrated in a trial burn or by alternative data specified in 35 Ill. Adm. Code 703.208, as sufficient to ensure compliance with the emissions standards of Sections 726.204 through 726.207.
- e) Operating requirements.
 - 1) General. A BIF burning hazardous waste must be operated in accordance with the operating requirements specified in the permit at all times when there is hazardous waste in the unit.
 - 2) Requirements to ensure compliance with the organic emissions standards.
 - A) DRE (destruction or removal efficiency) standard. Operating conditions must be specified in either of the following ways: on a case-by-case basis for each hazardous waste burned, which conditions must be demonstrated (in a trial burn or by alternative

data, as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a), or as special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived pursuant to Section 726.204(a)(4), each set of operating requirements must specify the composition of the hazardous waste (including acceptable variations in the physical and chemical properties of the hazardous waste that will not affect compliance with the DRE performance standard) to which the operating requirements apply. For each such hazardous waste, the permit must specify acceptable operating limits including, but not limited to, the following conditions, as appropriate:

- i) Feed rate of hazardous waste and other fuels measured and specified as prescribed in subsection (e)(6) of this Section;
- ii) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;
- iii) Appropriate controls of the hazardous waste firing system;
- iv) Allowable variation in BIF system design or operating procedures;
- v) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured, and specified as prescribed in subsection (e)(6) of this Section;
- vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6) of this Section, unless documentation is provided pursuant to 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 pursuant to Section 726.204(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run; and, the permit limit for HC is 20 ppmv (as defined in Section 726.204(c)(1)), except as provided in Section 726.204(f); or
- iii) When complying with the alternative HC limit for industrial furnaces pursuant to 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 pursuant to Sections 726.204(a)(5), 726.205, 726.206, and 726.207) must not be fed into the device, unless the device is operating within the conditions of operation specified in the permit.
- 3) Requirements to ensure conformance with the particulate matter (PM) standard.
 - A) Except as provided in subsections (e)(3)(B) and (e)(3)(C) of this Section, the permit must specify the following operating requirements to ensure conformance with the PM standard specified in Section 726.205:
 - i) Total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in subsection (e)(6) of this Section;
 - ii) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in subsection (e)(6) of this Section;
 - iii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system (APCS);
 - iv) Allowable variation in BIF system design including any APCS or operating procedures; and

- v) Such other operating requirements as are necessary to ensure that the PM standard in Section 726.211(b) 726.205(a) is met.
- B) Permit conditions to ensure conformance with the PM standard must not be provided for facilities exempt from the PM standard pursuant to Section 726.205(b);
- C) For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the PM standard must not limit the ash content of hazardous waste or other feed materials.
- 4) Requirements to ensure conformance with the metals emissions standard.
 - A) For conformance with the Tier I (or adjusted Tier I) metals feed rate screening limits of Section 726.206(b) or (e), the permit must specify the following operating requirements:
 - i) Total feed rate of each metal in hazardous waste, other fuels and industrial furnace feedstocks measured and specified pursuant to provisions of subsection (e)(6) of this Section;
 - ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and
 - iii) A sampling and metals analysis program for the hazardous waste, other fuels and industrial furnace feedstocks;
 - B) For conformance with the Tier II metals emission rate screening limits pursuant to Section 726.206(c) and the Tier III metals controls pursuant to Section 726.206(d), the permit must specify the following operating requirements:
 - i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;
 - ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;
 - iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6) of this Section: total feed streams; total hazardous waste feed; and total pumpable hazardous waste feed;
 - iv) Total feed rate of chlorine and chloride in total feed streams

- measured and specified as prescribed in subsection (e)(6) of this Section;
- v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;
- vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;
- vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;
- viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;
- ix) Allowable variation in BIF system design including any APCS or operating procedures; and
- x) Such other operating requirements as are necessary to ensure that the metals standards pursuant to Section 726.206(c) or (d) are met.
- C) For conformance with an alternative implementation approach approved by the Agency pursuant to Section 726.206(f), the permit must specify the following operating requirements:
 - i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;
 - ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;
 - iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsection (e)(6) of this Section: total hazardous waste feed; and total pumpable hazardous waste feed;
 - iv) Total feed rate of chlorine and chloride in total feed streams measured and specified prescribed in subsection (e)(6) of this Section;

- v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;
- vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;
- vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;
- viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;
- ix) Allowable variation in BIF system design including any APCS or operating procedures; and
- x) Such other operating requirements as are necessary to ensure that the metals standards pursuant to Section 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:
 - Feed rate of total chlorine and chloride in hazardous waste, other fuels and industrial furnace feedstocks measured and specified as prescribed in subsection (e)(6) of this Section;
 - ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and
 - iii) A sampling and analysis program for total chlorine and chloride for the hazardous waste, other fuels and industrial furnace feedstocks;
 - B) For conformance with the Tier II HCl and chlorine gas emission rate screening limits pursuant to Section 726.207(b)(2) and the Tier III HCl and chlorine gas controls pursuant to Section 726.207(c), the permit must specify the following operating requirements:

- i) Maximum emission rate for HCl and for chlorine gas specified as the average emission rate during the trial burn;
- ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section;
- iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6) of this Section;
- iv) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;
- v) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;
- vi) Allowable variation in BIF system design including any APCS or operating procedures; and
- vii) Such other operating requirements as are necessary to ensure that the HCl and chlorine gas standards pursuant to Section 726.207(b)(2) or (c) are met.
- 6) Measuring parameters and establishing limits based on trial burn data.
 - A) General requirements. As specified in subsections (e)(2) through (e)(5) of this Section, each operating parameter must be measured, and permit limits on the parameter must be established, according to either of the following procedures:
 - i) Instantaneous limits. A parameter is measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or
 - ii) Hourly rolling average. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The permit limit for the parameter must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

BOARD NOTE: The Board has combined the text of 40 CFR 266.100(e)(6)(i)(B)(1) and (e)(6)(i)(B)(2) into this subsection (e)(6)(A)(ii) and moved the text of 40 CFR

266.100(e)(6)(i)(B)(1)(i) and (e)(6)(i)(B)(1)(ii) to appear as definitions of "continuous monitor" and "hourly rolling average," respectively, in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.

- B) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (as defined in Section 726.200(i)) and lead must be established either on an hourly rolling average basis, as prescribed by subsection (e)(6)(A) of this Section, or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours, the following requirements apply:
 - 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 The continuous monitor must meet the specifications of "continuous monitor," "rolling average for the selected averaging period," and "one hour block average" as defined in Section 726.200(i); and
 - BOARD NOTE: The Board has moved the text of 40 CFR 266.100(e)(6)(ii)(B)(1) and (e)(6)(ii)(B)(2) to appear as definitions in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.
 - 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 pursuant to the continuous monitoring requirements of subsections (e)(6)(A) and (e)(6)(B) of this Section.
- D) Conduct of trial burn testing.
 - i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated

- simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.
- ii) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters pursuant to 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 pursuant to Section 726.206(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.
- iii) Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by this subsection (e).
- 7) General requirements.
 - A) Fugitive emissions. Fugitive emissions must be controlled in one of the following ways:
 - i) By keeping the combustion zone totally sealed against fugitive emissions;
 - ii) By maintaining the combustion zone pressure lower than atmospheric pressure; or
 - iii) By an alternative means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.
 - B) Automatic waste feed cutoff. A BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established pursuant to this Section. In addition, the following requirements apply:

- The permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber;
- ii) Exhaust gases must be ducted to the APCS operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and
- iii) Operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the permit limits. For parameters that are monitored on an instantaneous basis, the Agency must establish a minimum period of time after a waste feed cutoff during which the parameter must not exceed the permit limit before the hazardous waste feed is restarted.
- C) Changes. A BIF must cease burning hazardous waste when combustion properties or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits as specified in the permit.
- 8) Monitoring and Inspections.
 - A) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:
 - If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks and feed rates of ash, metals, and total chlorine and chloride;
 - ii) If specified by the permit, CO, HCs, and oxygen on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in subsection (e)(2)(B) of this Section. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I of this Part; and
 - iii) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace

feedstocks as appropriate), residues, and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.

- B) All monitors must record data in units corresponding to the permit limit unless otherwise specified in the permit.
- C) The BIF and associated equipment (pumps, <u>values</u>, <u>valves</u>, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.
- D) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Agency that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing must be conducted at least once every 30 days.
- E) These monitoring and inspection data must be recorded and the records must be placed in the operating record required by 35 Ill. Adm. Code 724.173.
- 9) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner and operator must comply with Section 726.211.
- 10) Recordkeeping. The owner or operator must keep maintain in the operating record of the facility all information and data required by this Section until closure of the facility for five years.
- Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the BIF.

(Source:	Amende	d at 32 Ill. Reg,	effective)
Section 72	26.203	Interim Status Standards	s for Burners	
a)	a) Purpose, scope, and applicability.		y.	
	1)	General.		

A) The purpose of this Section is to establish minimum national

standards for owners and operators of "existing" BIFs that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of this Section apply to owners and operators of existing facilities until either a permit is issued under Section 726.202(d) or until closure responsibilities identified in this Section are fulfilled.

- B) "Existing" or "in existence" means a BIF for which the owner or operator filed a certification of precompliance with USEPA pursuant to federal 40 CFR 266.103(b); provided, however, that USEPA has not determined that the certification is invalid.
- C) If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator must comply with the applicable regulations dealing with permit modifications in 35 Ill. Adm. Code 703.280 or changes in interim status in 35 Ill. Adm. Code 703.155.
- 2) Exemptions. The requirements of this Section do not apply to hazardous waste and facilities exempt under Section 726.200(b) or 726.208.
- Prohibition on burning dioxin-listed wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes must not be burned in a BIF operating under interim status: USEPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.
- 4) Applicability of 35 Ill. Adm. Code 725 standards. An owner or operator of a BIF that burns hazardous waste and which is operating under interim status is subject to the following provisions of 35 Ill. Adm. Code 725, except as provided otherwise by this Section:
 - A) In Subpart A of 35 Ill. Adm. Code 725 (General), 35 Ill. Adm. Code 725.104;
 - B) In Subpart B of 35 Ill. Adm. Code 725 (General facility standards), 35 Ill. Adm. Code 725.111 through 725.117;
 - C) In Subpart C of 35 Ill. Adm. Code 725 (Preparedness and prevention), 35 Ill. Adm. Code 725.131 through 725.137;
 - D) In Subpart D of 35 Ill. Adm. Code 725 (Contingency plan and emergency procedures), 35 Ill. Adm. Code 725.151 through 725.156;
 - E) In Subpart E of 35 Ill. Adm. Code 725 (Manifest system, recordkeeping and reporting), 35 Ill. Adm. Code 725.171 through

- 725.177, except that 35 Ill. Adm. Code 725.171, 725.172 and 725.176 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;
- F) In Subpart G of 35 Ill. Adm. Code 725 (Closure and post-closure), 35 Ill. Adm. Code 725.211 through 725.215;
- G) In Subpart H of 35 III. Adm. Code 725 (Financial requirements), 35 III. Adm. Code 725.241, 725.242, 725.243, and 725.247 through 725.251 725.250, except that the State of Illinois and the federal government are exempt from the requirements of Subpart H of 35 III. Adm. Code 725; and
- H) In Subpart BB of 35 Ill. Adm. Code 725 (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 725.950(a).
- 5) Special requirements for furnaces. The following controls apply during interim status to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see subsection (a)(5)(B) of this Section) at any location other than the hot end where products are normally discharged or where fuels are normally fired:

A) Controls.

- i) The hazardous waste must be fed at a location where combustion gas temperature is at least 1800° F;
- ii) The owner or operator must determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;
- iii) For cement kiln systems, the hazardous waste must be fed into the kiln; and
- iv) The HC controls of Section 726.204(f) or subsection (c)(5) of this Section apply upon certification of compliance under subsection (c) of this Section, irrespective of the CO level achieved during the compliance test.
- B) Burning hazardous waste solely as an ingredient. A hazardous waste is burned for a purpose other than "solely as an ingredient" if it meets either of the following criteria:
 - i) The hazardous waste has a total concentration of nonmetal compounds listed in Appendix H of 35 Ill. Adm. Code 721,

exceeding 500 ppm by weight, as fired and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the facility record; or

- ii) The hazardous waste has a heating value of 5,000 Btu/lb or more, as fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly blended must be retained in the facility record.
- Restrictions on burning hazardous waste that is not a fuel. Prior to certification of compliance under subsection (c) of this Section, an owner or operator must not feed hazardous waste that has a heating value less than 5000 Btu/lb, as generated, (except that the heating value of a waste asgenerated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a BIF, except that the following may occur:
 - A) Hazardous waste may be burned solely as an ingredient;
 - B) Hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours;
 - C) Such waste may be burned if the Agency has documentation to show that the following was true prior to August 21, 1991:
 - The BIF was operating under the interim status standards for incinerators or thermal treatment units, Subparts O or P of 35 Ill. Adm. Code 725;
 - ii) The BIF met the interim status eligibility requirements under 35 Ill. Adm. Code 703.153 for Subparts O or P of 35 Ill.

Adm. Code 725; and

- iii) Hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or
- D) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under 35 Ill. Adm. Code 721.102(e) prior to February 21, 1991, and documentation is kept on file supporting this claim.
- 7) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner or operator must comply with Section 726.211.
- b) Certification of precompliance. This subsection corresponds with 40 CFR 266.103(b), under which USEPA required certain owners and operators to file a certification of precompliance by August 21, 1991. No similar filing with the Agency was required, so the Board did not incorporate the federal filing requirement into the Illinois regulations. This statement maintains structural parity with the federal regulations.
- c) Certification of compliance. The owner or operator must conduct emissions testing to document compliance with the emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section under the procedures prescribed by this subsection (c), except under extensions of time provided by subsection (c)(7) of this Section. Based on the compliance test, the owner or operator must submit to the Agency, on or before August 21, 1992, a complete and accurate "certification of compliance" (under subsection (c)(4) of this Section) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1) of this Section.
 - Limits on operating conditions. The owner or operator must establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in subsection (c)(4)(D) of this Section) or as otherwise specified and include these limits with the certification of compliance. The BIF must be operated in accordance with these operating limits and the applicable emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section at all times when there is hazardous waste in the unit.
 - A) Feed rate of total hazardous waste and (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)), pumpable hazardous waste;
 - B) Feed rate of each metal in the following feedstreams:

- i) Total feedstreams, except that industrial furnaces which must comply with the alternative metals implementation approach under subsection (c)(3)(B) of this Section must specify limits on the concentration of each metal in collected PM in lieu of feed rate limits for total feedstreams; and facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metal feed rate screening limits determined under subsection 726.206(b) or (e) of this Section;
 - BOARD NOTE: Federal subsections 266.103(c)(1)(ii)(A)(1) and (c)(1)(ii)(A)(2) are condensed into subsection (c)(1)(B)(i).
- ii) Total hazardous waste feed (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)); and
- iii) Total pumpable hazardous waste feed (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));
- C) Total feed rate of total chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chloride feed rate screening limits determined under Section 726.207(b)(1) or (e);
- D) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited:
- E) CO concentration, and where required, HC concentration in stack gas. When complying with the CO controls of Section 726.204(b), the CO limit is 100 ppmv, and when complying with the HC controls of Section 726.204(c), the HC limit is 20 ppmv. When complying with the CO controls of Section 726.204(c), the CO limit is established based on the compliance test;
- F) Maximum production rate of the device in appropriate units when producing normal product unless complying with Tier I or Adjusted Tier I feed rate screening limits for chlorine under Section 726.207(b)(1) or (e) and for all metals under Section 726.207(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under Section 726.205;
- G) Maximum combustion chamber temperature where the temperature

measurement is as close to the combustion zone as possible and is upstream of any quench water injection, (unless complying with the Tier I adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

- H) Maximum flue gas temperature entering a PM control device (unless complying with Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));
- I) For systems using wet scrubbers, including wet ionizing scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):
 - i) Minimum liquid to flue gas ratio;
 - ii) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and
 - iii) Minimum pH level of the scrubber water;
- J) For systems using venturi scrubbers, the minimum differential gas pressure across the venturi (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e));
- K) For systems using dry scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):
 - i) Minimum caustic feed rate; and
 - ii) Maximum flue gas flow rate;
- L) For systems using wet ionizing scrubbers or electrostatic precipitators (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):
 - i) Minimum electrical power in kVA to the precipitator plates; and

- ii) Maximum flue gas flow rate;
- M) For systems using fabric filters (baghouses), the minimum pressure drop (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)).
- 2) Prior notice of compliance testing. At least 30 days prior to the compliance testing required by subsection (c)(3) of this Section, the owner or operator must notify the Agency and submit the following information:
 - A) General facility information including:
 - i) USEPA facility ID number;
 - ii) Facility name, contact person, telephone number, and address;
 - iii) Person responsible for conducting compliance test, including company name, address, and telephone number, and a statement of qualifications;
 - iv) Planned date of the compliance test;
 - B) Specific information on each device to be tested, including the following:
 - i) A Description of BIF;
 - ii) A scaled plot plan showing the entire facility and location of the BIF;
 - iii) A description of the APCS;
 - iv) Identification of the continuous emission monitors that are installed, including the following: CO monitor; Oxygen monitor; HC monitor, specifying the minimum temperature of the system, and, if the temperature is less than 150° C, an explanation of why a heated system is not used (see subsection (c)(5) of this Section) and a brief description of the sample gas conditioning system;
 - v) Indication of whether the stack is shared with another device that will be in operation during the compliance test; and

- vi) Other information useful to an understanding of the system design or operation; and
- C) Information on the testing planned, including a complete copy of the test protocol and QA/QC plan, and a summary description for each test providing the following information at a minimum:
 - i) Purpose of the test (e.g., demonstrate compliance with emissions of PM); and
 - ii) Planned operating conditions, including levels for each pertinent parameter specified in subsection (c)(1) of this Section.

3) Compliance testing.

- A) General. Compliance testing must be conducted under conditions for which the owner or operator has submitted a certification of precompliance under subsection (b) of this Section and under conditions established in the notification of compliance testing required by subsection (c)(2) of this Section. The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar on-site unit. To support the request, the owner or operator must provide a comparison of the hazardous waste burned and other feedstreams, and the design, operation, and maintenance of both the tested unit and the similar unit. The Agency must provide a written approval to use compliance test data in lieu of testing a similar unit if the Agency finds that the hazardous wastes, devices and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of this subsection (c).
- B) Special requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must comply with one of the following procedures for testing to determine compliance with the metals standards of Section 726.206(c) or (d):
 - i) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in Appendix I to this Part;
 - ii) Stack emissions testing for a minimum of six hours each day while hazardous waste is burned during interim status. The testing must be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when

the APCS is operated under normal conditions. During interim status, hazardous waste analysis for metals content must be sufficient for the owner or operator to determine if changes in metals content affect the ability of the unit to meet the metals emissions standards established under Section 726.206(c) or (d). Under this option, operating limits (under subsection (c)(1) of this Section) must be established during compliance testing under this subsection (c)(3) only on the following parameters: feed rate of total hazardous waste; total feed rate of total chlorine and chloride in total feed streams; total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; CO concentration, and where required, HC concentration in stack gas; and maximum production rate of the device in appropriate units when producing normal product; or

iii) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of subsection (c)(1) of this Section only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test must be fed at the feed rates that will be fed during the compliance test.

C) Conduct of compliance testing.

- i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.
- ii) Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters under this Section, the facility must operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected PM back into the furnace and that comply with subsection (c)(3)(B)(i) or (c)(3)(B)(ii) of this Section, however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning

- compliance testing for metals.
- iii) Compliance test data on the level of an operating parameter for which a limit must be established in the certification of compliance must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (c)(1) of this Section.
- 4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator must certify to the Agency compliance with the emissions standards of Sections 726.204(b), (c) and (e); 726.205; 726.206; 726.207; and subsection (a)(5)(A)(iv) of this Section. The certification of compliance must include the following information:
 - A) General facility and testing information, including the following:
 - i) USEPA facility ID number;
 - ii) Facility name, contact person, telephone number, and address:
 - iii) Person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;
 - iv) Dates of each compliance test;
 - v) Description of BIF tested;
 - vi) Person responsible for QA/QC, title and telephone number, and statement that procedures prescribed in the QA/QC plan submitted under Section 726.203(c)(2)(C) have been followed, or a description of any changes and an explanation of why changes were necessary;
 - vii) Description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why the changes were necessary;
 - viii) Description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why

the changes were necessary; and

- ix) The complete report on results of emissions testing.
- B) Specific information on each test, including the following:
 - i) Purposes of test (e.g., demonstrate conformance with the emissions limits for PM, metals, HCl, chlorine gas, and CO);
 - ii) Summary of test results for each run and for each test including the following information: date of run; duration of run; time-weighted average and highest hourly rolling average CO level for each run and for the test; highest hourly rolling average HC level, if HC monitoring is required for each run and for the test; if dioxin and furan testing is required under Section 726.204(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor (defined in Section 726.200(i)); timeweighted average PM emissions for each run and for the test; time-weighted average HCl and chlorine gas emissions for each run and for the test; time-weighted average emissions for the metals subject to regulation under Section 726.206 for each run and for the test; and QA/QC results.
- C) Comparison of the actual emissions during each test with the emissions limits prescribed by Sections 726.204(b), (c), and (e); 726.205; 726.206; and 726.207 and established for the facility in the certification of precompliance under subsection (b) of this Section.
- D) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in subsection (c)(1) of this Section using one of the following procedures:
 - i) Instantaneous limits. A parameter must be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the operating limit specified as the time-weighted average during all runs of the compliance test.
 - ii) Hourly rolling average basis. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The operating limit for the parameter must be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.

iii) Rolling average limits for carcinogenic metals (as defined in Section 726.200(i)) and lead. Feed rate limits for the carcinogenic metals and lead must be established either on an hourly rolling average basis as prescribed by subsection (c)(4)(D)(ii) of this Section or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from two to 24 hours the following must occur: the feed rate of each metal must be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis; the operating limit for the feed rate of each metal must be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run; and the continuous monitor and the rolling average for the selected averaging period are as defined in Section 726.200(i).

BOARD NOTE: The Board has combined the text of 40 C.F.R. 266.103(c)(4)(iv)(C)(1) and (c)(4)(iv)(C)(3) are condensed into subsection (c)(b)(C)(iii) to comport with Illinois Administrative Code codification requirements.

- iv) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (c)(4)(D)(i) through (c)(4)(D)(iii) of this Section.
- E) Certification of compliance statement. The following statement must accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results, and other information used to determine conformance with the requirements of 35 Ill. Adm. Code 726.203(c) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manage the facility, or those persons directly responsible for gathering the

information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established pursuant to 35 Ill. Adm. Code 726.203(c)(4)(D) are enforceable limits at which the facility can legally operate during interim status until a revised certification of compliance is submitted."

- Special requirements for HC monitoring systems. When an owner or operator is required to comply with the HC controls provided by Section 726.204(c) or subsection (a)(5)(A)(iv) of this Section, a conditioned gas monitoring system may be used in conformance with specifications provided in Appendix I to this Part provided that the owner or operator submits a certification of compliance without using extensions of time provided by subsection (c)(7) of this Section.
- 6) Special operating requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must do the following:
 - A) When complying with the requirements of subsection (c)(3)(B)(i) of this Section, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in Appendix I to this Part; and
 - B) When complying with the requirements of subsection (c)(3)(B)(ii) of this Section, comply with the operating requirements prescribed by that subsection.
- 7) Extensions of time.
 - A) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 by August 21, 1992, the owner or operator must do the following:
 - i) Stop burning hazardous waste and begin closure activities under subsection (l) of this Section for the hazardous waste portion of the facility;
 - ii) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance

testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Agency by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or

- iii) Obtain a case-by-case extension of time under subsection (c)(7)(B) of this Section.
- B) Case-by-case extensions of time. See Section 726.219.
- 8) Revised certification of compliance. The owner or operator may submit at any time a revised certification of compliance (recertification of compliance) under the following procedures:
 - A) Prior to submittal of a revised certification of compliance, hazardous waste must not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning must be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207;
 - B) At least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator must notify the Agency and submit the following information:
 - i) USEPA facility ID number, and facility name, contact person, telephone number, and address;
 - ii) Operating conditions that the owner or operator is seeking to revise and description of the changes in facility design or operation that prompted the need to seek to revise the operating conditions;
 - iii) A determination that, when operating under the revised operating conditions, the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 are not likely to be exceeded. To document this determination, the owner or operator must submit the applicable information required under subsection (b)(2) of this Section; and
 - iv) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the

applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 when operating under revised operating conditions. The protocol must include a schedule of pretesting and compliance testing. If the owner or operator revises the scheduled date for the compliance test, the owner or operator must notify the Agency in writing at least 30 days prior to the revised date of the compliance test;

- C) Conduct a compliance test under the revised operating conditions and the protocol submitted to the Agency to determine compliance with the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207; and
- D) Submit a revised certification of compliance under subsection (c)(4) of this Section.
- d) Periodic Recertifications. The owner or operator must conduct compliance testing and submit to the Agency a recertification of compliance under provisions of subsection (c) of this Section within three-five years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, the owner or operator must comply with the requirements of subsection (c)(8) of this Section.
- e) Noncompliance with certification schedule. If the owner or operator does not comply with the interim status compliance schedule provided by subsections (b), (c), and (d) of this Section, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l) of this Section, and hazardous waste burning must not resume except under an operating permit issued under 35 Ill. Adm. Code 703.232. For purposes of compliance with the closure provisions of subsection (l) of this Section and 35 Ill. Adm. Code 725.212(d)(2) and 725.213, the BIF has received "the known final volume of hazardous waste" on the date the deadline is missed.
- f) Start-up and shut-down. Hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine) must not be fed into the device during start-up and shut-down of the BIF, unless the device is operating within the conditions of operation specified in the certification of compliance.
- g) Automatic waste feed cutoff. During the compliance test required by subsection (c)(3) of this Section and upon certification of compliance under subsection (c) of this Section, a BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in subsections (c)(1)(A) and (c)(1)(E) through (c)(1)(M) of this Section deviate from those established in the certification of compliance. In addition, the following must occur:

- To minimize emissions of organic compounds, the minimum combustion chamber temperature (or the indicator of combustion chamber temperature) that occurred during the compliance test must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either of the following:
 - A) If compliance with the combustion chamber temperature limit is based on <u>a-an</u> hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or
 - B) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and
- 2) Operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.
- h) Fugitive emissions. Fugitive emissions must be controlled as follows:
 - 1) By keeping the combustion zone totally sealed against fugitive emissions; or
 - 2) By maintaining the combustion zone pressure lower than atmospheric pressure; or
 - 3) By an alternative means of control that the owner or operator demonstrates provides fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration must be included in the operating record.
- i) Changes. A BIF must cease burning hazardous waste when combustion properties, or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits specified in the certification of compliance.
- j) Monitoring and Inspections.
 - 1) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:
 - A) Feed rates and composition of hazardous waste, other fuels, and

- industrial furnace feed stocks and feed rates of ash, metals, and total chlorine and chloride as necessary to ensure conformance with the certification of precompliance or certification of compliance;
- B) CO, oxygen, and, if applicable, HC on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I to this Part; and
- C) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feed stocks as appropriate) and the stack gas emissions must be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.
- 2) The BIF and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when they contain hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.
- The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the owner or operator can demonstrate that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration must be included in the operating record. At a minimum, operational testing must be conducted at least once every 30 days.
- 4) These monitoring and inspection data must be recorded and the records must be placed in the operating log.
- k) Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by this Section until closure of the BIF unit for five years.
- l) Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF and must comply with 35 Ill. Adm. Code 725.211 through 725.215.

(Source: Amended at 32 Ill. Reg	, effective	_)
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Section 726.205 Standards to Control PM

- A BIF burning hazardous waste must not emit PM in excess of 180 mg/dry standard a) m³ (0.08 grains/dry standard cubic foot) after correction to a stack gas concentration of seven percent oxygen, using procedures prescribed in the following methods in appendix A to 40 CFR 60 (Test Methods), each incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part): Method 1 (Sample and Velocity Traverses for Stationary Sources), Method 2 (Determination of Volatile Organic Compound Leaks), Method 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts). Method 2B (Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators), Method 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), Method 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts), Method 2E (Determination of Landfill Gas Production Flow Rate), Method 2F (Determination of Stack Gas Velocity and Volumetric Flow Rate with Three-Dimensional Probes), Method 2G (Determination of Stack Gas Velocity and Volumetric Flow Rate with Two-Dimensional Probes), Method 2H (Determination of Stack Gas Velocity Taking into Account Velocity Decay Near the Stack Wall), Method 3 (Gas Analysis for the Determination of Dry Molecular Weight), Method 3A (Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)), Method 3B (Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air), Method 3C (Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources), Method 4 (Determination of Moisture Content in Stack Gases), Method 5 (Determination of Particulate Matter Emissions from Stationary Sources), Method 5A (Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry), Method 5B (Determination of Nonsulfuric Acid Particulate Matter Emissions from Stationary Sources), Method 5D (Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters), Method 5E (Determination of Particulate Matter Emissions from the Wool Fiberglass Insulation Manufacturing Industry), Method 5F (Determination of Nonsulfate Particulate Matter Emissions from Stationary Sources), Method 5G (Determination of Particulate Matter Emissions from Wood Heaters (Dilution Tunnel Sampling Location)), Method 5H (Determination of Particulate Emissions from Wood Heaters from a Stack Location), and Method 5I (Determination of Low Level Particulate Matter Emissions from Stationary Sources).
- b) An owner or operator meeting the requirements of Section 726.209(b) for the low risk waste exemption is exempt from the PM standard.
- c) Oxygen correction.
 - 1) Measured pollutant levels must be corrected for the amount of oxygen in the stack gas according to the following formula:

$$\frac{P_c = P_m \times 14/(E - Y)}{}$$

$$P_{c} = \frac{P_{m} \times 14}{E - Y}$$

Where:

 P_c = the corrected concentration of the pollutant in the stack gas

 P_m = the measured concentration of the pollutant in the stack gas

E = the oxygen concentration on a dry basis in the combustion air fed to the device

Y = the measured oxygen concentration on a dry basis in the stack.

- 2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion (that is, air with an oxygen concentration exceeding 21 percent), the value of E will be the concentration of oxygen in the enriched air.
- 3) Compliance with all emission standards provided by this Subpart H must be based on correcting to seven percent oxygen using this procedure.
- d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 726.206 Standards to Control Metals Emissions

- a) General. The owner or operator must comply with the metals standards provided by subsections (b), (c), (d), (e), or (f) of this Section for each metal listed in subsection (b) of this Section that is present in the hazardous waste at detectable levels using appropriate analytical methods.
 - BOARD NOTE: The federal regulations do not themselves define the phrase "appropriate analytical methods," but USEPA did include a definition in its preamble discussion accompanying the rule. The Board directs attention to the following segment (at 70 Fed. Reg. 34538, 34541 (June 14, 2005)) for the

purposes of subsections (b)(1)(C) and (b)(1)(D) of this Section:

[T]wo primary considerations in selecting an appropriate method, which together serve as our general definition of an appropriate method [are the following] . . . :

- 1. Appropriate methods are reliable and accepted as such in the scientific community.
- 2. Appropriate methods generate effective data.

USEPA went on to further elaborate these two concepts and to specify other documents that might provide guidance.

- b) Tier I feed rate screening limits. Feed rate screening limits for metals are specified in Appendix A to this Part as a function of terrain-adjusted effective stack height (TESH) and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b)(7) of this Section.
 - 1) Noncarcinogenic metals. The feed rates of the noncarcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the screening limits specified in Appendix A to this Part.
 - A) The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either of the following:
 - i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii); or
 - ii) An instantaneous limit not to be exceeded at any time.
 - B) The feed rate screening limit for lead is based on one of the following:
 - i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii);
 - ii) An averaging period of 2 to 24 hours, as defined in Section 726.202(e)(6)(B) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or
 - iii) An instantaneous limit not to be exceeded at any time.

- 2) Carcinogenic metals.
 - A) The feed rates of carcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed values derived from the screening limits specified in Appendix A to this Part. The feed rate of each of these metals is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{A_i}{F_i} \le 1.0$$

Where:

 Σ A_i/F_i = the sum of the values of A/F for each metal "i," from i = 1 to n

n = number of carcinogenic metals

 $A_i =$ the actual feed rate to the device for metal

F_i = the feed rate screening limit provided by Appendix A to this Part for metal "i."

- B) The feed rate screening limits for the carcinogenic metals are based on either:
 - i) An hourly rolling average; or
 - ii) An averaging period of two to 24 hours, as defined in Section 726.202(e)(6)(B), with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.
- 3) TESH (terrain adjusted effective stack height).
 - A) The TESH is determined according to the following equation:

$$TESH = H + P - T$$

Where:

H = Actual physical stack height (m).

- P = Plume rise (in m) as determined from Appendix F to this Part as a function of stack flow rate and stack gas exhaust temperature.
- T = Terrain rise (in m) within five kilometers of the stack.
- B) The stack height (H) must not exceed good engineering practice stack height, as defined in Section 726.200(i).
- C) If the TESH calculated pursuant to subsection (b)(3)(A) of this Section is not listed in Appendix A through Appendix C to this Part, the values for the nearest lower TESH listed in the table must be used. If the TESH is four meters or less, a value based on four meters must be used.
- 4) Terrain type. The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within five kilometers of the stack equals or exceeds the elevation of the physical stack height (H) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.
- 5) Land use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, procedures provided in Appendix I or Appendix J to this Part must be used.
- Multiple stacks. An owner or operator of a facility with more than one onsite stack from a BIF, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA permit or interim status controls must comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The stack with the lowest value of K is the worst-case stack. K is determined from the following equation as applied to each stack:

$$K = H \times V \times T$$

Where:

K = a parameter accounting for relative influence of stack height and plume rise

- H = physical stack height (meters)
- V = stack gas flow rate (m³/sec (cubic meters per second)
- T =exhaust temperature (degrees K).
- 7) Criteria for facilities not eligible for screening limits. If any criteria below are met, the Tier I (and Tier II) screening limits do not apply. Owners and operators of such facilities must comply with either the Tier III standards provided by subsection (d) of this Section or with the adjusted Tier I feed rate screening limits provided by subsection (e) of this Section.
 - A) The device is located in a narrow valley less than one kilometer wide;
 - B) The device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;
 - C) The device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake; or
 - D) The physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building.
- 8) Implementation. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate screening limits are not exceeded.
- c) Tier II emission rate screening limits. Emission rate screening limits are specified in Appendix A to this Part as a function of TESH and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b)(7) of this Section.
 - 1) Noncarcinogenic metals. The emission rates of noncarcinogenic metals must not exceed the screening limits specified in Appendix A to this Part.
 - 2) Carcinogenic metals. The emission rates of carcinogenic metals must not exceed values derived from the screening limits specified in Appendix A to this Part. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission

rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^{n} \frac{A_i}{E_i} \le 1.0$$

Where:

 Σ A_i/E_i = the sum of the values of A/E for each metal "i," from i = 1 to n

n = number of carcinogenic metals

 A_i = the actual emission rate to the device for metal "i"

E_i = the emission rate screening limit provided by Appendix A to this Part for metal "i."

- Implementation. The emission rate limits must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.
- 4) Definitions and limitations. The definitions and limitations provided by subsection (b) of this Section and 726.200(g) for the following terms also apply to the Tier II emission rate screening limits provided by this subsection (c): TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.
- 5) Multiple stacks.
 - A) An owner or operator of a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must comply with the emissions screening limits for any such stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.
 - B) The worst-case stack is determined by procedures provided in subsection (b)(6) of this Section.

- C) For each metal, the total emissions of the metal from those stacks must not exceed the screening limit for the worst-case stack.
- d) Tier III site-specific risk assessment. The requirements of this subsection (d) apply to facilities complying with either the Tier III or Adjusted Tier I except where specified otherwise.
 - 1) General. Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either Tier III or Adjusted Tier I metals controls must be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal and a demonstration that acceptable ambient levels are not exceeded.
 - 2) Acceptable ambient levels. Appendix D and Appendix E to this Part list the acceptable ambient levels for purposes of this Subpart H. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 1×10⁻⁵ RSDs are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD, as described in subsection (d)(3) of this Section.
 - Carcinogenic metals. For the carcinogenic metals the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on site) to the RSD for all carcinogenic metals emitted must not exceed 1.0 as determined by the following equation:

$$\sum_{i=1}^{n} \frac{P_i}{R_i} \le 1.0$$

Where:

 Σ $P_i/R_i \!\!=\!$ the sum of the values of P/R for each metal "i," from i=1 to n

n = number of carcinogenic metals

 P_i = the predicted ambient concentration for metal i

 $R_i =$ the RSD for metal i.

- 4) Noncarcinogenic metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal must not exceed the RAC.
- Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must conduct emissions testing (except that facilities complying with Adjusted Tier I controls need not conduct emissions testing) and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedence exceedance of the acceptable ambient levels.
- Implementation. Under Tier III, the metals controls must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.
- e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limits provided by Appendix A to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient levels provided by Appendix D and Appendix E to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in subsection (b)(2) of this Section.
- f) Alternative implementation approaches.
 - Pursuant to subsection (f)(2) of this Section the Agency must approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by subsection (c) or (d) of this Section alternative to monitoring the feed rate of metals in each feedstream.
 - 2) The emission limits provided by subsection (d) of this Section must be determined as follows:
 - A) For each noncarcinogenic metal, by back-calculating from the RAC provided in Appendix D to this Part to determine the allowable emission rate for each metal using the dilution factor for

the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and

- B) For each carcinogenic metal by the following methods:
 - i) By back-calculating from the RSD provided in Appendix E to this Part to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and
 - ii) If more than one carcinogenic metal is emitted, by selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by subsection (f)(2)(B)(i) of this Section, such that the sum for all carcinogenic metals of the ratios of the selected emission limit to the emission rate determined by that subsection does not exceed 1.0.

g) Emission testing.

- 1) General. Emission testing for metals must be conducted using Method 0060 (Determinations of Metals in Stack Emissions) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- 2) Hexavalent chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in Method 0061 (Determination of Hexavalent Chromium Emissions from Stationary Sources) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- h) Dispersion modeling. Dispersion modeling required under this Section must be conducted according to methods recommended in federal appendix W to 40 CFR 51 (Guideline on Air Quality Models), in section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure) in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," USEPA publication number EPA-454/R-92-019, each incorporated by reference in 35 Ill. Adm. Code 720.111(b), to predict the maximum annual average off-site ground level concentration. However, on-site concentrations

must be considered when a person resides on-site.

i) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended at	32 Ill. Reg.	, effect	ive)
Section 726.207	Standards to	Control HCl and	Chlorine Gas Emissions	

- a) General. The owner or operator must comply with the HCl and chlorine gas controls provided by subsection (b), (c), or (e) of this Section.
- b) Screening limits.
 - Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in Appendix B to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the levels specified.
 - 2) Tier II emission rate screening limits. Emission rate screening limits for HCl and chlorine gas are specified in Appendix C to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and chlorine gas must not exceed the levels specified.
 - 3) Definitions and limitations. The definitions and limitations provided by Sections 726.200(i) and 726.206(b) for the following terms also apply to the screening limits provided by this subsection: TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.
 - 4) Multiple stacks. Owners and operators of facilities with more than one onsite stack from a BIF, incinerator or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.
 - A) The worst-case stack is determined by procedures provided in Section 726.206(b)(6).

- B) Under Tier I, the total feed rate of chlorine and chloride to all subject devices must not exceed the screening limit for the worst-case stack.
- C) Under Tier II, the total emissions of HCl and chlorine gas from all subject stacks must not exceed the screening limit for the worst-case stack.
- c) Tier III site-specific risk assessments.
 - General. Conformance with the Tier III controls must be demonstrated by emissions testing to determine the emission rate for HCl and chlorine gas, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.
 - 2) Acceptable ambient levels. Appendix D to this Part lists the RACs for HCl $(7 \mu g/m^3)$ and chlorine gas $(0.4 \mu g/m^3)$.
 - Multiple stacks. Owners and operators of facilities with more than one onsite stack from a BIF, incinerator, or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an exceedence 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 of the following:
 - 1) An hourly rolling average, as defined in Sections 726.200(i) and 726.202(e)(6); or
 - 2) An instantaneous basis not to be exceeded at any time.
- e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limit provided by Appendix B to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for chlorine gas provided by Appendix D to this Part using dispersion modeling to determine the

- maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.
- f) Emissions testing. Emissions testing for HCl and chlorine gas (Cl₂) must be conducted using the procedures described in Method 0050 or 0051, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- g) Dispersion modeling. Dispersion modeling must be conducted according to the provisions of Section 726.206(h).
- h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended a	ıt 32 Ill. Reg	, effect	ive)
Section 726.209	Low Risk Wa	ste 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) of this Section, and the owner or operator demonstrates by procedures prescribed in subsection (a)(2) of this Section, 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 asfired 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 Appendix H to 35 Ill. Adm. Code 721, 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) of this Section, 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) of this Section, 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) An owner or operator of a facility with more than one on-site stack from a BIF that is exempt under this Section must conduct dispersion modeling of emissions from all stacks exempt under this Section to predict ambient levels prescribed by this subsection (a)(2).
 - D) Ground level concentrations of constituents predicted under subsection (a)(2)(C) of this Section, 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:

$$\sum_{i=1}^{n} \frac{A_i}{L_i} \le 1.0$$

Where:

 $\Sigma \left(A_i/L_i\right) \text{ means the sum of the values of } X \text{ for each} \\ \text{carcinogen } i, \text{ from } i=1 \text{ to } n.$

n means the number of carcinogenic compounds;

- A_i = Actual ground level concentration of carcinogen "i."
- L_i = Level established in Appendix E for carcinogen "i"; and
- iii) For constituents not listed in Appendix D or E, 0.1 μg/m³.
- b) Waiver of <u>particular particulate</u> matter standard. The PM standard of Section 726.205 does not apply if the following occur:
 - 1) The DRE standard is waived under subsection (a) of this Section; 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: Amended at 32 III. Reg. _____, effective _____)

Section 726.Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride

	Noncomplex Terrain Urban areas		Noncomplex Terrain Rural areas		Complex Terrain Urban and rural areas	
TESH (m)	Chlorine	HCl (g/hr)	Chlorine	HCl (g/hr)	Chlorine	HCl (g/hr)
	Gas (g/hr)		Gas (g/hr)		gas (g/hr)	
4	82.	1400.	42.	730.	19.	330.
6	91.	1600.	48.	830.	28.	490.
8	100.	1800.	53.	920.	41.	710.
10	120.	2000.	62.	1100.	58.	1000.
12	130.	2300.	77.	1300.	72.	1300.
14	150.	2600.	91.	1600.	91.	1600.
16	170.	2900.	120.	2000.	110.	1800.
18	190.	3300.	140.	2500.	120.	2000.
20	210.	3700.	180.	3100.	130.	2300.
22	240.	4200.	230.	3900.	140.	2400.
24	270.	4800.	290.	5000.	160.	2800.
26	310.	5400.	370.	6500.	170.	3000.
28	350.	6000.	470.	8100.	190.	3400.

30	390.	6900.	580.	10000.	210.	3700.
35	530.	9200.	960.	17000.	260.	4600.
40	620.	11000.	1400.	25000.	330.	5700.
45	820.	14000.	2000.	35000.	400.	7000.
50	1100.	18000.	2600.	46000.	480.	8400.
55	1300.	23000.	3500.	61000.	620.	11000.
60	1600.	29000.	4600.	81000.	770.	13000.
65	2000.	34000.	6200.	110000.	910.	16000.
70	2300.	39000.	7200.	130000.	1100.	18000.
75	2500.	45000.	8600.	150000.	1200.	20000.
80	2900.	50000.	10000.	180000.	1300.	23000.
85	3300.	58000.	12000.	220000.	1400.	25000.
90	3700.	66000.	14000.	250000.	1600.	29000.
95	4200.	74000.	17000.	300000.	1800.	32000.
100	4800.	84000.	21000.	360000.	2000.	35000.
105	5300.	92000.	24000.	430000.	2300.	39000.
110	6200.	110000.	29000.	510000.	2500.	45000.
115	7200.	130000.	35000.	610000.	2800.	50000.
120	8200.	140000.	41000.	720000.	3200.	56000.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 726.Appendix D Reference Air Concentrations

BOARD NOTE: The RAC for other Appendix H to 35 III. Adm. Code 721 constituents not listed below or in Appendix E is $0.1~\text{ug/m}^3$.

Constituent	CAS No.	RAC (ug/m^3)
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
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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
2,4,5-Trichlorophenol		
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: Amended at 32 Ill. Re	eg. , effective	

(Source: Amended at 32 III. Reg. _____, effective _____)

Section 726.Appendix E Risk-Specific Doses

BOARD NOTE: These are risk specific doses (RSDs) based on a risk of 1 in $10,000 - (1'10^{-5})$ (1×10^{-5}) .

Constituent	CAS No.	Unit risk (m³/mg)	RSD (mg/m^3)
Acrylamide	79-06-1	0.0013	0.0077
Acrylonitrile	107-13-1	0.000068	0.15
Aldrin	309-00-2	0.0049	0.0020
Aniline	62-53-3	0.0000074	1.4

Arsenic	7440-38-2	0.0043	0.0023
Benz(a)anthracene	56-55-3	0.00089	0.011
Benzene	71-43-2	0.0000083	1.2
Benzidine	92-87-5	0.067	0.00015
Benzo(a)pyrene	50-32-8	0.0033	0.0030
Beryllium	7440-41-7	0.0024	0.0042
Bis(2-chloroethyl)ether	111-44-4	0.00033	0.030
Bis(chloromethyl)ether	542-88-1	0.062	0.00016
Bis(2-ethylhexyl)-	117-81-7	0.00000024	42.
phthalate			
1,3-Butadiene	106-99-0	0.00028	0.036
Cadmium	7440-43-9	0.0018	0.0056
Carbon Tetrachloride	56-23-5	0.000015	0.67
Chlordane	57-74-9	0.00037	0.027
Chloroform	67-66-3	0.000023	0.43
Chloromethane	74-87-3	0.0000036	2.8
Chromium VI	7440-47-3	0.012	0.00083
DDT	50-29-3	0.000097	0.10
Dibenz(a,h)anthracene	53-70-3	0.014	0.00071
1,2-Dibromo-3-chloro-	96-12-8	0.0063	0.0016
propane			
1,2-Dibromoethane	106-93-4	0.00022	0.045
1,1-Dichloroethane	75-34-3	0.000026	0.38
1,2-Dichloroethane	107-06-2	0.000026	0.38
1,1-Dichloroethylene	75-35-4	0.000050	0.20
1,3-Dichloropropene	542-75-6	0.35	0.000029
Dieldrin	60-57-1	0.0046	0.0022
Diethylstilbestrol	56-53-1	0.14	0.000071
Dimethylnitrosamine	62-75-9	0.014	0.00071
2,4-Dinitrotoluene	121-14-2	0.000088	0.11
1,2-Diphenylhydrazine	122-66-7	0.00022	0.045
1,4-Dioxane	123-91-1	0.0000014	7.1
Epichlorohydrin	106-89-8	0.0000012	8.3
Ethylene Oxide	75-21-8	0.00010	0.10
Ethylene Dibromide	106-93-4	0.00022	0.045
Formaldehyde	50-00-0	0.000013	0.77
Heptachlor	76-44-8	0.0013	0.0077
Heptachlor Epoxide	1024-57-3	0.0026	0.0038
Hexachlorobenzene	118-74-1	0.00049	0.020
Hexachlorobutadiene	87-68-3	0.000020	0.50
Alpha-hexachloro-	319-84-6	0.0018	0.0056
cyclohexane			
Beta-hexachlorocyclo-	319-85-7	0.00053	0.019
hexane			
Gamma-hexachloro-	58-89-9	0.00038	0.026
cyclohexane			

Nexachlorodibenzo-p- dioxin (1,2 Mixture)	Hexachlorocyclo-		0.00051	0.020
dioxin (1,2 Mixture) Hexachloroethane 67-72-1 0.0000040 2.5 Hydrazine 302-01-2 0.0029 0.0034 Hydrazine Sulfate 302-01-2 0.0029 0.0034 3-Methylcholanthrene 56-49-5 0.0027 0.0037 Methyl Hydrazine 60-34-4 0.00031 0.032 Methylene Chloride 75-09-2 0.0000041 2.4 4,4"-Methylene-bis-2- chloroaniline 101-14-4 0.000047 0.21 Nickel 7440-02-0 0.00024 0.042 Nickel Refinery Dust 7440-02-0 0.00024 0.042 Nickel Subsulfide 12035-72-2 0.00048 0.021 2-Nitropropane 79-46-9 0.027 0.00037 N-Nitroson-n-butyl- amine 684-93-5 0.086 0.00012 urea N-Nitrosodiethylamine 55-18-5 0.043 0.00023 N-Nitrosopyrrolidine 930-55-2 0.00061 0.016 Pentachloronitro- 82-68-8 0.000007 0.14 benzene PCBs<	hexane, Technical		1 3	0.0000077
Hexachloroethane G7-72-1 D.0000040 D.0034 Hydrazine 302-01-2 D.0029 D.0034 Hydrazine Sulfate 302-01-2 D.0029 D.0034 Hydrazine Sulfate 302-01-2 D.0029 D.0034 D.0037 Methylcholanthrene 56-49-5 D.0027 D.0037 Methylene Chloride 75-09-2 D.000041 D.0032 Methylene Chloride 75-09-2 D.0000041 D.21 D.1-14-4 D.000047 D.21 D.21 D.21 D.21 D.21 D.21 D.22 D.0000041 D.00000000000000000000000000000000000	*		1.5	0.0000077
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Hydrazine Sulfate 302-01-2 0.0029 0.0034 3-Methylcholanthrene 56-49-5 0.0027 0.0037 Methyl Hydrazine 60-34-4 0.00031 0.032 Methylene Chloride 75-09-2 0.0000041 2.4 4,4'-Methylene-bis-2- chloroaniline 101-14-4 0.000047 0.21 Nickel 7440-02-0 0.00024 0.042 Nickel Refinery Dust 7440-02-0 0.00024 0.021 Nickel Subsulfide 12035-72-2 0.00048 0.021 2-Nitropropane 79-46-9 0.027 0.00037 N-Nitroso-n-butylamine 79-46-9 0.027 0.00033 N-Nitroson-methyl- 684-93-5 0.086 0.00012 urea N-Nitrosodiethylamine 55-18-5 0.043 0.00023 N-Nitrosopyrrolidine 930-55-2 0.00061 0.016 Pentachloronitro- 82-68-8 0.000073 0.14 benzene PCBs 1336-36-3 0.0012 0.0083 Pronamide 23950-58-5				
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Toxaphene 8001-35-2 0.00032 0.031 Vinyl Chloride 75-01-4 0.0000071 1.4	Trichloroethylene	79-01-6	0.0000013	7.7
Vinyl Chloride 75-01-4 0.0000071 1.4	2,4,6-Trichlorophenol	88-06-2	0.0000057	1.8
	Toxaphene	8001-35-2	0.00032	0.031
		75-01-4		1.4
(Source: Amended at 32 III. Reg, effective)				
	(Source: Amended at 3	2 Ill. Reg, e	ffective)

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE G: WASTE DISPOSAL

CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

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		ementing Sections 7.2 and 22.4 and authorized by Section 27 of the				
Environmenta	al Protect	tion Act [415 ILCS 5/7.2, 22.4, and 27].				
		R06-16/R06-17/R06-18 at 31 Ill. Reg. 1146, effective December 20, 2006;				
amended in R	.07-5/R0°	7-14 at 32 Ill. Reg, effective				
Section 727.1	70	Recordkeeping, Reporting, and Notifying				

a) Applicability of this Section. This Section applies to the owner and operator of a facility that stores or non-thermally treats a hazardous waste under a RCRA standardized permit pursuant to Subpart J of 35 Ill. Adm. Code 703, except as provided in Section 727.100(a)(2). In addition, the owner or operator must comply with the manifest requirements of 35 Ill. Adm. Code 722 whenever a shipment of hazardous waste is initiated from the facility.

BOARD NOTE: Subsection (a) of this Section is derived from 40 CFR 267.70, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005).

- b) Use of the manifest system.
 - 1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or its agent, must do each of the following:
 - A) It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
 - B) It must note any significant discrepancies in the manifest (as defined in Section 727.170(c)(1)) on each copy of the manifest;
 - C) It must immediately give the transporter at least one copy of the signed manifest;
 - D) Within 30 days after the delivery, it must send a copy of the manifest to the generator; and
 - E) It must retain at the facility a copy of each manifest for at least three years from the date of delivery.
 - If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator's certification, and signatures), the owner or operator, or its agent, must do each of the following:
 - A) It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;
 - B) It must note any significant discrepancies (as defined in Section 727.170(c)(1)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;
 - BOARD NOTE: USEPA does not intend that the owner or operator of a facility whose procedures pursuant to Section 727.110(d)(3) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 727.170(c)(2), however, requires reporting an unreconciled discrepancy discovered during later analysis.
 - C) It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

D) Within 30 days after the delivery, it must send a copy of the signed and dated manifest to the generator; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or its agent, must send a copy of the shipping paper signed and dated to the generator; and

BOARD NOTE: Section 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

- E) It must retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.
- Whenever a shipment of hazardous waste is initiated from a facility, the facility owner or operator must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 III. Adm. Code 724.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of 35 III. Adm. Code 724.134 apply only to an owner or operator that is shipping hazardous waste that it generated at that facility.

Within three working days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722 the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier, to the Agency, to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC 20460, and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

BOARD NOTE: Subsection (b) of this Section is derived from 40 CFR 267.71, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005).

- c) Manifest discrepancies.
 - 1) Manifest discrepancies are differences between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of hazardous waste a facility actually receives.

 Significant discrepancies in quantity are either of the following:
 - A) For bulk waste, variations greater than 10 percent in weight; or

- B) For batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.
- 2) Upon discovering a significant discrepancy, the facility owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 267.72, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- d) Retention of information.
 - 1) The facility owner or operator must keep a written operating record at its facility.
 - 2) The facility owner or operator must record the following information, as it becomes available, and maintain the operating record until it closes the facility:
 - A) A description and the quantity of each type of hazardous waste generated, and the methods and dates of its storage or treatment at the facility as required by Appendix A of 35 Ill. Adm. Code 724;
 - B) The location of each hazardous waste within the facility and the quantity at each location;
 - C) Records and results of waste analyses and waste determinations performed as specified in Section 727.110(d) and (h) and 35 III. Adm. Code 724.934, 724.963, 724.983, and 728.107;
 - D) Summary reports and details of all incidents that require the owner or operator to implement the contingency plan as specified in Section 727.150(i)(2));
 - E) Records and results of inspections as required by Section 727.110(f)(4) (except that the facility owner or operator needs to keep these data for only three years);

- F) Monitoring, testing or analytical data, and corrective action when required by Section 727.190, Section 727. 290(b), (d), and (f) and 35 Ill. Adm. Code 724.934(c) through (f), 724.935, 724.963(d) through (i), 724.964, 724.988, 724.989, and 724.990;
- G) All closure cost estimates pursuant to Section 727.240(c);
- H) The facility owner or operator certification, executed at least annually, that the owner or operator has a program in place to reduce the volume and toxicity of hazardous waste that it generates to the degree that the owner or operator determines to be economically practicable; and that the proposed method of treatment or storage is that practicable method currently available to the owner or operator that minimizes the present and future threat to human health and the environment;
- I) For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required by the facility owner or operator pursuant to 35 Ill. Adm. Code 728.107;
- J) For an on-site storage facility, the information in the notice (except the manifest number), and the certification and demonstration, if applicable, required by the facility owner or operator pursuant to 35 Ill. Adm. Code 728.107;
- K) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the facility owner or operator pursuant to 35 Ill. Adm. Code 728.107 or 728.108; and
- L) For an off-site storage facility, a copy of the notice, and the certification and demonstration, if applicable, required by the generator or the owner or operator pursuant to 35 Ill. Adm. Code 728.107 or 728.108.

BOARD NOTE: Subsection (d) of this Section is derived from 40 CFR 267.73, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- e) Availability of records.
 - 1) The facility owner or operator must furnish all records, including plans, required pursuant to this Part upon the request of any officer, employee, or representative of the Agency or USEPA and make them available at all reasonable times for inspection.

2) The retention period for all records required pursuant to this Part is extended automatically during the course of any unresolved enforcement action involving the facility or as requested by the Agency.

BOARD NOTE: Subsection (e) of this Section is derived from 40 CFR 267.74, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

- f) Submission of reports. The facility owner or operator must prepare a biennial an annual facility activities report and other reports listed in subsection (f)(2) of this Section.
 - Biennial-Annual facility activities report. The facility owner or operator must prepare and submit a single copy of a biennial an annual facility activities report to the Agency by March 1 of each even numbered year. The biennial annual facility activities report must be submitted on USEPA Form 8700-13B. The report must cover facility activities during the previous two-calendar years year and must include the following information:

BOARD NOTE: Corresponding 40 CFR 267.75(a) (2006) requires biennial reporting. The Board has required annual reporting, since Section 20.1 of the Act [415 ILCS 5/20.1 (2006)] requires the Agency to assemble annual reports, and only annual facility activity reports will enable the Agency to fulfill this mandate.

- A) The USEPA identification number, name, and address of the facility;
- B) The calendar year covered by the report;
- C) The method of treatment or storage for each hazardous waste;
- D) The most recent closure cost estimate pursuant to Section 727.240(c);
- E) A description of the efforts undertaken during the year to reduce the volume and toxicity of generated waste;
- F) A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984; and
- G) The certification signed by the owner or operator.

- 2) Additional reports. In addition to submitting the biennial reports, the owner or operator must also report the following information to the Agency:
 - A) Releases, fires, and explosions as specified in Section 727.150(i)(2);
 - B) Facility closures specified in Section 727.210(h); and
 - C) Other information as otherwise required by Sections 727.270, 727.290, and 727.900 and Subparts AA, BB, and CC of 35 Ill. Adm. Code 264.
- 3) For off-site facilities, the USEPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator.
- 4) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by USEPA identification number of each generator.

BOARD NOTE: Subsection (f) of this Section is derived from 40 CFR 267.75, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

g) Required notifications. Before transferring ownership or operation of a facility during its operating life, the facility owner or operator must notify the new owner or operator in writing of the requirements of this Part and Subpart J of 35 Ill. Adm. Code 703.

BOARD NOTE: Subsection (g) of this Section is derived from 40 CFR 267.76, as added at 70 Fed. Reg. 53420 (Sep. 8, 2005) (2007).

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

PART 728 LAND DISPOSAL RESTRICTIONS

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

SOURCE: Adopted in R87-5 at 11 III. Reg. 19354, effective Nov. 12, 1987; amended in R87-39 at 12 III. Reg. 13046, effective July 29, 1988; amended in R89-1 at 13 III. Reg. 18403, effective Nov. 13, 1989; amended in R89-9 at 14 III. Reg. 6232, effective April 16, 1990; amended in R90-2 at 14 III. Reg. 14470, effective August 22, 1990; amended in R90-10 at 14 III. Reg. 16508, effective Sept. 25, 1990; amended in R90-11 at 15 III. Reg. 9462, effective June 17, 1991; amended in R90-11 at 15 III. Reg. 11937, effective August 12, 1991; amendment withdrawn at 15 III. Reg. 14716, October 11, 1991; amended in R91-13 at 16 III. Reg. 9619, effective June 9, 1992; amended in R92-10 at 17 III. Reg. 5727, effective March 26, 1993; amended in R93-4 at 17 III. Reg. 20692, effective Nov. 22, 1993; amended in R93-16 at 18 III. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 III. Reg. 12203, effective July 29,

1994; amended in R94-17 at 18 III. Reg. 17563, effective Nov. 23, 1994; amended in R95-6 at 19 III. Reg. 9660, effective June 27, 1995; amended in R95-20 at 20 III. Reg. 11100, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 III. Reg. 783, effective December 16, 1997; amended in R98-12 at 22 III. Reg. 7685, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17706, effective Sept. 28, 1998; amended in R98-21/R99-2/R99-7 at 23 III. Reg. 1964, effective January 19, 1999; amended in R99-15 at 23 III. Reg. 9204, effective July 26, 1999; amended in R00-13 at 24 III. Reg. 9623, effective June 20, 2000; amended in R01-3 at 25 III. Reg. 1296, effective January 11, 2001; amended in R01-21/R01-23 at 25 III. Reg. 9181, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 III. Reg. 6687, effective April 22, 2002; amended in R03-18 at 27 III. Reg. 13045, effective July 17, 2003; amended in R05-8 at 29 III. Reg. 6049, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 III. Reg. 3800, effective February 23, 2006; amended in R07-5/R07-14 at 32 III. Reg. , effective

SUBPART A: GENERAL

Section 728.102 Definitions

When used in this Part, the following terms have the meanings given below. All other terms have the meanings given under 35 Ill. Adm. Code 702.110, 720.110, or 721.102 through 721.104.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that <u>is:—is</u> a manufactured object; plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D of this Part, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals, such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75 percent of their original volume. A mixture of debris that has not been treated to the standards provided by Section 728.145 of this Part and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"End-of-pipe" refers to the point where effluent is discharged to the environment.

"Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond that are listed under Appendix C of this Part.

"Hazardous constituent or constituents" means those constituents listed in Appendix H to 35 Ill. Adm. Code 721.

"Hazardous debris" means debris that contains a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 or that exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Inorganic metal-bearing waste" is one for which USEPA has established treatment standards for metal hazardous constituents that does not otherwise contain significant organic or cyanide content, as described in Section 728.103(b)(1), and which is specifically listed in Appendix K of this Part.

"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and "land disposal" includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

"Land disposal restriction" or "LDR" is a restriction imposed on the land disposal of a hazardous waste pursuant to this Part or 40 CFR 738. The land disposal of hazardous waste is generally prohibited, except where the activity constituting land disposal is specifically allowed, pursuant to this Part or 40 CFR 738.

BOARD NOTE: The Board added this definition based on the preamble discussions at 51 Fed. Reg. 40572, 40573-74 (Nov. 7, 1986) and 53 Fed. Reg. 28118, 28119-20 (July 26, 1988). The USEPA publication "Terms of Environment Glossary, Abbreviations, and Acronyms" (December 1997), USEPA, Communications, Education, and Public Affairs, EPA 175/B-97-001, defines "land disposal restrictions" as follows: "Rules that require hazardous wastes to be treated before disposal on land to destroy or immobilize hazardous constituents that might migrate into soil and ground water."

"Nonwastewaters" are wastes that do not meet the criteria for "wastewaters" in this Section.

"Polychlorinated biphenyls" or "PCBs" are halogenated organic compounds defined in accordance with federal 40 CFR 761.3 (Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"ppm" means parts per million.

"RCRA corrective action" means corrective action taken under 35 Ill. Adm. Code 724.200 or 725.193, federal 40 CFR 264.100 or 265.93, or similar regulations in

other states with RCRA programs authorized by USEPA pursuant to 40 CFR 271.

"Soil" means unconsolidated earth material composing the superficial geologic strata (material overlying bedrock), consisting of clay, silt, sand, or gravel size particles, as classified by the United States Natural Resources Conservation Service, or a mixture of such materials with liquids, sludges, or solids that is inseparable by simple mechanical removal processes and which is made up primarily of soil by volume based on visual inspection. Any deliberate mixing of prohibited waste with debris that changes its treatment classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Stormwater impoundments" are surface impoundments that receive wet weather flow and which receive process waste only during wet weather events.

"Underlying hazardous constituent" means any constituent listed in Table U of this Part, "Universal Treatment Standards (UTS)," except fluoride, selenium, sulfides, vanadium, and zinc, that can reasonably be expected to be present at the point of generation of the hazardous waste at a concentration above the constituent-specific UTS treatment standard.

"USEPA" or "U.S. EPA" means the United States Environmental Protection Agency.

"Wastewaters" are wastes that contain less than one percent by weight total organic carbon (TOC) and less than one percent by weight total suspended solids (TSS).

(Source:	Amended at	32 Ill. Reg		, effe	ctive _)
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Section 728.104 Treatment Surface Impoundment Exemption

- a) Wastes that are otherwise prohibited from land disposal under this Part may be treated in a surface impoundment or series of impoundments provided that all of the following conditions are fulfilled:
 - 1) Treatment of such wastes occurs in the impoundments;
 - 2) The following conditions are met:
 - A) Sampling and testing. For wastes with treatment standards in Subpart D or prohibition levels in Subpart C, the residues from treatment are analyzed, as specified in Section 728.107 or 728.132, to determine if they meet the applicable treatment standards or, where no treatment standards have been established for the waste, the applicable prohibition levels. The sampling method, specified

- in the waste analysis plan under 35 Ill. Adm. Code 724.113 or 725.113, must be designed such that representative samples of the sludge and the supernatant are tested separately rather than mixed to form homogeneous samples.
- B) Removal. The following treatment residues (including any liquid waste) must be removed at least annually: residues that do not meet the treatment standards promulgated under Subpart D of this Part; residues that do not meet the prohibition levels established under Subpart C of this Part or imposed by federal statute (where no treatment standards have been established); residues that are from the treatment of wastes prohibited from land disposal under Subpart C of this Part (where no treatment standards have been established and no prohibition levels apply); or residues from managing listed wastes that are not delisted under 35 Ill. Adm. Code 720.122. If the volume of liquid flowing through the impoundment or series of impoundments annually is greater than the volume of the impoundment or impoundments, this flowthrough constitutes removal of the supernatant for the purpose of this requirement.
- C) Subsequent management. Treatment residues must not be placed in any other surface impoundment for subsequent management.
- D) Recordkeeping. Sampling, testing, and recordkeeping provisions of 35 Ill. Adm. Code 724.113 or 725.113 apply;
- The impoundment meets the design requirements of 35 Ill. Adm. Code 724.321(c) or 725.321(a) even though the unit may not be new, expanded or a replacement, and must be in compliance with applicable groundwater monitoring requirements of Subpart F of 35 Ill. Adm. Code 724 or Subpart F of this Part 35 Ill. Adm. Code 725, unless any of the following conditions is fulfilled:
 - A) The impoundment is exempted pursuant to 35 Ill. Adm. Code 724.321(d) or (e), or to 35 Ill. Adm. Code 725.321(c) or (d);
 - B) Upon application by the owner or operator, the Agency has by permit provided that the requirements of this Part do not apply on the basis that the surface impoundment fulfills all of the following conditions:
 - i) The impoundment has at least one liner, for which there is no evidence that such liner is leaking;
 - ii) The impoundment is located more than one-quarter mile

from an underground source of drinking water; and

- iii) The impoundment is in compliance with generally applicable groundwater monitoring requirements for facilities with permits; or
- C) Upon application by the owner or operator, the Board has, pursuant to Subpart D of 35 Ill. Adm. Code 104, granted an adjusted standard from the requirements of this Part. The justification for such an adjusted standard must be a demonstration that the surface impoundment is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time; and
- 4) The owner or operator submits to the Agency a written certification that the requirements of subsection (a)(3) of this Section have been met. The following certification is required:

I certify under penalty of law that the requirements of 35 Ill. Adm. Code 728.104(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

b) Evaporation of hazardous constituents as the principal means of treatment is not considered to be a treatment for purposes of an exemption under this Section.

Source: Amended at	32 III. Reg	, effective	_)
Section 728.107	Testing, Tracking, and Treaters, and Disposa	d Recordkeeping Requirements for G I Facilities	enerators,

- a) Requirements for generators.
 - A generator of a hazardous waste must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in Section 728.140, 728.145, or 728.149. This determination can be made concurrently with the hazardous waste determination required in 35 Ill. Adm. Code 722.111, in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing determines the total concentration of hazardous constituents or the concentration of hazardous constituents in an extract of the waste obtained using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid

Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste extract. (Alternatively, the generator must send the waste to a RCRA-permitted hazardous waste treatment facility, where the waste treatment facility must comply with the requirements of 35 Ill. Adm. Code 724.113 and subsection (b) of this Section.) In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in Section 728.140 and Table T of this Part, and are described in detail in Table C of this Part. These wastes and soils contaminated with such wastes do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards must be tested). If a generator determines that it is managing a waste or soil contaminated with a waste that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator must comply with the special requirements of Section 728.109 in addition to any applicable requirements in this Section.

- 2) If the waste or contaminated soil does not meet the treatment standard or if the generator chooses not to make the determination of whether its waste must be treated, the generator must send a one-time written notice to each treatment or storage facility receiving the waste with the initial shipment of waste to each treatment or storage facility, and the generator must place a copy of the one-time notice in the file. The notice must include the information in column "728.107(a)(2)" of the Generator Paperwork Requirements Table in Table I of this Part. (Alternatively, if the generator chooses not to make the determination of whether the waste must be treated, the notification must include the USEPA hazardous waste numbers and manifest number of the first shipment, and it must include the following statement: "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility must make the determination.") No further notification is necessary until such time that the waste or facility changes, in which case a new notification must be sent and a copy placed in the generator's file.
 - A) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

Lecrtify under penalty of law that I personally have examined this contaminated soil and it (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 35 Ill. Adm. Code 728.149(c).

- B) This subsection (a)(2)(B) corresponds with 40 CFR 268.7(a)(2)(ii), which is marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules.
- 3) If the waste or contaminated soil meets the treatment standard at the original point of generation, the waste generator must do the following:
 - A) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in its own file. The notice must include the information indicated in column "728.107(a)(3)" of the Generator Paperwork Requirements Table in Table I of this Part and the following certification statement, signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in Subpart D of 35 Ill. Adm. Code 728. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

- B) For contaminated soil, with the initial shipment of wastes to each treatment, storage, or disposal facility, the generator must send a one-time written notice to each facility receiving the waste and place a copy in the file. The notice must include the information in the column headed "(a)(3)" in Table I of this Part.
- C) If the waste changes, the generator must send a new notice and certification to the receiving facility and place a copy in its files. A generator of hazardous debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(f) is not subject to these requirements.
- 4) For reporting, tracking and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed, there are certain exemptions from the requirement that hazardous wastes or contaminated soil meet treatment standards before they can be land disposed. These include, but are not limited to, case-by-case extensions under Section 728.105, disposal in a no-migration unit under Section 728.106, or a national capacity variance or case-by-case

capacity variance under Subpart C of this Part. If a generator's waste is so exempt, then with the initial shipment of waste, the generator must send a one-time written notice to each land disposal facility receiving the waste. The notice must include the information indicated in column "728.107(a)(4)" of the Generator Paperwork Requirements Table in Table I of this Part. If the waste changes, the generator must send a new notice to the receiving facility, and place a copy in its file.

- If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 35 Ill. Adm. Code 722.134 to meet applicable LDR treatment standards found at Section 728.140, the generator must develop and follow a written waste analysis plan that describes the procedures it will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table F of this Part, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:
 - A) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated, and contain all information necessary to treat the wastes in accordance with the requirements of this Part, including the selected testing frequency;
 - B) Such plan must be kept in the facility's on-site files and made available to inspectors; and
 - C) Wastes shipped off-site pursuant to this subsection (a)(5) of this Section must comply with the notification requirements of subsection (a)(3) of this Section.
- 6) If a generator determines that the waste or contaminated soil is restricted based solely on its knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, all waste analysis data must be retained on-site in the generator's files.
- 7) If a generator determines that it is managing a prohibited waste that is excluded from the definition of hazardous or solid waste or which is exempt from Subtitle C regulation under 35 Ill. Adm. Code 721.102 through 721.106 subsequent to the point of generation (including

deactivated characteristic hazardous wastes that are managed in wastewater treatment systems subject to the CWA, as specified at 35 Ill. Adm. Code 721.104(a)(2); that are CWA-equivalent; or that are managed in an underground injection well regulated under 35 Ill. Adm. Code 730), the generator must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste in the generating facility's on-site file.

- A generator must retain a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this Section on-site for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Agency. The requirements of this subsection (a)(8) apply to solid wastes even when the hazardous characteristic is removed prior to disposal, or when the waste is excluded from the definition of hazardous or solid waste under 35 Ill. Adm. Code 721.102 through 721.106, or exempted from RCRA Subtitle C regulation, subsequent to the point of generation.
- 9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs found at Section 728.142(c), the generator must fulfill the following conditions:
 - A) With the initial shipment of waste to a treatment facility, the generator must submit a notice that provides the information in column "Section 728.107(a)(9)" in the Generator Paperwork Requirements Table of Table I of this Part and the following certification. The certification, which must be signed by an authorized representative and must be placed in the generator's files, must say the following:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only wastes that have not been excluded under Appendix D to 35 Ill. Adm. Code 728 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 35 Ill. Adm. Code 728.142(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

B) No further notification is necessary until such time as the wastes in the lab pack change, or the receiving facility changes, in which

- case a new notice and certification must be sent and a copy placed in the generator's file.
- C) If the lab pack contains characteristic hazardous wastes (D001-D043), underlying hazardous constituents (as defined in Section 728.102(i)) need not be determined.
- D) The generator must also comply with the requirements in subsections (a)(6) and (a)(7) of this Section.
- 10) Small quantity generators with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) must comply with the applicable notification and certification requirements of subsection (a) of this Section for the initial shipment of the waste subject to the agreement. Such generators must retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Agency.
- b) The owner or operator of a treatment facility must test its wastes according to the frequency specified in its waste analysis plan, as required by 35 Ill. Adm. Code 724.113 (for permitted TSDs) or 725.113 (for interim status facilities). Such testing must be performed as provided in subsections (b)(1), (b)(2), and (b)(3) of this Section.
 - 1) For wastes or contaminated soil with treatment standards expressed in the waste extract (TCLP), the owner or operator of the treatment facility must test an extract of the treatment residues using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, to assure that the treatment residues extract meets the applicable treatment standards.
 - 2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility must test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.
 - A one-time notice must be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice must be placed in the treatment facility's file.
 - A) No further notification is necessary until such time that the waste or receiving facility changes, in which case a new notice must be sent and a copy placed in the treatment facility's file.

- B) The one-time notice must include the following requirements:
 - i) USEPA hazardous waste number and manifest number of first shipment;
 - ii) The waste is subject to the LDRs. The constituents of concern for F001 through F005 and F039 waste and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice;
 - iii) The notice must include the applicable wastewater/ nonwastewater category (see Section 728.102(d) and (f)) and subdivisions made within a waste code based on wastespecific criteria (such as D003 reactive cyanide);
 - iv) Waste analysis data (when available);
 - v) For contaminated soil subject to LDRs as provided in Section 728.149(a), the constituents subject to treatment as described in Section 728.149(d) and the following statement, "this contaminated soil (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and (is subject to/complies with) the soil treatment standards as provided by Section 728.149(c)"; and
 - vi) A certification is needed (see applicable Section for exact wording).
- 4) The owner or operator of a treatment facility must submit a certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification must state as follows:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 35 Ill. Adm. Code 728.140 without impermissible dilution of the prohibited waste. I am aware

there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

A certification is also necessary for contaminated soil and it must state as follows:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 35 Ill. Adm. Code 728.149 without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

- A) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the treatment facility's file.
- B) Debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e) 721.103(f) (i.e., debris treated by an extraction or destruction technology listed in Table F of this Part and debris that the Agency has determined does not contain hazardous waste) is subject to the notification and certification requirements of subsection (d) of this Section rather than the certification requirements of this subsection (b)(4).
- C) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in part or in whole on the analytical detection limit alternative specified in Section 728.140(d), the certification must be signed by an authorized representative and must state as follows:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in Table C to 35 Ill. Adm. Code 728. I have been unable to detect the nonwastewater organic constituents, despite having used best good faith efforts to analyze for such constituents. I

am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

D) For characteristic wastes that are subject to the treatment standards in Section 728.140 and Table T of this Part (other than those expressed as a required method of treatment) or Section 728.149 and which contain underlying hazardous constituents, as defined in Section 728.102(i); if these wastes are treated on-site to remove the hazardous characteristic; and that are then sent off-site for treatment of underlying hazardous constituents, the certification must state as follows:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of Section 728.149 of that Part to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

E) For characteristic wastes that contain underlying hazardous constituents, as defined in Section 728.102(i), that are treated onsite to remove the hazardous characteristic and to treat underlying hazardous constituents to levels in Section 728.148 and Table U of this Part universal treatment standards, the certification must state as follows:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 and Table T of that Part to remove the hazardous characteristic and that underlying hazardous constituents, as defined in 35 Ill. Adm. Code 728.102(i), have been treated on-site to meet the universal treatment standards of 35 Ill. Adm. Code 728.148 and Table U of that Part. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility that sends the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this Section.

- 6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b). regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler) is not required to notify the receiving facility pursuant to subsection (b)(3) of this Section. With each shipment of such wastes the owner or operator of the recycling facility must submit must, for the initial shipment of waste, prepare a onetime certification described in subsection (b)(4) of this Section and a notice that includes the information listed in subsection (b)(3) of this Section (except the manifest number) to the Agency. The certification and notification must be placed in the facility's on-site files. If the waste or the receiving facility changes, a new certification and notification must be prepared and placed in the on-site files. The In addition, the owner or operator of the recycling facility also must keep records of the name and location of each entity receiving the hazardous waste-derived product.
- c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 35 Ill. Adm. Code 726.120(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this Part must do the following:
 - 1) Maintain in its files copies of the notice and certifications specified in subsection (a) or (b) of this Section.
 - Test the waste or an extract of the waste or treatment residue developed using Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, to assure that the waste or treatment residue is in compliance with the applicable treatment standards set forth in Subpart D of this Part. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by 35 Ill. Adm. Code 724.113 or 35 Ill. Adm. Code 725.113.
 - Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 728.133(f) but not subject to the prohibitions set forth in Section 728.132, the owner or operator must ensure that such waste is the subject of a certification according to the requirements of Section 728.108 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 728.105(h)(2). The same requirement applies to any waste that is subject to the prohibitions under Section 728.133(f) and also is subject to the statutory prohibitions in the codified prohibitions in Section 728.139 or Section 728.132.

- Where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), the owner or operator is not subject to subsections (c)(1) through (c)(3) of this Section with respect to such waste.
- d) A generator or treater that first claims that hazardous debris is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e)-721.103(f) (i.e., debris treated by an extraction or destruction technology provided by Table F of this Part, and debris that has been delisted) is subject to the following notification and certification requirements:
 - 1) A one-time notification must be submitted to the Agency including the following information:
 - A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the treated debris;
 - B) A description of the hazardous debris as initially generated, including the applicable USEPA hazardous waste numbers; and
 - C) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the technology from Table F of this Part used to treat the debris.
 - The notification must be updated if the debris is shipped to a different facility and, for debris excluded under 35 Ill. Adm. Code 721.102(e)(1) 721.102(f)(1), if a different type of debris is treated or if a different technology is used to treat the debris.
 - 3) For debris excluded under 35 Ill. Adm. Code 721.102(e)(1) 721.102(f)(1), the owner or operator of the treatment facility must document and certify compliance with the treatment standards of Table F of this Part, as follows:
 - A) Records must be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards;
 - B) Records must be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and
 - C) For each shipment of treated debris, a certification of compliance with the treatment standards must be signed by an authorized representative and placed in the facility's files. The certification must state as follows:

I certify under penalty of law that the debris has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.145. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment.

- e) A generator or treater that first receives a determination from USEPA or the Agency that a given contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer contains a listed hazardous waste and a generator or treater that first determines that a contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer exhibits a characteristic of hazardous waste must do the following:
 - 1) Prepare a one-time only documentation of these determinations including all supporting information; and
 - 2) Maintain that information in the facility files and other records for a minimum of three years.

(Source: Amended a	it 32 III. Reg	, effective)
Section 728 109	Special Rules	for Characteristic Wastes	

- The initial generator of a solid waste must determine each USEPA hazardous a) waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under Subpart D of this Part. This determination may be made concurrently with the hazardous waste determination required in Section 722.111. For purposes of this Part, the waste must carry the waste code for any applicable listing under Subpart D of 35 Ill. Adm. Code 721. In addition, the waste must carry one or more of the waste codes under Subpart C of 35 Ill. Adm. Code 721 where the waste exhibits a characteristic, except in the case when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in subsection (b) of this Section. If the generator determines that its waste displays a characteristic of hazardous waste (and the waste is not D001 nonwastewaters treated by CMBST, RORGS, or POLYM of Table C to this Part), the generator must determine the underlying hazardous constituents (as defined at Section 728.102(i)) in the characteristic waste.
- b) Where a prohibited waste is both listed under Subpart D of 35 Ill. Adm. Code 721 and exhibits a characteristic of hazardous waste under Subpart C of 35 Ill. Adm. Code 721, the treatment standard for the waste code listed in Subpart D of 35 Ill. Adm. Code 721 will operate in lieu of the standard for the waste code under Subpart C of 35 Ill. Adm. Code 721, 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 that exhibits a characteristic under Subpart C of 35 Ill. Adm. Code 721 must be land disposed, unless the waste complies with the treatment standards under Subpart D of this Part.
- d) A waste that exhibits a characteristic of hazardous waste under Subpart C of 35 Ill. Adm. Code 721 is also subject to Section 728.107 requirements, except that once the waste is no longer hazardous, a one-time notification and certification must be placed in the generator's or treater's on-site files and sent to the Agency, except for those facilities described in subsection (f) of this Section. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes or if the RCRA Subtitle D (municipal solid waste landfill) facility receiving the waste changes. However, the generator or treater need only notify the Agency on an annual basis if such changes occur. Such notification and certification should be sent to the Agency by the end of the year, but no later than December 31.
 - 1) The notification must include the following information:
 - A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the waste shipment; and
 - B) A description of the waste as initially generated, including the applicable USEPA hazardous waste numbers, the treatability groups, and the underlying hazardous constituents (as defined in Section 728.102(i)), unless the waste will be treated and monitored for all underlying hazardous constituents. If all underlying hazardous constituents will be treated and monitored, there is no requirement to list any of the underlying hazardous constituents on the notice.
 - The certification must be signed by an authorized representative and must state the language found in Section 728.107(b)(4). If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification found in Section 728.107(b)(4)(D) applies.
 - For a characteristic waste whose ultimate disposal will be into a Class I nonhazardous waste injection well, and for which compliance with the treatment standards set forth in Section 728.148 and Table U to this Part for underlying hazardous constituents is achieved through pollution prevention that meets the criteria set forth at 35 Ill. Adm. Code 738.101(d), the following information must also be included:

- A) A description of the pollution prevention mechanism and when it was implemented, if already complete;
- B) The mass of each underlying hazardous constituent before pollution prevention;
- C) The mass of each underlying hazardous constituent that must be removed, adjusted to reflect variations in mass due to normal operating conditions; and
- D) The mass reduction of each underlying hazardous constituent that is achieved.
- For a decharacterized waste managed on-site in a wastewater treatment system subject to the federal Clean Water Act (CWA) or zero-dischargers engaged in CWA-equivalent treatment, compliance with the treatment standards set forth in Sections 728.148 and Table D to this Part must be monitored quarterly, unless the treatment is aggressive biological treatment, in which case compliance must be monitored annually. Monitoring results must be kept in on-site files for five years.
- f) For a decharacterized waste managed on-site in a wastewater treatment system subject to the federal Clean Water Act (CWA) for which all underlying hazardous constituents (as defined in Section 728.102) are addressed by a CWA permit, this compliance must be documented and this documentation must be kept in on-site files.
- For a characteristic waste whose ultimate disposal will be into a Class I nonhazardous waste injection well that qualifies for the de minimis exclusion described in Section 728.101, information supporting that qualification must be kept in on-site files.

(Source: Amended at 32 II	Reg
Section 728.Table C	Technology Codes and Description of Technology-Based Standards
Technology	

Description of Technology-Based Standard

Code

ADGAS Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)--venting can be accomplished through physical release utilizing valves or piping; physical penetration of the container; or penetration through detonation.

AMLGM Amalgamation of liquid, elemental mercury contaminated with radioactive

materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.

BIODG

Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).

CARBN

Carbon adsorption (granulated or powdered) of non-metallic inorganics, organometallics, or organic constituents, operated so that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.

CHOXD

Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations or reagents:

- 1) hypochlorite (e.g., bleach);
- 2) chlorine;
- 3) chlorine dioxide;
- 4) ozone or UV (ultraviolet light) assisted ozone;
- 5) peroxides;
- 6) persulfates;
- 7) perchlorates;
- 8) permanganates; or
- 9) other oxidizing reagents of equivalent efficiency, performed in units operated so that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues). Chemical oxidation specifically includes what is

commonly referred to as alkaline chlorination.

CHRED Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents:

- 1) sulfur dioxide;
- 2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);
- 3) sodium hydrosulfide;
- 4) ferrous salts; or
- other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic halogens (TOX) can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.

CMBST High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of Subpart O of 35 Ill. Adm. Code 724, Subpart O of 35 Ill. Adm. Code 725, or Subpart H of 35 Ill. Adm. Code 726, and in other units operated in accordance with applicable technical operating requirements; and certain non-combustive technologies, such as the Catalytic Extraction Process.

DEACT Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, or reactivity.

FSUBS Fuel substitution in units operated in accordance with applicable technical operating requirements.

HLVIT Vitrification of high-level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the federal Nuclear Regulatory Commission.

IMERC Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

INCIN

Incineration in units operated in accordance with the technical operating requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725.

LLEXT

Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and a raffinate (extracted liquid waste) proportionately low in organics that must undergo further treatment as specified in the standard.

MACRO

Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a tank or container according to 35 Ill. Adm. Code 720.110.

NEUTR

Neutralization with the following reagents (or waste reagents) or combinations of reagents:

- 1) acids;
- 2) bases; or
- 3) water (including wastewaters) resulting in a pH greater than two but less than 12.5 as measured in the aqueous residuals.

NLDBR No land disposal based on recycling.

POLYM

Formation of complex high-molecular weight solids through polymerization of monomers in high-TOC D001 nonwastewaters that are chemical components in the manufacture of plastics.

PRECP

Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination:

- 1) lime (i.e., containing oxides or hydroxides of calcium or magnesium);
- 2) caustic (i.e., sodium or potassium hydroxides);
- 3) soda ash (i.e., sodium carbonate);
- 4) sodium sulfide;

- 5) ferric sulfate or ferric chloride;
- 6) alum; or
- 7) sodium sulfate. Additional flocculating, coagulation, or similar reagents or processes that enhance sludge dewatering characteristics are not precluded from use.

RBERY Thermal recovery of beryllium.

RCGAS Recovery or reuse of compressed gases including techniques such as reprocessing of the gases for reuse or resale; filtering or adsorption of impurities; remixing for direct reuse or resale; and use of the gas as a fuel source.

RCORR Recovery of acids or bases utilizing one or more of the following recovery technologies:

- 1) distillation (i.e., thermal concentration);
- 2) ion exchange;
- 3) resin or solid adsorption;
- 4) reverse osmosis; or
- 5) incineration for the recovery of acid

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RLEAD Thermal recovery of lead in secondary lead smelters.

RMERC Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) must be subject to one or more of the following:

- a) A federal national emissions standard for hazardous air pollutants (NESHAP) for mercury (subpart E of 40 CFR 61);
- b) A best available control technology (BACT) or a lowest achievable emission rate (LAER) standard for mercury imposed pursuant to a prevention of significant deterioration (PSD) permit (including 35 Ill. Adm. Code 201 through 203); or

c) A state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury, including a permit issued pursuant to 35 Ill. Adm. Code 201. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

RMETL Recovery of metals or inorganics utilizing one or more of the following direct physical or removal technologies:

- 1) ion exchange;
- 2) resin or solid (i.e., zeolites) adsorption;
- 3) reverse osmosis;
- 4) chelation or solvent extraction;
- 5) freeze crystallization;
- 6) ultrafiltration; or
- 7) simple precipitation (i.e., crystallization)

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RORGS Recovery of organics utilizing one or more of the following technologies:

- 1) Distillation;
- 2) thin film evaporation;
- 3) steam stripping;
- 4) carbon adsorption;
- 5) critical fluid extraction;
- 6) liquid-liquid extraction;
- 7) precipitation or crystallization (including freeze crystallization); or
- 8) chemical phase separation techniques (i.e., addition of acids, bases,

demulsifiers, or similar chemicals).

Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RTHRM

Thermal recovery of metals or inorganics from nonwastewaters in units defined as cement kilns, blast furnaces, smelting, melting and refining furnaces, combustion devices used to recover sulfur values from spent sulfuric acid and "other devices" determined by the Agency pursuant to 35 Ill. Adm. Code 720.110, the definition of "industrial furnace."

RZINC

Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.

STABL

Stabilization with the following reagents (or waste reagents) or combinations of reagents:

- 1) Portland cement; or
- 2) lime or pozzolans (e.g., fly ash and cement kiln dust)--this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set or cure time or compressive strength, or to overall reduce the leachability of the metal or inorganic.

SSTRP

Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges, have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit, such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and an extracted wastewater that must undergo further treatment as specified in the standard.

WETOX

Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).

WTRRX

Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic or ignitable levels of gases released during the reaction.

Note 1: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in Table T to this Part by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

Note 2: When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR." This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

BOARD NOTE: Derived	d from Table	I in 40 CFR 268.42 (2005)	<u>(2007)</u> .
(Source: Amended at 32	Ill. Reg	, effective)
Section 728.Table F	Alternati	ve Treatment Standards For	· Hazardous Debris

- a) Hazardous debris must be treated by either the standards indicated in this Table F or by the waste-specific treatment standards for the waste contaminating the debris. The treatment standards must be met for each type of debris contained in a mixture of debris types, unless the debris is converted into treatment residue as a result of the treatment process. Debris treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.
- b) Definitions. For the purposes of this Table F, the following terms are defined as follows:

"Clean debris surface" means the surface, when viewed without magnification, must be free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits must be limited to no more than five percent of each square inch of surface area.

"Contaminant restriction" means that the technology is not BDAT for that contaminant. If debris containing a restricted contaminant is treated by the technology, the contaminant must be subsequently treated by a technology for which it is not restricted in order to be land disposed (and excluded from Subtitle C regulation).

"Dioxin-listed wastes" means wastes having any of USEPA hazardous waste numbers FO20, FO21, FO22, FO23, FO26, or FO27.

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- c) Notes. In this Table F, the following text is to be read in conjunction with the tabulated text where the appropriate notations appear:
 - ¹ Acids, solvents, and chemical reagents may react with some debris and contaminants to form hazardous compounds. For example, acid washing of cyanide-contaminated debris could result in the formation of hydrogen cyanide. Some acids may also react violently with some debris and contaminants, depending on the concentration of the acid and the type of debris and contaminants. Debris treaters should refer to the safety precautions specified in Material Safety Data Sheets for various acids to avoid applying an incompatible acid to a particular debris/contaminant combination. For example, concentrated sulfuric acid may react violently with certain organic compounds, such as acrylonitrile.
 - ² If reducing the particle size of debris to meet the treatment standards results in material that no longer meets the 60 mm minimum particle size limit for debris, such material is subject to the waste-specific treatment standards for the waste contaminating the material, unless the debris has been cleaned and separated from contaminated soil and waste prior to size reduction. At a minimum, simple physical or mechanical means must be used to provide such cleaning and separation of nondebris materials to ensure that the debris surface is free of caked soil, waste, or other nondebris material.
 - ³ Thermal desorption is distinguished from thermal destruction in that the primary purpose of thermal desorption is to volatilize contaminants and to remove them from the treatment chamber for subsequent destruction or other treatment.
 - ⁴ The demonstration of "equivalent technology" under Section 728.142(b) must document that the technology treats contaminants subject to treatment to a level equivalent to that required by the performance and design and operating standards for other technologies in this table such that residual levels of hazardous contaminants will not pose a hazard to human health and the environment absent management controls.
 - ⁵ Any soil, waste, and other nondebris material that remains on the debris surface (or remains mixed with the debris) after treatment is considered a treatment residual that must be separated from the debris using, at a minimum, simple physical or mechanical means. Examples of simple physical or mechanical means are vibratory or trommel screening or water washing. The debris surface need not be cleaned to a "clean debris surface" as defined in subsection (b) of this Section when separating treated debris from residue; rather, the surface must be free of caked soil, waste, or other nondebris material. Treatment residuals are subject to the waste-specific treatment standards for the waste contaminating the debris.

Technology description	Performance or design and operating standard	Contaminant restrictions
A. Extraction Technologies:		
1. Physical Extraction		
a. Abrasive Blasting: Removal of contaminated debris surface layers using water or air pressure to propel a solid media (e.g., steel shot, aluminum oxide grit, plastic beads).	Glass, Metal, Plastic, Rubber: Treatment to a clean debris surface. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Removal of at least 0.6 cm of the surface layer; treatment to a clean debris surface.	All Debris: None.
b. Scarification, Grinding, and Planing: Process utilizing striking piston heads, saws, or rotating grinding wheels such that contaminated debris surface layers are removed.	Same as above	Same as above
c. Spalling: Drilling or chipping holes at appropriate locations and depth in the contaminated debris surface and applying a tool that exerts a force on the sides of those holes such that the surface layer is removed. The surface layer removed remains hazardous debris subject to the debris treatment standards.	Same as above	Same as above
d. Vibratory Finishing: Process utilizing scrubbing media, flushing fluid, and oscillating energy such that hazardous contaminants or contaminated debris surface layers are removed. ¹	Same as above	Same as above
e. High Pressure Steam and Water Sprays: Application of water or steam sprays of	Same as above	Same as above.

sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contaminants from debris surfaces or to remove contaminated debris surface layers

2. Chemical Extraction

a. Water Washing and Spraying: All Debris: Treatment to a Application of water sprays or water baths of sufficient temperature, pressure, residence Pavement, Rock, Wood: Debris time, agitation, surfactants, acids, bases, and detergents to remove hazardous contaminants from debris surfaces and surface pores or to remove contaminated debris surface layers.

clean debris surface; Brick, Cloth, Concrete, Paper, must be no more than $1.2 \text{ cm} (\frac{1}{2})$ inch) in one dimension (i.e., thickness limit,² except that this thickness limit may be waived under an "Equivalent Technology" approval under Section 728.142(b):⁴ debris surfaces must be in contact with water solution for at least 15 minutes

Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Contaminant must be soluble to at least five percent by weight in water solution or five percent by weight in emulsion; if debris is contaminated with a dioxinlisted waste,³ an "Equivalent Technology" approval under Section 728.142(b) must be obtained 4

b. Liquid Phase Solvent Extraction: Removal of hazardous contaminants from debris surfaces and surface pores by applying a nonaqueous liquid or liquid solution that causes the hazardous contaminants to enter the liquid phase and be flushed away from the debris along with the liquid or liquid solution while using appropriate agitation, temperature, and residence time.1

Same as above

Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Same as above, except that contaminant must be soluble to at least five percent by weight in the solvent.

c. Vapor Phase Solvent Extraction: Application of an organic vapor using sufficient agitation, residence time, and temperature to cause hazardous contaminants on contaminated

Same as above, except that brick, cloth, concrete, paper, pavement, rock and wood surfaces must be in contact with the organic vapor for at least 60 minutes

Same as above.

debris surfaces and surface pores to enter the vapor phase and be flushed away with the organic vapor.¹

3. Thermal Extraction

a. High Temperature Metals Recovery: Application of sufficient heat, residence time, mixing, fluxing agents, or carbon in a smelting, melting, or refining furnace to separate metals from debris.

For refining furnaces, treated debris must be separated from treatment residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residuals must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris.

Debris contaminated with a dioxin-listed waste:² Obtain an "Equivalent Technology" approval under Section 728.142(b).⁴

b. Thermal Desorption: Heating in an enclosed chamber under either oxidizing or nonoxidizing atmospheres at sufficient temperature and residence time to vaporize hazardous contaminants from contaminated surfaces and surface pores and to remove the contaminants from the heating chamber in a gaseous exhaust gas.³

All Debris: Obtain an "Equivalent Technologia approval under Section 728.142(b);⁴ treated debric be separated from treat residuals using simple or mechanical means,⁵ prior to further treatment stan organic compounds in contaminating the debric contamination contaminating the debric contaminating the debric contamination contam

"Equivalent Technology" approval under Section 728.142(b);⁴ treated debris must be separated from treatment residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residue must meet the wastespecific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 10 cm (4 inches) in one dimension (i.e., thickness limit),² except that this thickness limit may be waived under the "Equivalent Technology" approval

All Debris: Metals other than mercury.

B. Destruction Technologies:

1. Biological Destruction (Biodegradation): Removal of hazardous contaminants from debris surfaces and surface pores in an aqueous solution All Debris: Obtain an "Equivalent Technology" approval under Section 728.142(b);⁴ treated debris must be separated from treatment

All Debris: Metal contaminants.

and biodegration biodegradation of organic or nonmetallic or mechanical means, and, inorganic compounds (i.e., inorganics that contain phosphorus, nitrogen, or sulfur) in units operated under either aerobic or anaerobic conditions.

residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residue must meet the wastespecific treatment standards for organic compounds in the waste contaminating the debris.

Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 1.2 cm (½ inch) in one dimension (i.e., thickness limit),² except that this thickness limit may be waived under the "Equivalent Technology" approval

2. Chemical Destruction

a. Chemical Oxidation: Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combination of reagents: (1) hypochlorite (e.g., bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or UV (ultraviolet light) assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permanganates; or (9) other oxidizing reagents of equivalent destruction efficiency.¹ Chemical oxidation specifically includes what is referred to as alkaline chlorination.

All Debris: Obtain an "Equivalent Technology" approval under 35 Ill. Adm. Code.142(b);⁴ treated debris must be separated from treatment residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residue must meet the waste-specific treatment standards for organic compounds in the waste contaminating the debris. Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Debris must be no more than 1.2 cm ($\frac{1}{2}$ inch) in one dimension (i.e., thickness limit).² except that this thickness limit may be waived under the "Equivalent Technology" approval

All Debris: Metal contaminants.

b. Chemical Reduction: Chemical reaction utilizing the following reducing reagents (or waste reagents) or combination of reagents: (1) sulfur dioxide; (2) sodium, potassium, or alkali Same as above

Same as above.

salts of sulfites, bisulfites, and metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; or (5) other reducing reagents of equivalent efficiency.¹

3. Thermal Destruction: Treatment in an incinerator operating in accordance with Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725; a boiler or industrial furnace operating in accordance with Subpart H of 35 Ill. Adm. Code 726, or other thermal treatment unit operated in accordance with Subpart X of 35 Ill. Adm. Code 724, or Subpart P of 35 Ill. Adm. Code 725, but excluding for purposes of these debris treatment standards Thermal Desorption units

Treated debris must be separated from treatment residuals using simple physical or mechanical means,⁵ and, prior to further treatment, such residue must meet the wastespecific treatment standards for organic compounds in the waste contaminating the debris.

Brick, Concrete, Glass, Metal, Pavement, Rock, Metal: Metals other than mercury, except that there are no metal restrictions for vitrification.

Debris contaminated with a dioxin-listed waste.³ Obtain an "Equivalent Technology" approval under Section 728.142(b),⁴ except that this requirement does not apply to vitrification.

C. Immobilization Technologies:

1. Macroencapsulation:
Application of surface coating materials such as polymeric organics (e.g., resins and plastics) or use of a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media.

2. Microencapsulation: Stabilization of the debris with the following reagents (or waste reagents) such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/ Encapsulating material must completely encapsulate debris and be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes).

Leachability of the hazardous contaminants must be reduced.

None.

None.

pozzolans (e.g., fly ash and cement kiln dust). Reagents (e.g., iron salts, silicates, and clays) may be added to enhance the set/cure time or compressive strength, or to reduce the leachability of the hazardous constituents.²

3. Sealing: Application of an appropriate material that adheres tightly to the debris surface to avoid exposure of the surface to potential leaching media. When necessary to effectively seal the surface, sealing entails pretreatment of the debris surface to remove foreign matter and to clean and roughen the surface. Sealing materials include epoxy, silicone, and urethane compounds, but paint may not be used as a sealant

Sealing must avoid exposure of the debris surface to potential leaching media and sealant must be resistant to degradation by the debris and its contaminants and materials into which it may come into contact after placement (leachate, other waste, microbes).

Source:	Amended at 32 Ill. Reg.	, effective)
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Section 728. Table T

Treatment Standards for Hazardous Wastes

Note: The treatment standards that heretofore appeared in tables in Sections 728.141, 728.142, and 728.143 have been consolidated into this table.

Waste Code

Waste Description and Treatment or Regulatory Subcategory¹

Regulated Hazardous Constituent Wastewaters Nonwastewaters

Concentration⁵ in mg/kg⁵ unless noted as "mg/ℓ TCLP"; or Tech-

Concentration³ in mg/ℓ^3 ; or Technology Code⁴

Common Name CAS² Number logy Code⁴ nology Code⁴

D001 ⁹ Ignitable Characteristic Wastes, except for the 35 Ill. Adm. Code 721.121(a)(1) High TOC Subcategory.			
NA NA	NA	DEACT and meet Section 728.148 standards ⁸ ; or RORGS; or CMBST	DEACT and meet Section 728.148 standards ⁸ ; or RORGS; or CMBST
D001 ⁹ High TOC Ignitable Characteristic 721.121(a)(1) - Greater than or equivalent (Note: This subcategory consists on NA	ual to 10 percent to	tal organic carbon.	n. Code RORGS; CMBST;
			or POLYM
D002 ⁹ Corrosive Characteristic Wastes.			
NA	NA	DEACT and meet Section 728.148 standards ⁸	DEACT and meet Section 728.148 standards ⁸
D002, D004, D005, D006, D007, Radioactive high level wastes gene (Note: This subcategory consists of	erated during the re	processing of fuel rods	
Corrosivity (pH)	NA	NA	HLVIT
Arsenic	7440-38-2	NA NA	HLVIT
Barium	7440-39-3	NA	HLVIT
Cadmium	7440-43-9	NA	HLVIT
Chromium (Total)	7440-47-3	NA	HLVIT
Lead	7439-92-1	NA	HLVIT
Mercury	7439-97-6	NA	HLVIT
Selenium	7782-49-2	NA	HLVIT
Silver	7440-22-4	NA	HLVIT
D003 ⁹ Reactive Sulfides Subcategory bas	sed on 35 III. Adm.	Code 721.123(a)(5).	
NA	NA	DEACT	DEACT
D003 ⁹	C 11 A 1 C 1 C	1 1227)(6) /)(7)	17.70
Explosive subcategory based on 3:			
NA	NA	DEACT and meet	DEACT and meet

Section 728.148 standards⁸

Section 728.148 standards⁸

D	0	0	3	9

Unexploded ordnance and other explosive devices that have been the subject of an emergency response.

NA NA DEACT DEACT

 $D003^{9}$

Other Reactives Subcategory based on 35 Ill. Adm. Code 721.123(a)(1).

NA DEACT and meet DEACT and meet

Section 728.148 Section 728.148

standards⁸ standards⁸

 $D003^{9}$

Water Reactive Subcategory based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4).

(Note: This subcategory consists of nonwastewaters only.)

NA NA NA DEACT and meet

Section 728.148

standards⁸

D003⁹

Reactive Cyanides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

Cyanides (Total)⁷ 57-12-5 -- 590 Cyanides (Amenable)⁷ 57-12-5 0.86 30

 $D004^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Arsenic 7440-38-2 1.4 and meet 5.0 mg/ ℓ TCLP Section 728.148 and meet Section

standards⁸ 728.148 standards⁸

 $D005^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Barium 7440-39-3 1.2 and meet $21 \text{ mg/}\ell \text{ TCLP}$ and

Section 728.148 meet Section

standards⁸ 728.148 standards⁸

D0069

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cadmium 7440-43-9 0.69 and meet 0.11 mg/ ℓ TCLP Section 728.148 and meet Section

standards⁸ 728.148 standards⁸

 $D006^{9}$

Cadmium-Containing Batteries Subcategory.

(Note: This subcategory consists of nonwastewaters only.)

Cadmium 7440-43-9 NA RTHRM

 $D006^{9}$

Radioactively contaminated cadmium-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

Cadmium 7440-43-9 NA Macroencapsula-

tion in accordance with Section 728.145

 $D007^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chromium (Total) 7440-47-3 2.77 and meet 0.60 mg/ ℓ TCLP Section 728.148 and meet Section

standards⁸ 728.148 standards⁸

D0089

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Lead 7439-92-1 0.69 and meet 0.75 mg/ ℓ TCLP

Section 728.148 and meet Section standards⁸ 728.148 standards⁸

$D008^{9}$

Lead Acid Batteries Subcategory

(Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of this Part or exempted under other regulations (see 35 Ill. Adm. Code 726.180). This subcategory consists of nonwastewaters only.)

Lead 7439-92-1 NA RLEAD

$D008^{9}$

Radioactive Lead Solids Subcategory

(Note: These lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash. This subcategory consists of nonwastewaters only.)

Lead 7439-92-1 NA MACRO

$D009^{9}$

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic Subcategory)

Mercury 7439-97-6 NA IMERC; or RMERC

$D009^{9}$

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)

Mercury 7439-97-6 NA RMERC

D0099

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury. (Low Mercury Subcategory)

Mercury 7439-97-6 NA 0.20 mg/ ℓ TCLP and meet Section 728.148 standards⁸

 $D009^{9}$

All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a); and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury

Subcategory)

Mercury 7439-97-6 NA

 $0.025 \text{ mg/}\ell \text{ TCLP}$ and meet Section 728 148 standards⁸

NA

 $D009^{9}$

All D009 wastewaters.

Mercury

0.15 and meet

Section 728.148

standards⁸

 $D009^{9}$

Elemental mercury contaminated with radioactive materials.

(Note: This subcategory consists of nonwastewaters only.)

7439-97-6 Mercury NA **AMLGM**

7439-97-6

 $D009^{9}$

Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.

(Note: This subcategory consists of nonwastewaters only.)

Mercury 7439-97-6 NA **IMERC**

 $D009^{9}$

Radioactively contaminated mercury-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

7439-97-6 Mercury NA Macroencapsula-

> tion in accordance with Section 728.145

 $D010^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for selenium based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-

530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Selenium 7782-49-2 0.82 5.7 mg/ℓ TCLP

and meet Section 728.148 standards⁸

D0119

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on

Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Silver 7440-22-4 0.43 0.14 mg/ℓ TCLP

and meet Section 728.148 standards⁸

D011⁹

Radioactively contaminated silver-containing batteries.

(Note: This subcategory consists of nonwastewaters only.)

Silver 7440-22-4 NA Macroencapsula-

tion in accordance with Section 728.145

$D012^{9}$

Wastes that are TC for endrin based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Endrin	72-20-8	BIODG; or CMBST	0.13 and meet Section 728.148 standards ⁸
Endrin aldehyde	7421-93-4	BIODG; or CMBST	0.13 and meet Section 728.148 standards ⁸

$D013^{9}$

Wastes that are TC for lindane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

α-BHC	319-84-6	CARBN; or CMBST	0.066 and meet Section 728.148
β-ВНС	319-85-7	CARBN; or	standards ⁸ 0.066 and meet
		CMBST	Section 728.148 standards ⁸
δ-ВНС	319-86-8	CARBN; or CMBST	0.066 and meet Section 728.148
		CMDS1	standards ⁸
γ-BHC (Lindane)	58-89-9	CARBN; or	0.066 and meet
		CMBST	Section 728.148 standards ⁸

$D014^{9}$

Wastes that are TC for methoxychlor based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methoxychlor

72-43-5

WETOX or CMBST

0.18 and meet Section 728.148

standards⁸

$D015^{9}$

Wastes that are TC for toxaphene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Toxaphene

8001-35-2

BIODG or CMBST

2.6 and meet Section 728.148

standards⁸

D0169

Wastes that are TC for 2,4-D (2,4-dichlorophenoxyacetic acid) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-D (2,4-dichlorophenoxyacetic acid)

94-75-7

CHOXD; BIODG; or CMBST

10 and meet Section 728.148

standards⁸

$D017^{9}$

Wastes that are TC for 2,4,5-TP (Silvex) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-TP (Silvex)

93-72-1

CHOXD or CMBST

7.9 and meet Section 728.148

standards⁸

D018⁹

Wastes that are TC for benzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Benzene

71-43-2

0.14 and meet Section 728.148 10 and meet Section 728.148

standards⁸

standards⁸

D0199

Wastes that are TC for carbon tetrachloride based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Carbon tetrachloride 56-23-5 0.057 and meet 6.0 and meet Section 728.148 Section 728.148

standards⁸ standards⁸

$D020^{9}$

Wastes that are TC for chlordane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Chlordane (α and χ isomers) 57-74-9 0.0033 and meet Section 728.148 standards⁸ standards⁸ standards⁸

D0219

Wastes that are TC for chlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Chlorobenzene 108-90-7 0.057 and meet 6.0 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D022^{9}$

Wastes that are TC for chloroform based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Chloroform 67-66-3 0.046 and meet 6.0 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D023^{9}$

Wastes that are TC for o-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

o-Cresol 95-48-7 0.11 and meet 5.6 and meet Section 728.148 standards⁸ standards⁸ standards⁸

D0249

Wastes that are TC for m-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

m-Cresol	108-39-4	0.77 and meet	5.6 and meet
(difficult to distinguish from p-		Section 728.148	Section 728.148
cresol)		standards ⁸	standards ⁸

D0259

Wastes that are TC for p-cresol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Cresol	106-44-5	0.77 and meet	5.6 and meet
(difficult to distinguish from m-		Section 728.148	Section 728.148
cresol)		standards ⁸	standards ⁸

D0269

Wastes that are TC for cresols (total) based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Cresol-mixed isomers (Cresylic	1319-77-3	0.88 and meet	11.2 and meet
acid)		Section 728.148	Section 728.148
(sum of o-, m-, and p-cresol		standards ⁸	standards ⁸
concentrations)			

$D027^{9}$

Wastes that are TC for p-dichlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

p-Dichlorobenzene (1,4-	106-46-7	0.090 and meet	6.0 and meet
Dichlorobenzene)		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

$D028^{9}$

Wastes that are TC for 1,2-dichloroethane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,2-Dichloroethane	107-06-2	0.21 and meet	6.0 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

$D029^{9}$

Wastes that are TC for 1,1-dichloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

1,1-Dichloroethylene	75-35-4	0.025 and meet	6.0 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

$D030^{9}$

Wastes that are TC for 2,4-dinitrotoluene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4-Dinitrotoluene	121-14-2	0.32 and meet	140 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

D031⁹

Wastes that are TC for heptachlor based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Heptachlor	76-44-8	0.0012 and meet	0.066 and meet
		Section 728.148 standards ⁸	Section 728.148 standards ⁸
Heptachlor epoxide	1024-57-3	0.016 and meet	0.066 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

$D032^{9}$

Wastes that are TC for hexachlorobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachlorobenzene	118-74-1	0.055 and meet	10 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

$D033^{9}$

Wastes that are TC for hexachlorobutadiene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

 Hexachlorobutadiene
 87-68-3
 0.055 and meet
 5.6 and meet

 Section 728.148
 Section 728.148

standards⁸ standards⁸

$D034^{9}$

Wastes that are TC for hexachloroethane based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Hexachloroethane 67-72-1 0.055 and meet 30 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D035^{9}$

Wastes that are TC for methyl ethyl ketone based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Methyl ethyl ketone 78-93-3 0.28 and meet 36 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D036^{9}$

Wastes that are TC for nitrobenzene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Nitrobenzene 98-95-3 0.068 and meet 14 and meet Section 728.148 Section 728.148 standards⁸ standards⁸

$D037^{9}$

Wastes that are TC for pentachlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Pentachlorophenol 87-86-5 0.089 and meet 7.4 and meet Section 728.148 standards⁸ standards⁸

$D038^{9}$

Wastes that are TC for pyridine based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 III. Adm. Code 720.111(a).

Pyridine 110-86-1 0.014 and meet 16 and meet Section 728.148 standards⁸ standards⁸ standards⁸

 $D039^{9}$

Wastes that are TC for tetrachloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Tetrachloroethylene 127-18-4 0.056 and meet 6.0 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D040^{9}$

Wastes that are TC for trichloroethylene based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

Trichloroethylene 79-01-6 0.054 and meet 6.0 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D041^9$

Wastes that are TC for 2,4,5-trichlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,5-Trichlorophenol 95-95-4 0.18 and meet 7.4 and meet Section 728.148 standards⁸ standards⁸ standards⁸

$D042^{9}$

Wastes that are TC for 2,4,6-trichlorophenol based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2,4,6-Trichlorophenol 88-06-2 0.035 and meet 7.4 and meet Section 728.148 standards⁸ standards⁸

D043⁹
Wastes that are TC for vinyl chloride based on Method 1311 (Toxicity Characteristic Leaching Procedure (TCLP)) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code

Vinyl chloride	75-01-4	0.27 and meet	6.0 and meet
		Section 728.148	Section 728.148
		standards ⁸	standards ⁸

F001, F002, F003, F004 & F005

720.111(a).

F001, F002, F003, F004, or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloro-1,2,2-trifluoroethane, trichloroethylene, trichloromonofluoromethane, or xylenes (except as specifically noted in other subcategories). See further details of these listings in 35 Ill. Adm. Code 721.131.

Acetone	67-64-1	0.28	160
Benzene	71-43-2	0.14	10
n-Butyl alcohol	71-36-3	5.6	2.6
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlorobenzene	108-90-7	0.057	6.0
o-Cresol	95-48-7	0.11	5.6
m-Cresol	108-39-4	0.77	5.6
(difficult to distinguish from p-			
cresol)			
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-			
cresol)			
Cresol-mixed isomers (Cresylic	1319-77-3	0.88	11.2
acid)			
(sum of o-, m-, and p-cresol			
concentrations)			
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
Isobutyl alcohol	78-83-1	5.6	170
Methanol	67-56-1	5.6	NA
Methylene chloride	75-9-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33

Nitrobenzene	98-95-3	0.068	14
Pyridine	110-86-1	0.014	16
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
1,1,2-Trichloro-1,2,2-trifluoro-	76-13-1	0.057	30
ethane			
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			

F001, F002, F003, F004 & F005

F003 and F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001 through F005 solvents: carbon disulfide, cyclohexanone, or methanol. (Formerly Section 728.141(c)).

Carbon disulfide	75-15-0	3.8	4.8 mg/ℓ TCLP
Cyclohexanone	108-94-1	0.36	$0.75 \text{ mg/}\ell \text{ TCLP}$
Methanol	67-56-1	5.6	0.75 mg/ℓ TCLP

F001, F002, F003, F004 & F005

F005 solvent waste containing 2-Nitropropane as the only listed F001 through F005 solvent.

	0			
2-Nitropropane		79-46-9	(WETOX or	CMBST
			CHOXD) fb	
			CARBN; or	
			CMBST	

F001, F002, F003, F004 & F005

F005 solvent waste containing 2-Ethoxyethanol as the only listed F001 through F005 solvent.

2-Ethoxyethanol 110-80-5 BIODG; or CMBST

CMBST

F006

Wastewater treatment sludges from electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning or stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.

(.)	8		
Cadmium	7440-43-9	0.69	0.11 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	$0.60~\mathrm{mg}/\mathrm{\ell}~\mathrm{TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP

Silver	7440-22-4	NA	$0.14 \text{ mg/}\ell \text{ TCLP}$
F007			
Spent cyanide plating bath solution	ns from electroplati	ng operations.	
Cadmium	7440-43-9	NA	$0.11 \text{ mg/}\ell \text{ TCLP}$
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
Silver	7440-22-4	NA	$0.14 \text{ mg/}\ell \text{ TCLP}$
F008			
Plating bath residues from the bott	om of plating baths	from electroplating or	perations where
cyanides are used in the process.			
Cadmium	7440-43-9	NA	$0.11 \text{ mg/}\ell \text{ TCLP}$
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
Silver	7440-22-4	NA	$0.14 \text{ mg/}\ell \text{ TCLP}$
F009			
Spent stripping and cleaning bath	solutions from elect	roplating operations w	here cyanides are
used in the process.	7440 42 0	27.4	0.11 /0.ECL.D
Cadmium	7440-43-9	NA	0.11 mg/ ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable)	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ ℓ TCLP
Silver	7440-22-4	NA	0.14 mg/ℓ TCLP
F010			
Quenching bath residues from oil	baths from metal he	at-treating operations	where cyanides are
used in the process.	57.10.5	1.0	7 00
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	NA
F011			
Spent cyanide solutions from salt bath pot cleaning from metal heat-treating operations.			
Cadmium	7440-43-9	NA	0.11 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30

Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 mg/ℓ TCLP

F012

Quenching wastewater treatment sludges from metal heat-treating operations where cyanides are used in the process.

used in the process.			
Cadmium	7440-43-9	NA	0.11 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
Silver	7440-22-4	NA	$0.14 \text{ mg/}\ell \text{ TCLP}$

F019

Wastewater treatment sludges from the chemical conversion coating of aluminum, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.

Chromium (Total)	7440-47-3	2.77	$0.60~\mathrm{mg}/\ell~\mathrm{TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Cyanides (Amenable) ⁷	57-12-5	0.86	30

F020, F021, F022, F023, F026

Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (i.e., F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022) and wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenols, excluding wastes from equipment used only for the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (F023) or (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).

HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)			
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)			
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)			
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)			
Pentachlorophenol	87-86-5	0.089	7.4

TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 35 Ill. Adm. Code 721.131 or 721.132.)

spent educiyoto, and wastes noted	i iii 33 iii. Maiii. Co	uc /21.131 01 /21.132	
All F024 wastes	NA	$CMBST^{11}$	CMBST ¹¹
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
3-Chloropropylene	107-05-1	0.036	30
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Hexachloroethane	67-72-1	0.055	30
Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP

F025

Condensed light ends from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one up to and including five, with varying amounts and positions of chlorine substitution. F025--Light Ends Subcategory.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
Methylene chloride	75-9-2	0.089	30
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

F025

Spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with

varying amounts and positions of chlorine substitution. F025--Spent Filters/Aids and Desiccants Subcategory.

C 3			
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Methylene chloride	75-9-2	0.089	30
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

F027

Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

1 /			
HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)			
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)			
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)			
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)			
Pentachlorophenol	87-86-5	0.089	7.4
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

F028

Residues resulting from the incineration or thermal treatment of soil contaminated with USEPA hazardous waste numbers F020, F021, F023, F026, and F027.

HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)			
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)			
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)			
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)			
Pentachlorophenol	87-86-5	0.089	7.4

TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 35 Ill. Adm. Code 721.135 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or penta-chlorophenol.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)			
fluoranthene)			
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
2-4-Dimethyl phenol	105-67-9	0.036	14
Fluorene	86-73-7	0.059	3.4
Hexachlorodibenzo-p-dioxins	NA	0.000063 or	0.001 or CMBST ¹¹
		CMBST ¹¹	
Hexachlorodibenzofurans	NA	0.000063 or	0.001 or CMBST ¹¹
		CMBST ¹¹	
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Pentachlorodibenzo-p-dioxins	NA	0.000063 or	0.001 or CMBST ¹¹
		CMBST ¹¹	
Pentachlorodibenzofurans	NA	0.000035 or	0.001 or CMBST ¹¹
		CMBST ¹¹	
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2

Tetrachlorodibenzo-p-dioxins	NA	0.000063 or	0.001 or CMBST ¹¹
Tetrachlorodibenzofurans	NA	CMBST ¹¹ 0.000063 or	0.001 or CMBST ¹¹
Tottaomoroatoonzorarans	1171	CMBST ¹¹	o.out of CMBS1
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

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Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from			
benzo(k)fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from			
benzo(b)fluoranthene)			
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Fluorene	86-73-7	0.059	3.4
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$

F035

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes that are generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol.

Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP

F037

Petroleum refinery primary oil/water/solids separation sludge--Any sludge generated from the

gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not limited to, those generated in: oil/water/solids separators; tanks, and impoundments; ditches, and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludge generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges generated in aggressive biological treatment units as defined in 35 Ill. Adm. Code 721.131(b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.

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Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/ℓ TCLP

F038

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation (IAF) units, tanks, and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges, and floats generated in aggressive biological treatment units as defined in 35 Ill. Adm. Code 721.131(b)(2) (including sludges and floats generated in one or more additional units after wastewaters have been treated in aggressive biological units) and F037, K048, and K051 are not included in this listing.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4

bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/ℓ TCLP
			=

Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of this Part. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste numbers: F020, F021, F022, F026, F027, or F028.).

Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	NA
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylonitrile	107-13-1	0.24	84
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
α-ВНС	319-84-6	0.00014	0.066
β-ВНС	319-85-7	0.00014	0.066
δ-ВНС	319-86-8	0.023	0.066
ү-ВНС	58-89-9	0.0017	0.066
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4

Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol	88-85-7	0.066	2.5
(Dinoseb)			
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	NA
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
Chloromethane (Methyl	74-87-3	0.19	30
chloride)	71073	0.17	50
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol	108-39-4	0.77	5.6
(difficult to distinguish from p-	100-37-4	0.77	3.0
cresol)			
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-	100-44-3	0.77	3.0
cresol)			
Cyclohexanone	108-94-1	0.36	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.30	15
1,2-Dioromo-3-emoropropane	70-14-0	U.11	13

Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
2,4-D (2,4-Dichlorophenoxy-	94-75-7	0.72	10
acetic acid)			
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
2,4-Dimethylaniline (2,4-	95-68-1	0.010	0.66
xylidine)			
Diethyl phthalate	84-66-2	0.20	28
2-4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to	122-39-4	0.92	NA
distinguish from diphenylnitros-			
amine)			
,			

Diphenylnitrosamine (difficult to distinguish from diphenyl-	86-30-6	0.92	NA
amine)			
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2
Endosulfan I	939-98-8	0.023	0.066
Endosulfan II	33213-6-5	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
Ethyl acetate	141-78-6	0.34	33
Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
1,2,3,4,6,7,8-Heptachloro-	35822-46-9	0.000035	0.0025
dibenzo-p-dioxin (1,2,3,4,6,7,8-			
HpCDD)			
1,2,3,4,6,7,8-Heptachloro-	67562-39-4	0.000035	0.0025
dibenzofuran (1,2,3,4,6,7,8-			
HpCDF)		0.0000	0 000 =
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035	0.0025
dibenzofuran (1,2,3,4,7,8,9-			
HpCDF)	1004 57 2	0.016	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)	55604.04.1	0.000063	0.001
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)	(7.70.1	0.055	20
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1 143-50-8	0.081	2.6
Kepone	143-30-8	0.0011	0.13

Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	NA
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloro-	101-14-4	0.50	30
aniline)			
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	NA
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachloro-	3268-87-9	0.000063	0.0025
dibenzo-p-dioxin			
(1,2,3,4,6,7,8,9-OCDD)			
Parathion	56-38-2	0.014	4.6
Total PCBs	1336-36-3	0.10	10
(sum of all PCB isomers, or all			
Aroclors)			
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)			
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)			
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
1,3-Phenylenediamine	108-45-2	0.010	0.66
Phorate	298-02-2	0.021	4.6
Phthalic anhydride	85-44-9	0.055	NA

Pronamide	23950-58-5	0.093	1.5
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
2,4,5-T	93-76-5	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)	.1300 07 0	0.00000	0.001
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)	22722 27 2	0.000005	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromomethane)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-00-5 79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoro-	76-13-1	0.057	30
ethane	/0-13-1	0.037	30
tris(2,3-Dibromopropyl)	126-72-7	0.11	NA
phosphate	120-72-7	0.11	IVA
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene	1330-20-7	0.32	30
concentrations)			
Antimony	7440-36-0	1.9	1.15 mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 mg/ ℓ TCLP
Barium	7440-38-2	1.4	•
Beryllium	7440-39-3	0.82	21 mg/ℓ TCLP NA
Cadmium	7440-41-7	0.69	0.11 mg/ ℓ TCLP
Chromium (Total)	7440-43-9	2.77	0.60 mg/ ℓ TCLP
Cyanides (Total) ⁷	57-12-5	1.2	590
	57-12-5 57-12-5	0.86	NA
Cyanides (Amenable)			NA NA
Fluoride Lead	16964-48-8 7439-92-1	35 0.69	
	7439-92-1 7439-97-6	0.09	0.75 mg/ℓ TCLP
Mercury Nickel	7440-02-0		0.025 mg/ℓ TCLP
INICKEI	/44U-UZ-U	3.98	11 mg/ℓ TCLP

Selenium	7782-49-2	0.82	5.7 mg/ℓ TCLP
Silver	7440-22-4	0.43	0.14 mg/ℓ TCLP
Sulfide	8496-25-8	14	NA
Thallium	7440-28-0	1.4	NA
Vanadium	7440-62-2	4.3	NA
K001			
Bottom sediment sludge from the use creosote or pentachlorophenol		vaters from wood prese	erving processes that
Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene	1330 20 7	0.52	50
concentrations)			
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Leud	7437 72 1	0.07	0.73 mg/ ¢ 1 CE1
K002			
Wastewater treatment sludge from	the production of o	chrome yellow and oran	nge pigments.
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
K003	.1 1 0	1.1.1.	
Wastewater treatment sludge from	_		
Chromium (Total)	7440-47-3	2.77	0.60 mg/ ℓ TCLP
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
K004			
Wastewater treatment sludge from	the production of z	zinc vellow pigments.	
Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
	, , , , ,		8
K005			
Wastewater treatment sludge from	the production of o	chrome green pigments	.
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
V006			
K006 Wastewater treatment sludge from	the production of a	hrome ovide green nic	ments (anhydrous)
Chromium (Total)	7440-47-3	2.77	0.60 mg/ ℓ TCLP
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Loau	/ T J / - 74 - 1	0.07	v. / J mg/ t TCLF

K006 Wastewater treatment sludge from Chromium (Total) Lead	the production of 7440-47-3 7439-92-1	chrome oxide green pig 2.77 0.69	gments (hydrated). 0.60 mg/l TCLP NA
K007 Wastewater treatment sludge from Chromium (Total) Lead Cyanides (Total) ⁷	7440-47-3 7439-92-1 57-12-5	iron blue pigments. 2.77 0.69 1.2	0.60 mg/ ℓ TCLP 0.75 mg/ ℓ TCLP 590
K008 Oven residue from the production Chromium (Total) Lead	of chrome oxide gr 7440-47-3 7439-92-1	reen pigments. 2.77 0.69	0.60 mg/ℓ TCLP 0.75 mg/ℓ TCLP
K009 Distillation bottoms from the production Chloroform	luction of acetaldeh 67-66-3	yde from ethylene. 0.046	6.0
K010 Distillation side cuts from the proc Chloroform	duction of acetaldel 67-66-3	nyde from ethylene. 0.046	6.0
K011 Bottom stream from the wastewat Acetonitrile Acrylonitrile Acrylamide Benzene Cyanide (Total)	er stripper in the pr 75-05-8 107-13-1 79-06-1 71-43-2 57-12-5	oduction of acrylonitril 5.6 0.24 19 0.14 1.2	e. 38 84 23 10 590
K013 Bottom stream from the acetonitri Acetonitrile Acrylonitrile Acrylamide Benzene Cyanide (Total)	le column in the pro 75-05-8 107-13-1 79-06-1 71-43-2 57-12-5	oduction of acrylonitril 5.6 0.24 19 0.14 1.2	e. 38 84 23 10 590
K014 Bottoms from the acetonitrile puri Acetonitrile Acrylonitrile Acrylamide Benzene	fication column in 75-05-8 107-13-1 79-06-1 71-43-2	the production of acryl 5.6 0.24 19 0.14	onitrile. 38 84 23 10

Cyanide (Total)	57-12-5	1.2	590
K015			
Still bottoms from the distillation of	_		
Anthracene	120-12-7	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)	207-08-9	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-	207-08-9	0.11	0.8
fluoranthene)			
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.039	10
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
THERE	7110 02 0	3.70	ii mg o i cei
K016			
Heavy ends or distillation residues	from the production	n of carbon tetrachloric	de.
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.056	6.0
K017			
Heavy ends (still bottoms) from th	-	±	•
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
1,2-Dichloropropane	78-87-5	0.85	18
1,2,3-Trichloropropane	96-18-4	0.85	30
K018			
Heavy ends from the fractionation	column in ethyl chl	oride production	
Chloroethane	75-00-3	0.27	6.0
Chloromethane	74-87-3	0.19	NA
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
W010			
K019	C	1 1 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1
Heavy ends from the distillation of			-
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0

Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
p-Dichlorobenzene	106-46-7	0.090	NA
1,2-Dichloroethane	107-06-2	0.21	6.0
Fluorene	86-73-7	0.059	NA
Hexachloroethane	67-72-1	0.055	30
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
W020			
K020 Heavy ends from the distillation o	f vinyl chloride in y	zinyl chloride monome	r production
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1 chacinorochiyiche	127 10 1	0.020	0.0
K021			
Aqueous spent antimony catalyst	waste from fluorom	ethanes production.	
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Antimony	7440-36-0	1.9	$1.15 \text{ mg/}\ell \text{ TCLP}$
K022	1 0.1	1	
Distillation bottom tars from the p	-		
Toluene	108-88-3	0.080	10
Acetophenone	96-86-2	0.010	9.7
Diphenylamine (difficult to	122-39-4	0.92	13
distinguish from diphenylnitros-			
amine)	06.20.6	0.00	
Diphenylnitrosamine (difficult	86-30-6	0.92	13
to distinguish from diphenyl-			
amine)			
Phenol	108-95-2	0.039	6.2
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
K023			
Distillation light ends from the pro	oduction of phthalic	anhydride from nanht	halene
Phthalic anhydride (measured as	100-21-0	0.055	28
District annyunde (measured as	100 21 0	0.055	20

Phthalic acid or Terephthalic

acid)

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K024 Distillation bottoms from the prod Phthalic anhydride (measured as	uction of phthalic a 100-21-0	nhydride from naphtha 0.055	ulene. 28
Phthalic acid or Terephthalic acid) Phthalic anhydride (measured as Phthalic acid or Terephthalic	85-44-9	0.055	28
acid)			
K025 Distillation bottoms from the prod		•	
NA	NA	LLEXT fb SSTRP fb CARBN; or CMBST	CMBST
K026 Stripping still tails from the production NA	ction of methyl ethy NA	vl pyridines. CMBST	CMBST
K027			
Centrifuge and distillation residue NA	s from toluene diiso NA	cyanate production. CARBN; or CMBST	CMBST
K028 Spent catalyst from the hydrochlor	cinator reactor in the	nroduction of 1.1.1-ti	richloroethane
1,1-Dichloroethane	75-34-3	0.059	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Cadmium	7440-43-9	0.69	NA
Chromium(Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP

K	N	2	9
17	v	_	,

Chloroform	67-66-3	0.046	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.

o-Dichlorobenzene	95-50-1	0.088	NA
p-Dichlorobenzene	106-46-7	0.090	NA
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	NA	30
Pentachlorobenzene	608-93-5	NA	10
Pentachloroethane	76-01-7	NA	6.0
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K031

By-product salts generated in the production of MSMA and cacodylic acid.

Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
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K032

Wastewater treatment sludge from the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Chlordane (α and γ isomers)	57-74-9	0.0033	0.26
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066

K033

Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4
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K034

Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4
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K035

Wastewater treatment sludges generated in the production of creosote.

Acenaphthene	83-32-9	NA	3.4
Anthracene	120-12-7	NA	3.4

Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol	108-39-4	0.77	5.6
(difficult to distinguish from p-			
cresol)			
p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-			
cresol)			
Dibenz(a,h)anthracene	53-70-3	NA	8.2
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	NA	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
K036 Still bottoms from toluene reclam Disulfoton	ation distillation in 298-04-4	the production of disu	lfoton. 6.2
K037		0.11 10	
Wastewater treatment sludges fro			6.2
Disulfoton	298-04-4	0.017	6.2
Toluene	108-88-3	0.080	10
K038 Wastewater from the washing and Phorate	l stripping of phorat 298-02-2	te production. 0.021	4.6
K039 Filter cake from the filtration of d NA	iethylphosphoroditl NA	hioic acid in the produc CARBN; or CMBST	ction of phorate. CMBST
K040 Wastewater treatment sludge from Phorate	n the production of 298-02-2	phorate. 0.021	4.6
K041 Wastewater treatment sludge from Toxaphene	n the production of 8001-35-2	toxaphene. 0.0095	2.6

K042 Heavy ends or distillation residues of 2,4,5-T.	from the distillation	n of tetrachlorobenzen	e in the production
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19
K043			
2,6-Dichlorophenol waste from the	production of 2,4-1	D.	
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	187-65-0	0.044	14
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4
Tetrachloroethylene	127-18-4	0.056	6.0
HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)	NA	0.000003	0.001
* /	55684-94-1	0.000063	0.001
HxCDFs (All Hexachloro-	33084-94-1	0.000003	0.001
dibenzofurans)	26000 22 0	0.000063	0.001
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)	20102171	0.0000	0.004
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)			
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			
K044			
Wastewater treatment sludges from	the manufacturing	and processing of exp	losives
NA	NA	DEACT	DEACT
141	1471	DENCT	DL/101
K045			
Spent carbon from the treatment of	wastewater contain	ning explosives.	
NA	NA	DEACT	DEACT
K046			
Wastewater treatment sludges from	the manufacturing	, formulation and load	ing of lead-based
initiating compounds.			
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$

K047 Pink or red water from TNT oper	ations		
NA	NA	DEACT	DEACT
1121	1111	BEITET	BEITE I
K048			
Dissolved air flotation (DAF) floa	_	ım refining industry.	
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-33	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	$11 \text{ mg/}\ell \text{ TCLP}$
K049			
Slop oil emulsion solids from the	petroleum refining	industry.	
Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Carbon disulfide	75-15-0	3.8	NA
Chrysene	2218-01-9	0.059	3.4
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Cyanides (Total) ⁷	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
()	· · · · · ·		3, 7 = 2.22

Lead Nickel	7439-92-1 7440-02-0	0.69 NA	NA 11 mg/l TCLP
K050			
Heat exchanger bundle cleaning s	•		•
Benzo(a)pyrene	50-32-8	0.061	3.4
Phenol	108-95-2	0.039	6.2
Cyanides (Total) ⁷	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/ℓ TCLP
K051			
API separator sludge from the pet	roleum refining ind	lustry.	
Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	2218-01-9	0.059	3.4
Di-n-butyl phthalate	105-67-9	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.08	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Cyanides (Total) ⁷	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/ℓ TCLP
K052			
Tank bottoms (leaded) from the p	etroleum refining in	ndustry.	
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol	108-39-4	0.77	5.6
(difficult to distinguish from p-			
cresol)			
,			

p-Cresol	106-44-5	0.77	5.6
(difficult to distinguish from m-cresol)			
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.057	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Toluene	108-93-2	0.037	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene	1550 20 7	0.52	50
concentrations)			
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/ℓ TCLP
TTOKOT	7110 02 0	1111	II mg/ c TCLI
K060			
Ammonia still lime sludge from o	coking operations		
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2
Cyanides (Total) ⁷	57-12-5	1.2	590
- ,	• , •		
K061			
Emission control dust or sludge f	rom the primary pro	duction of steel in elec	tric furnaces.
Antimony	7440-36-0	NA	1.15 mg/ℓ TCLP
Arsenic	7440-38-2	NA	5.0 mg/ℓ TCLP
Barium	7440-39-3	NA	21 mg/ℓ TCLP
Beryllium	7440-41-7	NA	1.22 mg/ℓ TCLP
Cadmium	7440-43-9	0.69	0.11 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/ℓ TCLP
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Mercury	7439-97-6	NA	0.025 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
Selenium	7782-49-2	NA	5.7 mg/ℓ TCLP
Silver	7440-22-4	NA	0.14 mg/ℓ TCLP
Thallium	7440-28-0	NA	0.20 mg/ℓ TCLP
Zinc	7440-66-6	NA	4.3 mg/ℓ TCLP
			-
K062			
Spent pickle liquor generated by	steel finishing opera	ations of facilities within	in the iron and steel
industry (SIC Codes 331 and 332	(a).		
Chromium (Total)			
,	7440-47-3	2.77	$0.60 \text{ mg}/\ell \text{ TCLP}$
Lead	7440-47-3 7439-92-1	2.77 0.69	$0.60 \text{ mg/}\ell \text{ TCLP}$ $0.75 \text{ mg/}\ell \text{ TCLP}$

Nickel	7440-02-0	3.98	NA		
K069 Emission control dust or sludge from secondary lead smelting - Calcium sulfate (Low Lead) Subcategory.					
Cadmium Lead	7440-43-9 7439-92-1	0.69 0.69	$0.11 \text{ mg/}\ell \text{ TCLP}$ $0.75 \text{ mg/}\ell \text{ TCLP}$		
K069 Emission control dust or sludge fr Lead) Subcategory.	om secondary lead	smelting - Non-Calcium	m sulfate (High		
NA	NA	NA	RLEAD		
K071 K071 (Brine purification muds from separately prepurified brine is not Mercury	•	.			
K071 K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are not residues from RMERC. Mercury 7439-97-6 NA 0.025 mg/ ℓ TCLP					
K071 All K071 wastewaters. Mercury	7439-97-6	0.15	NA		
K073 Chlorinated hydrocarbon waste frographite anodes in chlorine produc		step of the diaphragm	cell process using		
Carbon tetrachloride	56-23-5	0.057	6.0		
Chloroform	67-66-3	0.046	6.0		
Hexachloroethane	67-72-1	0.055	30		
Tetrachloroethylene 1,1,1-Trichloroethane	127-18-4 71-55-6	0.056 0.054	6.0 6.0		
K083 Distillation bottoms from aniline p	production.				
Aniline	62-53-3	0.81	14		
Benzene	71-43-2	0.14	10		
Cyclohexanone	108-94-1	0.36	NA		
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13		

Diphenylnitrosamine (difficult	86-30-6	0.92	13
to distinguish from diphenyl-			
amine)			
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Nickel	7440-02-0	3.98	11 mg/ℓ TCLP

Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
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K085

Distillation or fractionation column bottoms from the production of chlorobenzenes.

Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Total PCBs	1336-36-3	0.10	10
(sum of all PCB isomers, or all			
Aroclors)			
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K086

Solvent wastes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

210101111111111111111111111111111111111			
Acetone	67-64-1	0.28	160
Acetophenone	96-86-2	0.010	9.7
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
n-Butyl alcohol	71-36-3	5.6	2.6
Butylbenzyl phthalate	85-68-7	0.017	28
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Diethyl phthalate	84-66-2	0.20	28
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
Di-n-octyl phthalate	117-84-0	0.017	28
Ethyl acetate	141-78-6	0.34	33
Ethylbenzene	100-41-4	0.057	10
Methanol	67-56-1	5.6	NA
Methyl ethyl ketone	78-93-3	0.28	36

Methyl isobutyl ketone	108-10-1	0.14	33
Methylene chloride	75-09-2	0.089	30
Naphthalene	91-20-3	0.059	5.6
Nitrobenzene	98-95-3	0.068	14
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁷	57-12-5	1.2	590
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
			\mathcal{E}
K087	lring anarotions		
Decanter tank tar sludge from co	U 1	0.050	2.4
Acenaphthylene	208-96-8	0.059	3.4
Benzene	71-43-2	0.14	10
Chrysene	218-01-9	0.059	3.4
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)		0.00	
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
K088			
Spent potliners from primary alu	minum reduction.		
Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene	205-99-2	0.11	6.8
Benzo(k)fluoranthene	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
Indeno(1,2,3-cd)pyrene	-,- 0, 0		
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Antimony	7440-36-0	1.9	1.15 mg/ℓ TCLP
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Arsenic Barium Beryllium Cadmium Chromium (Total) Lead Mercury Nickel Selenium Silver Cyanide (Total) ⁷ Cyanide (Amenable) ⁷ Fluoride	7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7439-92-1 7439-97-6 7440-02-0 7782-49-2 7440-22-4 57-12-5 57-12-5 16984-48-8	1.4 1.2 0.82 0.69 2.77 0.69 0.15 3.98 0.82 0.43 1.2 0.86 35	26.1 mg/ ℓ 21 mg/ ℓ TCLP 1.22 mg/ ℓ TCLP 0.11 mg/ ℓ TCLP 0.60 mg/ ℓ TCLP 0.75 mg/ ℓ TCLP 0.025 mg/ ℓ TCLP 11 mg/ ℓ TCLP 5.7 mg/ ℓ TCLP 5.7 mg/ ℓ TCLP 0.14 mg/ ℓ TCLP 590 30
K093			
Distillation light ends from the pro	-	-	•
Phthalic anhydride (measured as Phthalic acid or Terephthalic	100-21-0	0.055	28
acid)			
Phthalic anhydride (measured as	85-44-9	0.055	28
Phthalic acid or Terephthalic			
acid)			
K094		1 1:1 6 4	1
Distillation bottoms from the prod	uction of phthalic at 100-21-0	nnydride from ortho-xy	ylene. 28
Phthalic anhydride (measured as Phthalic acid or Terephthalic	100-21-0	0.033	20
acid)			
Phthalic anhydride (measured as	85-44-9	0.055	28
Phthalic acid or Terephthalic			
acid)			
K095	(1114:1	1 41	
Distillation bottoms from the prod Hexachloroethane	uction of 1,1,1-tricr 67-72-1	0.055	30
Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
W00.6			
K096	-1 C /1	1	41
Heavy ends from the heavy ends c	-		
m-Dichlorobenzene	541-73-1	0.036	6.0

76-01-7

0.055

Pentachloroethane

6.0

1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
K097			
Vacuum stripper discharge from th	ne chlordane chlo	rinator in the produ	ction of chlordane.
Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
K098			
Untreated process wastewater from	n the production (of toyanhene	
Toxaphene	8001-35-2	0.0095	2.6
Тохарнене	8001-33-2	0.0093	2.0
K099			
Untreated wastewater from the pro	duction of 2.4-D		
2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	10
HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)	1 17 1	0.000005	0.001
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)		0.00000	0.001
PeCDDs (All Pentachloro-	36088-22-9	0.000063	0.001
dibenzo-p-dioxins)	20000 22 9	0.00000	0.001
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)	20.02.12	0.000022	0.001
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)	11905 57 5	0.00000	0.001
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)	33722 27 3	0.000003	0.001

K100			
Waste leaching solution from acid	leaching of emiss	sion control dust or	sludge from secondary
lead smelting.		0.60	
Cadmium	7440-43-9	0.69	0.11 mg/ℓ TCLP
Chromium (Total)	7440-47-3	2.77	$0.60~\mathrm{mg/\ell}~\mathrm{TCLP}$
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
K101			
Distillation tar residues from the d	istillation of anili	ne-based compound	ds in the production of
2 12 11 11 11 11 11 11 11 11 11 11 11 11			production of

veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

88-74-4

7440-38-2

0.27

1.4

14

5.0 mg/ℓ TCLP

o-Nitroaniline

Arsenic

Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA
Wicicuty	7437-77-0	0.13	1471
K102			
Residue from the use of activated	carbon for decolor	rization in the production	on of veterinary
pharmaceuticals from arsenic or o		_	J
o-Nitrophenol	88-75-5	0.028	13
Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA
•			
K103			
Process residues from aniline extr	raction from the pro	oduction of aniline.	
Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
K104			
Combined wastewater streams ge			
Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Cyanides (Total) ⁷	57-12-5	1.2	590
17105			
K105	1 1	1: 4 : 4	1 4: 0 11
Separated aqueous stream from the	ie reactor product v	wasning step in the proc	nuction of chloro-
benzenes.	71 42 2	0.14	10
Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
2-Chlorophenol	95-57-8	0.044	5.7
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Phenol	108-95-2	0.039	6.2
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4

K106 (wastewater treatment sludge from the mercury cell process in chlorine production)

NA

nonwastewaters that contain greater than or equal to 260 mg/kg total mercury. 7439-97-6

K106

Mercury

RMERC

K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC.

Mercury

7439-97-6

NA

 $0.20 \text{ mg/}\ell \text{ TCLP}$

K106

Other K106 nonwastewaters that contain less than 260 mg/kg total mercury and are not residues from RMERC.

Mercury

7439-97-6

NA

0.025 mg/ℓ TCLP

K106

All K106 wastewaters.

Mercury

7439-97-6

0.15

NA

K107

Column bottoms from product separation from the production of 1,1-dimethylhydrazine

(UDMH) from carboxylic acid hydrazides.

NA

NA

CMBST; or

CMBST

CHOXD fb CARBN; or BIODG fb CARBN

K108

Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA

NA

CMBST; or

CMBST

CHOXD fb CARBN; or BIODG fb CARBN

K109

Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA

NA

CMBST; or

CMBST

CHOXD fb CARBN; or BIODG fb CARBN

TZ	1	1	Λ
N	1	1	U

Condensed column overheads from intermediate separation from the production of 1,1-dimethyl-hydrazine (UDMH) from carboxylic acid hydrazides.

NA NA CMBST; or CMBST

CHOXD fb CARBN; or BIODG fb CARBN

K111

Product washwaters from the production of dinitrotoluene via nitration of toluene.

2,4-Dinitrotoluene 121-1-1 0.32 140 121-14-2

2,6-Dinitrotoluene 606-20-2 0.55 28

K112

Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA NA CMBST; or CMBST

CHOXD fb CARBN; or BIODG fb CARBN

K113

Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA NA CARBN; or CMBST

CMBST

K114

Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA NA CARBN; or CMBST

CMBST

K115

Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

Nickel 7440-02-0 3.98 11 mg/ℓ TCLP

NA NA CARBN; or CMBST

CMBST

TZ 1	1/	
KI	10	

Organic condensate from the solvent recovery column in the production of toluene diisocyanate
via phosgenation of toluenediamine.

NA	NA	CARBN; or	CMBST
		CMBST	

Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-	106-93-4	0.028	15
Dibromoethane)			

K118

Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-	106-93-4	0.028	15
Dibromoethane)			

K123

Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or	CMBST
		CHOXD fb	
		(BIODG or	
		CARBN)	

K124

Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or	CMBST
		CHOXD fb	
		(BIODG or	
		CARBN)	

K125

Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithio-carbamic acid and its salts.

NA	NA	CMBST; or	CMBST
		CHOXD fb	
		(BIODG or	
		CARBN)	

K126

Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.

NA	NA	CMBST; or	CMBST
		CHOXD fb	
		(BIODG or	
		CARBN)	

K131

Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.

Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			

K132

Spent absorbent and wastewater separator solids from the production of methyl bromide.

Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			

K136

Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-	106-93-4	0.028	15
Dibromoethane)			

K141

Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).

This fisting does not include 1200	(acculited tulik	i tai siaage ii oiii eon	ing operations
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-2-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K142

Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.

T T			
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K143

Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4

K144

Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

Continuous Sump States	- 	products p	
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2

by-

K145			
Residues from naphthalene collect	ion and recovery of	perations from the recov	very of coke
products produced from coal.			
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Naphthalene	91-20-3	0.059	5.6
K147			
Tar storage tank residues from coa	ıl tar refining.		
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
K148			
Residues from coal tar distillation,	including, but not l	limited to, still bottoms	•
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-			
fluoranthene)			
Benzo(k)fluoranthene (difficult	207-08-9	0.11	6.8
to distinguish from benzo(b)-			
fluoranthene)			
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K149

Distillation bottoms from the production of α - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillations of benzyl chloride.)

Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30

p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Toluene	108-88-3	0.080	10

Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of α - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

14114 trong 810 trps.			
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,1,2,2- Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K151

Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of α - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Benzene	71-43-2	0.14	10
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10

K156

Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes.¹⁰

Acetonitrile	75-05-8	5.6	1.8
Acetophenone	96-86-2	0.010	9.7
	<u>98-86-2</u>		
Aniline	62-53-3	0.81	14
Benomyl	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Carbaryl	63-25-21	0.006	0.14

Carbenzadim	10605-21-7	0.056	1.4
Carbofuran	1563-66-2	0.006	0.14
Carbosulfan	55285-14-8	0.028	1.4
Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
Methomyl	16752-77-5	0.028	0.14
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyridine	110-86-1	0.014	16
Toluene	108-88-3	0.080	10
Triethylamine	121-44-8	0.081	1.5

Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
Methomyl	16752-77-5	0.028	0.14
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Pyridine	110-86-1	0.014	16
Triethylamine	121-44-8	0.081	1.5

K158

Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes.

OAIIIICS.			
Benomyl	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Carbenzadim	10605-21-7	0.056	1.4
Carbofuran	1563-66-2	0.006	0.14
Carbosulfan	55285-14-8	0.028	1.4
Chloroform	67-66-3	0.046	6.0
Methylene chloride	75-09-2	0.089	30
Phenol	108-95-2	0.039	6.2

K159

Organics from the treatment of thiocarbamate wastes. 10

Organies from the treatme	iii oi iiiocaroainate wast		
Benzene	71-43-2	0.14	10
Butylate	2008-41-5	0.042	1.4
EPTC (Eptam)	759-94-4	0.042	1.4
Molinate	2212-67-1	0.042	1.4
Pebulate	1114-71-2	0.042	1.4

Vernolate 1929-77-7 0.042 1.4

K161
Purification solids (including filtration, evaporation, and centrifugation solids), baghouse dust and floor sweepings from the production of dithiocarbamate acids and their salts.

Antimony	7440-36-0	1.9	1.1511
Arsenic	7440-38-2	1.4	5.0^{11}
Carbon disulfide	75-15-0	3.8	4.8^{11}
Dithiocarbamates (total)	137-30-4	0.028	28
Lead	7439-92-1	0.69	0.75^{11}
Nickel	7440-02-0	3.98	11^{11}
Selenium	7782-49-2	0.82	5.7^{11}

K169

Crude oil tank sediment from petroleum refining operations.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Ethyl benzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	81-05-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total)	1330-20-7	0.32	30

K170

Clarified slurry oil sediment from petroleum refining operations.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Ethyl benzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	3.4
Indeno(1,2,3,-cd)pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	81-05-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total	1330-20-7	0.32	30

K171 Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to

spending and an end of the state of the stat	spending the drawing to the many state of the many state of the drawing sound to the drawing state of the drawing				
desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)					
Benz(a)anthracene	56-55-3	0.059	3.4		
Benzene	71-43-2	0.14	10		
Chrysene	218-01-9	0.059	3.4		
Ethyl benzene	100-41-4	0.057	10		
Naphthalene	91-20-3	0.059	5.6		
Phenanthrene	81-05-8	0.059	5.6		
Pyrene	129-00-0	0.067	8.2		
Toluene (Methyl Benzene)	108-88-3	0.080	10		
Xylenes (Total)	1330-20-7	0.32	30		
Arsenic	7740-38-2	1.4	5 mg/ℓ TCLP		
Nickel	7440-02-0	3.98	11.0 mg/ℓ TCLP		
Vanadium	7440-62-2	4.3	1.6 mg/ℓ TCLP		
Reactive sulfides	NA	DEACT	DEACT		

K172

Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)

Benzene	71-43-2	0.14	10
Ethyl benzene	100-41-4	0.057	10
Toluene (Methyl Benzene)	108-88-3	0.080	10
Xylenes (Total)	1330-20-7	0.32	30
Antimony	7740-36-0	1.9	1.15 mg/ℓ TCLP
Arsenic	7740-38-2	1.4	5 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11.0 mg/ℓ TCLP
Vanadium	7440-62-2	4.3	1.6 mg/ℓ TCLP
Reactive Sulfides	NA	DEACT	DEACT

K174

Wastewater treatment sludge from the production of ethylene dicholoride or vinyl choloride monomer.

1,2,3,4,6,7,8-Heptachloro- dibenzo-p-dioxin (1,2,3,4,6,7,8-	35822-46-9	0.000035 or CMBST ¹¹	0.0025 or CMBST ¹¹
HpCDD)		CIVIDOT	CIVIDOT
1,2,3,4,6,7,8-Heptachloro-	67562-39-4	0.000035 or	0.0025 or
dibenzofuran (1,2,3,4,6,7,8-		CMBST ¹¹	CMBST ¹¹
HpCDF)			
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035 or	0.0025 or
dibenzofuran (1,2,3,4,7,8,9-		CMBST ¹¹	CMBST ¹¹
HpCDF)			11
All hexachlorodibenzo-p-dioxins	34465-46-8	0.000063 or	0.001 or CMBST ¹¹
(HxCDDs)		CMBST ¹¹	11
All hexachlorodibenzofurans	55684-94-1	0.000063 or	0.001 or CMBST ¹¹
(HxCDFs)		CMBST ¹¹	

1,2,3,4,6,7,8,9-Octachloro-dibenzo-p-dioxin	3268-87-9	0.000063 or CMBST ¹¹	0.005 or CMBST ¹¹
(1,2,3,4,6,7,8,9-OCDD) 1,2,3,4,6,7,8,9-Octachloro- dibenzofuran (1,2,3,4,6,7,8,9-	39001-02-0	0.000063 or CMBST ¹¹	0.005 or CMBST ¹¹
OCDF) All pentachlorodibenzo-p- dioxins (PeCDDs)	36088-22-9	0.000063 or CMBST ¹¹	0.001 or CMBST ¹¹
All pentachlorodibenzofurans (PeCDFs)	30402-15-4	0.000035 or CMBST ¹¹	0.001 or CMBST ¹¹
All tetrachlorodibenzo-p-dioxins (TCDDs)	41903-57-5	0.000063 or CMBST ¹¹	0.001 or CMBST ¹¹
All tetrachlorodibenzofurans (TCDFs)	55722-27-5	0.000063 or CMBST ¹¹	0.001 or CMBST ¹¹
Arsenic	7440-36-0	1.4	$5.0 \text{ mg/}\ell \text{ TCLP}$

K175

Wastewater treatment sludge from the production of vinyl choloride monomer using mercuric chloride catalyst in an acetylene-based process.

Mercury ¹² PH ¹²	7439-97-6	NA NA	0.025 mg/ℓ TCLP pH≤6.0
K175 All K175 wastewaters.			
Mercury	7439-97-6	0.15	NA

K176

Baghouse filters from the production of antimony oxide, including filters from the production of intermediates e.g., antimony metal or crude antimony oxide).

Antimony	7440-36-0	1.9	$1.15~\mathrm{mg/\ell}~\mathrm{TCLP}$
Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Cadmium	7440-43-9	0.69	$0.11~\text{mg/}\ell~\text{TCLP}$
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$
Mercury	7439-97-6	0.15	0.025 mg/ℓ TCLP

K177

Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).

Antimony	7440-36-0	1.9	1.15 mg/ℓ TCLP
Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$

K178
Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.

formed during the production of tit	anium dioxide usin	g the chloride-ilmenite	process.
1,2,3,4,6,7,8-Heptachloro-	35822-46-9	0.000035 or	0.0025 or
dibenzo-p-dioxin (1,2,3,4,6,7,8-		CMBST ¹¹	CMBST ¹¹
HpCDD)			
1,2,3,4,6,7,8-Heptachloro-	67562-39-4	0.000035 or	0.0025 or
dibenzofuran (1,2,3,4,6,7,8-		CMBST ¹¹	CMBST ¹¹
HpCDF)			
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035 or	0.0025 or
dibenzofuran (1,2,3,4,7,8,9-		CMBST ¹¹	CMBST ¹¹
HpCDF)			
HxCDDs (All Hexachloro-	34465-46-8	0.000063 or	0.001 or CMBST ¹¹
dibenzo-p-dioxins)		CMBST ¹¹	
HxCDFs (All Hexachloro-	55684-94-1	0.000063 or	0.001 or CMBST ¹¹
dibenzofurans)		CMBST ¹¹	
1,2,3,4,6,7,8,9-Octachloro-	3268-87-9	0.000063 or	0.005 or CMBST ¹¹
dibenzo-p-dioxin		CMBST ¹¹	
(1,2,3,4,6,7,8,9-OCDD)			
1,2,3,4,6,7,8,9-Octachloro-	39001-02-0	0.000063 or	0.005 or CMBST ¹¹
dibenzofuran (OCDF)		CMBST ¹¹	
PeCDDs (All Pentachloro-	36088-22-9	0.000063 or	0.001 or CMBST ¹¹
dibenzo-p-dioxins)		CMBST ¹¹	
PeCDFs (All Pentachloro-	30402-15-4	0.000035 or	0.001 or CMBST ¹¹
dibenzofurans)		CMBST ¹¹	
TCDDs (All Tetrachloro-	41903-57-5	0.000063 or	0.001 or CMBST ¹¹
dibenzo-p-dioxins)		CMBST ¹¹	
TCDFs (All Tetrachloro-	55722-27-5	0.000063 or	0.001 or CMBST ¹¹
dibenzofurans)		CMBST ¹¹	
Thallium	7440-28-0	1.4	$0.20 \text{ mg/}\ell \text{ TCLP}$

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Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in Section 721.132(c) which are equal to or greater than the corresponding Section 721.132(c) levels, as determined on a calendar-year basis.

Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxyaniline)	90-04-0	0.010	0.66
4-Chloroaniline	106-47-8	0.46	16
p-Cresidine	120-71-8	0.010	0.66
2,4-Dimethylaniline (2,4-	95-68-1	0.010	0.66
xylidine)			

1,2-Phenylenediamine	95-54-5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN
1,3-Phenylenediamine	108-45-2	0.010	0.66
P001 Warfarin, & salts, when present at Warfarin	concentrations great 81-81-2	ater than 0.3 percent. (WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P002 1-Acetyl-2-thiourea. 1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P003 Acrolein. Acrolein	107-02-8	0.29	CMBST
P004 Aldrin. Aldrin	309-00-2	0.021	0.066
P005 Allyl alcohol. Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P006 Aluminum phosphide. Aluminum phosphide	20859-73-8	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST

P007 5-Aminomethyl-3-isoxazolol. 5-Aminomethyl-3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P008 4-Aminopyridine. 4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P009 Ammonium picrate. Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P010 Arsenic acid. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
P011 Arsenic pentoxide. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
P012 Arsenic trioxide. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
P013 Barium cyanide. Barium Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	7440-39-3 57-12-5 57-12-5	NA 1.2 0.86	21 mg/ℓ TCLP 590 30
P014 Thiophenol (Benzene thiol). Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P015 Beryllium dust. Beryllium	7440-41-7	RMETL;or RTHRM	RMETL; or RTHRM
P016 Dichloromethyl ether (Bis(chloromethyl ether	methyl)ether). 542-88-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P017 Bromoacetone. Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P018 Brucine. Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P020 2-sec-Butyl-4,6-dinitrophenol (Di 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	noseb). 88-85-7	0.066	2.5
P021 Calcium cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30
P022 Carbon disulfide. Carbon disulfide Carbon disulfide; alternate ⁶ standard for nonwastewaters only	75-15-0 75-15-0	3.8 NA	CMBST 4.8 mg/ℓ TCLP

P023 Chloroacetaldehyde. Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P024 p-Chloroaniline. p-Chloroaniline	106-47-8	0.46	16
P026 1-(o-Chlorophenyl)thiourea. 1-(o-Chlorophenyl)thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P027 3-Chloropropionitrile. 3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P028 Benzyl chloride. Benzyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P029 Copper cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30
P030 Cyanides (soluble salts and comple Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	exes). 57-12-5 57-12-5	1.2 0.86	590 30

P031			
Cyanogen. Cyanogen	460-19-5	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P033			
Cyanogen chloride Cyanogen chloride	506-77-4	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
P034			
2-Cyclohexyl-4,6-dinitrophenol.2-Cyclohexyl-4,6-dinitrophenol	131-89-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P036 Dichlorophenylarsine. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
P037 Dieldrin. Dieldrin	60-57-1	0.017	0.13
P038			
Diethylarsine. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
P039 Disulfoton. Disulfoton	298-04-4	0.017	6.2
P040 O,O-Diethyl-O-pyrazinyl-phospho O,O-Diethyl-O-pyrazinyl- phosphorothioate	orothioate. 297-97-2	CARBN; or CMBST	CMBST
P041 Diethyl-p-nitrophenyl phosphate. Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or CMBST	CMBST

P042 Epinephrine. Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P043 Diisopropylfluorophosphate (DFP) Diisopropylfluorophosphate (DFP)). 55-91-4	CARBN; or CMBST	CMBST
P044 Dimethoate. Dimethoate	60-51-5	CARBN; or CMBST	CMBST
P045 Thiofanox. Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P046 α,α -Dimethylphenethylamine. α,α -Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P047 4,6-Dinitro-o-cresol. 4,6-Dinitro-o-cresol	543-52-1	0.28	160
P047 4,6-Dinitro-o-cresol salts. NA	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P048 2,4-Dinitrophenol. 2,4-Dinitrophenol	51-28-5	0.12	160

P049 Dithiobiuret. Dithiobiuret	541-53-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P050 Endosulfan. Endosulfan I Endosulfan II Endosulfan sulfate	939-98-8 33213-6-5 1031-07-8	0.023 0.029 0.029	0.066 0.13 0.13
P051 Endrin. Endrin aldehyde	72-20-8 7421-93-4	0.0028 0.025	0.13 0.13
P054 Aziridine. Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P056 Fluorine. Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR
P057 Fluoroacetamide. Fluoroacetamide	640-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P058 Fluoroacetic acid, sodium salt. Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P059 Heptachlor. Heptachlor Heptachlor epoxide	76-44-8 1024-57-3	0.0012 0.016	0.066 0.066	
P060 Isodrin. Isodrin	465-73-6	0.021	0.066	
P062 Hexaethyl tetraphosphate. Hexaethyl tetraphosphate	757-58-4	CARBN; or CMBST	CMBST	
P063 Hydrogen cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30	
P064 Isocyanic acid, ethyl ester. Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST	
P065 P065 (mercury fulminate) nonwas incinerator residues or are not resi	dues from RMERC			
Mercury	7439-97-6	NA	IMERC	
P065 P065 (mercury fulminate) nonwastewaters that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260 mg/kg total mercury. Mercury 7339-97-6 NA RMERC				
P065 P065 (mercury fulminate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury. Mercury 7439-97-6 NA 0.20 mg/ℓ TCLP				
P065				
P065 (mercury fulminate) nonwas	tewaters that are inc	cinerator residues and	contain less than 260	
mg/kg total mercury. Mercury	7439-97-6	NA	$0.025~\text{mg}/\ell~\text{TCLP}$	

P065 All P065 (mercury fulminate) wastewaters. Mercury 7439-97-6 0.15 NA					
P066 Methomyl. Methomyl	16752-77-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST		
P067 2-Methyl-aziridine. 2-Methyl-aziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST		
P068 Methyl hydrazine. Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED, or CMBST		
P069 2-Methyllactonitrile. 2-Methyllactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST		
P070 Aldicarb. Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST		
P071 Methyl parathion. Methyl parathion	298-00-0	0.014	4.6		

P072 1-Naphthyl-2-thiourea. 1-Naphthyl-2-thiourea	86-88-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P073 Nickel carbonyl. Nickel	7440-02-0	3.98	11 mg/ℓ TCLP
P074 Nickel cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷ Nickel	57-12-5 57-12-5 7440-02-0	1.2 0.86 3.98	590 30 11 mg/ℓ TCLP
P075 Nicotine and salts. Nicotine and salts	54-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P076 Nitric oxide. Nitric oxide	10102-43-9	ADGAS	ADGAS
P077 p-Nitroaniline. p-Nitroaniline	100-01-6	0.028	28
P078 Nitrogen dioxide. Nitrogen dioxide	10102-44-0	ADGAS	ADGAS
P081 Nitroglycerin. Nitroglycerin	55-63-0	CHOXD; CHRED; CARBN; BIODG or CMBST	CHOXD; CHRED; or CMBST
P082 N-Nitrosodimethylamine. N-Nitrosodimethylamine	62-75-9	0.40	2.3

P084 N-Nitrosomethylvinylamine N-Nitrosomethylvinylamine	4549-40-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P085 Octamethylpyrophosphoramide. Octamethylpyrophosphoramide	152-16-9	CARBN; or CMBST	CMBST
P087 Osmium tetroxide. Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM
P088 Endothall. Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P089 Parathion. Parathion	56-38-2	0.014	4.6
P092 P092 (phenyl mercuric acetate) no are not incinerator residues or are Mercury	, .		ercury content, that IMERC; or RMERC
P092 P092 (phenyl mercuric acetate) no residues from RMERC; and still of Mercury			
P092 P092 (phenyl mercuric acetate) no than 260 mg/kg total mercury. Mercury	onwastewaters that a	are residues from RME NA	ERC and contain less 0.20 mg/ℓ TCLP
P092 P092 (phenyl mercuric acetate) no	onwastewaters that	are incinerator residues	s and contain less

than 260 mg/kg total mercury. Mercury	7439-97-6	NA	$0.025~\text{mg}/\ell~\text{TCLP}$
P092 All P092 (phenyl mercuric acetate) Mercury) wastewaters. 7439-97-6	0.15	NA
P093 Phenylthiourea. Phenylthiourea	103-85-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P094 Phorate. Phorate	298-02-2	0.021	4.6
P095 Phosgene. Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P096 Phosphine. Phosphine	7803-51-2	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
P097 Famphur. Famphur	52-85-7	0.017	15
P098 Potassium cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30
P099 Potassium silver cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷ Silver	57-12-5 57-12-5 7440-22-4	1.2 0.86 0.43	590 30 0.14 mg/ℓ TCLP

P101 Ethyl cyanide (Propanenitrile). Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
P102 Propargyl alcohol. Propargyl alcohol	107-19-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P103 Selenourea. Selenium	7782-49-2	0.82	5.7 mg/ℓ TCLP
P104 Silver cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷ Silver	57-12-5 57-12-5 7440-22-4	1.2 0.86 0.43	590 30 0.14 mg/ℓ TCLP
P105 Sodium azide. Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P106 Sodium cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30
P108 Strychnine and salts. Strychnine and salts	57-24-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P109 Tetraethyldithiopyrophosphate. Tetraethyldithiopyrophosphate	3689-24-5	CARBN; or CMBST	CMBST

P110 Tetraethyl lead. Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
P111 Tetraethylpyrophosphate. Tetraethylpyrophosphate	107-49-3	CARBN; or CMBST	CMBST
P112 Tetranitromethane. Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
P113 Thallic oxide. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P114 Thallium selenite. Selenium	7782-49-2	0.82	5.7 mg/ℓ TCLP
P115 Thallium (I) sulfate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
P116 Thiosemicarbazide. Thiosemicarbazide	79-19-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P118 Trichloromethanethiol. Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

P119 Ammonium vanadate. Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P120 Vanadium pentoxide. Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P121 Zinc cyanide. Cyanides (Total) ⁷ Cyanides (Amenable) ⁷	57-12-5 57-12-5	1.2 0.86	590 30
P122 Zinc phosphide Zn ₃ P ₂ , when prese Zinc Phosphide	ent at concentrations 1314-84-7	greater than 10 percent CHOXD; CHRED; or CMBST	
P123 Toxaphene. Toxaphene	8001-35-2	0.0095	2.6
P127 Carbofuran. Carbofuran	1563-66-2	0.006	0.14
P128 Mexacarbate. Mexacarbate	315-18-4	0.056	1.4
P185 Tirpate. ¹⁰ Tirpate	26419-73-8	0.056	0.28
P188 Physostigimine salicylate. Physostigmine salicylate	57-64-7	0.056	1.4
P189 Carbosulfan. Carbosulfan	55285-14-8	0.028	1.4

P190 Metolcarb. Metolcarb	1129-41-5	0.056	1.4
P191 Dimetilan. ¹⁰ Dimetilan	644-64-4	0.056	1.4
P192 Isolan. ¹⁰ Isolan	119-38-0	0.056	1.4
P194 Oxamyl. Oxamyl	23135-22-0	0.056	0.28
P196 Manganese dimethyldithiocarbama Dithiocarbamates (total)	ates (total). NA	0.028	28
P197 Formparanate. ¹⁰ Formparanate	17702-57-7	0.056	1.4
P198 Formetanate hydrochloride. Formetanate hydrochloride	23422-53-9	0.056	1.4
P199 Methiocarb. Methiocarb	2032-65-7	0.056	1.4
P201 Promecarb. Promecarb	2631-37-0	0.056	1.4
P202 m-Cumenyl methylcarbamate. m-Cumenyl methylcarbamate	64-00-6	0.056	1.4
P203 Aldicarb sulfone. Aldicarb sulfone	1646-88-4	0.056	0.28

P204 Physostigmine. Physostigmine	57-47-6	0.056	1.4
P205 Ziram. Dithiocarbamates (total)	NA	0.028	28
U001 Acetaldehyde. Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U002 Acetone. Acetone	67-64-1	0.28	160
U003 Acetonitrile. Acetonitrile Acetonitrile; alternate ⁶ standard for nonwastewaters only	75-05-8 75-05-8	5.6 NA	CMBST 38
U004 Acetophenone. Acetophenone	98-86-2	0.010	9.7
U005 2-Acetylaminofluorene. 2-Acetylaminofluorene	53-96-3	0.059	140
U006 Acetyl chloride. Acetyl chloride	75-36-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U007 Acrylamide. Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U008 Acrylic acid. Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U009 Acrylonitrile. Acrylonitrile	107-13-1	0.24	84
U010 Mitomycin C. Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U011 Amitrole. Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U012 Aniline. Aniline	62-53-3	0.81	14
U014 Auramine. Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U015 Azaserine Azaserine	115-02-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U016 Benz(c)acridine.			
Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U017 Benzal chloride. Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U018 Benz(a)anthracene. Benz(a)anthracene	56-55-3	0.059	3.4
U019 Benzene. Benzene	71-43-2	0.14	10
U020 Benzenesulfonyl chloride. Benzenesulfonyl chloride	98-09-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U021 Benzidine. Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U022 Benzo(a)pyrene. Benzo(a)pyrene	50-32-8	0.061	3.4
U023 Benzotrichloride. Benzotrichloride	98-07-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST

U024 bis(2-Chloroethoxy)methane. bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
U025 bis(2-Chloroethyl)ether. bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
U026 Chlornaphazine. Chlornaphazine	494-03-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U027 bis(2-Chloroisopropyl)ether. bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
U028 bis(2-Ethylhexyl)phthalate. bis(2-Ethylhexyl)phthalate	117-81-7	0.28	28
U029 Methyl bromide (Bromomethane). Methyl bromide (Bromomethane)	74-83-9	0.11	15
U030 4-Bromophenyl phenyl ether. 4-Bromophenyl phenyl ether	101-55-3	0.055	15
U031 n-Butyl alcohol. n-Butyl alcohol	71-36-3	5.6	2.6
U032 Calcium chromate. Chromium (Total)	7440-47-3	2.77	$0.60~\text{mg}/\ell~\text{TCLP}$
U033 Carbon oxyfluoride. Carbon oxyfluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U034 Trichloroacetaldehyde (Chloral). Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U035 Chlorambucil. Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U036 Chlordane. Chlordane (α and χ isomers)	57-74-9	0.0033	0.26
U037 Chlorobenzene. Chlorobenzene	108-90-7	0.057	6.0
U038 Chlorobenzilate. Chlorobenzilate	510-15-6	0.10	CMBST
U039 p-Chloro-m-cresol. p-Chloro-m-cresol	59-50-7	0.018	14
U041 Epichlorohydrin (1-Chloro-2,3-epichlorohydrin (1-Chloro-2,3-epoxypropane)	oxypropane). 106-89-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U042 2-Chloroethyl vinyl ether. 2-Chloroethyl vinyl ether	110-75-8	0.062	CMBST
U043 Vinyl chloride. Vinyl chloride	75-01-4	0.27	6.0

U044 Chloroform. Chloroform	67-66-3	0.046	6.0
U045 Chloromethane (Methyl chloride). Chloromethane (Methyl chloride)	74-87-3	0.19	30
U046 Chloromethyl methyl ether. Chloromethyl methyl ether	107-30-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U047 2-Chloronaphthalene. 2-Chloronaphthalene	91-58-7	0.055	5.6
U048 2-Chlorophenol. 2-Chlorophenol	95-57-8	0.044	5.7
U049 4-Chloro-o-toluidine hydrochloride 4-Chloro-o-toluidine hydro-chloride	e. 3165-93-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U050 Chrysene. Chrysene	218-01-9	0.059	3.4
U051 Creosote. Naphthalene Pentachlorophenol Phenanthrene Pyrene Toluene Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	91-20-3 87-86-5 85-01-8 129-00-0 108-88-3 1330-20-7	0.059 0.089 0.059 0.067 0.080 0.32	5.6 7.4 5.6 8.2 10 30
Lead	7439-92-1	0.69	$0.75 \text{ mg/}\ell \text{ TCLP}$

U052 Cresols (Cresylic acid).			
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to	108-39-4	0.77	5.6
distinguish from p-cresol) p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
U053 Crotonaldehyde. Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U055 Cumene. Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U056 Cyclohexane. Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U057 Cyclohexanone. Cyclohexanone Cyclohexanone; alternate ⁶ standard for nonwastewaters only	108-94-1 108-94-1	0.36 NA	CMBST 0.75 mg/ℓ TCLP
U058 Cyclophosphamide. Cyclophosphamide	50-18-0	CARBN; or CMBST	CMBST

U059 Daunomycin. Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U060 DDD. o,p'-DDD p,p'-DDD	53-19-0 72-54-8	0.023 0.023	0.087 0.087
U061 DDT. o,p'-DDT p,p'-DDT o,p'-DDD p,p'-DDD o,p'-DDE p,p'-DDE	789-02-6 50-29-3 53-19-0 72-54-8 3424-82-6 72-55-9	0.0039 0.0039 0.023 0.023 0.031 0.031	0.087 0.087 0.087 0.087 0.087 0.087
U062 Diallate. Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U063 Dibenz(a,h)anthracene. Dibenz(a,h)anthracene	53-70-3	0.055	8.2
U064 Dibenz(a,i)pyrene. Dibenz(a,i)pyrene	189-55-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U066 1,2-Dibromo-3-chloropropane 1,2-Dibromo-3-chloropropane	96-12-8	0.11	15

U067 Ethylene dibromide (1,2-Dibromoe Ethylene dibromide (1,2- Dibromoethane)	ethane). 106-93-4	0.028	15
U068 Dibromomethane. Dibromomethane	74-95-3	0.11	15
U069 Di-n-butyl phthalate. Di-n-butyl phthalate	84-74-2	0.057	28
U070 o-Dichlorobenzene. o-Dichlorobenzene	95-50-1	0.088	6.0
U071 m-Dichlorobenzene. m-Dichlorobenzene	541-73-1	0.036	6.0
U072 p-Dichlorobenzene. p-Dichlorobenzene	106-46-7	0.090	6.0
U073 3,3'-Dichlorobenzidine. 3,3'-Dichlorobenzidine	91-94-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U074			
1,4-Dichloro-2-butene. cis-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
trans-1,4-Dichloro-2-butene	764-41-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U075			
Dichlorodifluoromethane. Dichlorodifluoromethane	75-71-8	0.23	7.2

U076 1,1-Dichloroethane. 1,1-Dichloroethane	75-34-3	0.059	6.0
U077 1,2-Dichloroethane. 1,2-Dichloroethane	107-06-2	0.21	6.0
U078 1,1-Dichloroethylene. 1,1-Dichloroethylene	75-35-4	0.025	6.0
U079 1,2-Dichloroethylene. trans-1,2-Dichloroethylene	156-60-5	0.054	30
U080 Methylene chloride. Methylene chloride	75-09-2	0.089	30
U081 2,4-Dichlorophenol. 2,4-Dichlorophenol	120-83-2	0.044	14
U082 2,6-Dichlorophenol. 2,6-Dichlorophenol	87-65-0	0.044	14
U083 1,2-Dichloropropane. 1,2-Dichloropropane	78-87-5	0.85	18
U084 1,3-Dichloropropylene. cis-1,3-Dichloropropylene trans-1,3-Dichloropropylene	10061-01-5 10061-02-6	0.036 0.036	18 18
U085 1,2:3,4-Diepoxybutane. 1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U086 N,N'-Diethylhydrazine. N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U087 O,O-Diethyl-S-methyldithiophos O,O-Diethyl-S-methyldithio- phosphate	phate. 3288-58-2	CARBN; or CMBST	CMBST
U088 Diethyl phthalate. Diethyl phthalate	84-66-2	0.20	28
U089 Diethyl stilbestrol. Diethyl stilbestrol	56-53-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U090 Dihydrosafrole. Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U091 3,3'-Dimethoxybenzidine. 3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U092 Dimethylamine. Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U093 p-Dimethylaminoazobenzene. p-Dimethylaminoazobenzene	60-11-7	0.13	CMBST

U094 7,12-Dimethylbenz(a)anthracene. 7,12-Dimethylbenz(a)- anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U095 3,3'-Dimethylbenzidine. 3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U096			
α , α -Dimethyl benzyl hydroperox α , α -Dimethyl benzyl hydroperoxide	ide. 80-15-9	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U097 Dimethylcarbamoyl chloride. Dimethylcarbamoyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or	CMBST
		CMBST	
U098 1,1-Dimethylhydrazine. 1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED;	CHOXD; CHRED;
		CARBN; BIODG; or CMBST	or CMBST
U099 1,2-Dimethylhydrazine. 1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG;	CHOXD; CHRED; or CMBST
		or CMBST	
U101 2,4-Dimethylphenol.			
2,4-Dimethylphenol	105-67-9	0.036	14

U102 Dimethyl phthalate. Dimethyl phthalate	131-11-3	0.047	28
U103 Dimethyl sulfate. Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U105 2,4-Dinitrotoluene. 2,4-Dinitrotoluene	121-14-2	0.32	140
U106 2,6-Dinitrotoluene. 2,6-Dinitrotoluene	606-20-2	0.55	28
U107 Di-n-octyl phthalate. Di-n-octyl phthalate	117-84-0	0.017	28
U108 1,4-Dioxane. 1,4-Dioxane	123-91-1	(WETOX or CHOXD) fb CARBN; or	CMBST
1,4-Dioxane; alternate ⁶ standard for nonwastewaters only	123-91-1	CMBST 12.0	170
U109 1,2-Diphenylhydrazine.			
1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
1,2-Diphenylhydrazine; alternate ⁶ standard for wastewaters only	122-66-7	0.087	NA
U110 Dipropylamine. Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U111 Di-n-propylnitrosamine. Di-n-propylnitrosamine	621-64-7	0.40	14
U112 Ethyl acetate. Ethyl acetate	141-78-6	0.34	33
U113 Ethyl acrylate. Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U114 Ethylanahiadithia aarhamia aaid sa	Ita and astars		
Ethylenebisdithiocarbamic acid sa Ethylenebisdithiocarbamic acid	111 71 6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U115			
Ethylene oxide Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or	CHOXD; or CMBST
Ethylene oxide; alternate ⁶ standard for wastewaters only	75-21-8	CMBST 0.12	NA
U116			
Ethylene thiourea. Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U117 Ethyl ether. Ethyl ether	60-29-7	0.12	160
U118 Ethyl methacrylate. Ethyl methacrylate	97-63-2	0.14	160

U119 Ethyl methane sulfonate. Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U120 Fluoranthene. Fluoranthene	206-44-0	0.068	3.4
U121 Trichloromonofluoromethane. Trichloromonofluoromethane	75-69-4	0.020	30
U122 Formaldehyde. Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U123 Formic acid. Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U124 Furan. Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U125 Furfural. Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U126 Glycidylaldehyde. Glycidylaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U127 Hexachlorobenzene. Hexachlorobenzene	118-74-1	0.055	10
U128 Hexachlorobutadiene. Hexachlorobutadiene	87-68-3	0.055	5.6
U129 Lindane. α-BHC β-BHC δ-BHC γ-BHC (Lindane)	319-84-6 319-85-7 319-86-8 58-89-9	0.00014 0.00014 0.023 0.0017	0.066 0.066 0.066
U130 Hexachlorocyclopentadiene. Hexachlorocyclopentadiene	77-47-4	0.057	2.4
U131 Hexachloroethane. Hexachloroethane	67-72-1	0.055	30
U132 Hexachlorophene. Hexachlorophene	70-30-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U133 Hydrazine. Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST

U134 Hydrogen fluoride. Fluoride (measured in wastewaters only)	16964-48-8 7664-39-3	35	ADGAS fb NEUTR; or NEUTR
U135 Hydrogen sulfide. Hydrogen sulfide	7783-06-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U136 Cacodylic acid. Arsenic	7440-38-2	1.4	5.0 mg/ℓ TCLP
U137 Indeno(1,2,3-c,d)pyrene. Indeno(1,2,3-c,d)pyrene. Indeno(1,2,3-c,d)pyrene Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
U138 Iodomethane. Iodomethane	74-88-4	0.19	65
U140 Isobutyl alcohol. Isobutyl alcohol	78-83-1	5.6	170
U141 Isosafrole. Isosafrole	120-58-1	0.081	2.6
U142 Kepone. Kepone	143-50-8	0.0011	0.13
U143 Lasiocarpine. Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U144 Lead acetate.				
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP	
U145 Lead phosphate. Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP	
U146 Lead subacetate. Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP	
U147 Maleic anhydride. Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST	
U148 Maleic hydrazide. Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST	
U149 Malononitrile. Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST	
U150 Melphalan. Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST	
U151 U151 (mercury) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury. Mercury 7439-97-6 NA RMERC				
U151				

U151 (mercury) nonwastewaters that contain less than 260 mg/kg total mercury and that are

residues from RMERC only. Mercury	7439-97-6	NA	0.20 mg/ℓ TCLP
U151 U151 (mercury) nonwastewaters thresidues from RMERC only.	hat contain less than	n 260 mg/kg total merc	eury and that are not
Mercury	7439-97-6	NA	$0.025 \text{ mg/}\ell \text{ TCLP}$
U151 All U151 (mercury) wastewater. Mercury	7439-97-6	0.15	NA
U151 Elemental Mercury Contaminated Mercury	with Radioactive N 7439-97-6	laterials. NA	AMLGM
U152			
Methacrylonitrile. Methacrylonitrile	126-98-7	0.24	84
U153 Methanethiol.			
Methanethiol	74-93-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U154			
Methanol. Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
Methanol; alternate ⁶ set of standards for both wastewaters and nonwastewaters	67-56-1	5.6	0.75 mg/ℓ TCLP
U155 Methapyrilene. Methapyrilene	91-80-5	0.081	1.5

U156 Methyl chlorocarbonate. Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U157 3-Methylcholanthrene. 3-Methylcholanthrene	56-49-5	0.0055	15
U158 4,4'-Methylene bis(2-chloroaniline 4,4'-Methylene bis(2-chloro- aniline)	e). 101-14-4	0.50	30
U159 Methyl ethyl ketone. Methyl ethyl ketone	78-93-3	0.28	36
U160 Methyl ethyl ketone peroxide. Methyl ethyl ketone peroxide	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U161 Methyl isobutyl ketone. Methyl isobutyl ketone	108-10-1	0.14	33
U162 Methyl methacrylate. Methyl methacrylate	80-62-6	0.14	160
U163 N-Methyl-N'-nitro-N-nitrosoguani N-Methyl-N'-nitro-N-nitroso- guanidine	dine. 70-25-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U164 Methylthiouracil. Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U165 Naphthalene. Naphthalene	91-20-3	0.059	5.6
U166 1,4-Naphthoquinone. 1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U167 1-Naphthylamine 1-Naphthylamine	134-32-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U168 2-Naphthylamine. 2-Naphthylamine	91-59-8	0.52	CMBST
U169 Nitrobenzene. Nitrobenzene	98-95-3	0.068	14
U170 p-Nitrophenol. p-Nitrophenol	100-02-7	0.12	29
U171 2-Nitropropane. 2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U172 N-Nitrosodi-n-butylamine. N-Nitrosodi-n-butylamine	924-16-3	0.40	17
U173 N-Nitrosodiethanolamine. N-Nitrosodiethanolamine	1116-54-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U174 N-Nitrosodiethylamine. N-Nitrosodiethylamine	55-18-5	0.40	28
U176 N-Nitroso-N-ethylurea. N-Nitroso-N-ethylurea	759-73-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U177 N-Nitroso-N-methylurea. N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U178 N-Nitroso-N-methylurethane. N-Nitroso-N-methylurethane	615-53-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U179 N-Nitrosopiperidine. N-Nitrosopiperidine	100-75-4	0.013	35
U180 N-Nitrosopyrrolidine. N-Nitrosopyrrolidine	930-55-2	0.013	35

U181 5-Nitro-o-toluidine. 5-Nitro-o-toluidine	99-55-8	0.32	28
U182 Paraldehyde. Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U183 Pentachlorobenzene. Pentachlorobenzene	608-93-5	0.055	10
U184 Pentachloroethane. Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or	CMBST
Pentachloroethane; alternate ⁶ standards for both wastewaters and nonwastewaters	76-01-7	CMBST 0.055	6.0
U185 Pentachloronitrobenzene. Pentachloronitrobenzene	82-68-8	0.055	4.8
U186 1,3-Pentadiene. 1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U187 Phenacetin. Phenacetin	62-44-2	0.081	16
U188 Phenol. Phenol	108-95-2	0.039	6.2

U189 Phosphorus sulfide. Phosphorus sulfide	1314-80-3	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U190 Phthalic anhydride. Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
U191 2-Picoline. 2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U192 Pronamide. Pronamide	23950-58-5	0.093	1.5
U193 1,3-Propane sultone. 1,3-Propane sultone	1120-71-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U194 n-Propylamine. n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U196 Pyridine. Pyridine	110-86-1	0.014	16

U197 p-Benzoquinone.			
p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U200 Reserpine. Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U201 Resorcinol Resorcinol.	108-46-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U202 Saccharin and salts. Saccharin	81-07-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U203 Safrole. Safrole	94-59-7	0.081	22
U204 Selenium dioxide. Selenium	7782-49-2	0.82	5.7 mg/ℓ TCLP
U205 Selenium sulfide. Selenium	7782-49-2	0.82	5.7 mg/ℓ TCLP
U206 Streptozotocin. Streptozotocin	18883-66-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U207 1,2,4,5-Tetrachlorobenzene. 1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
U208 1,1,1,2-Tetrachloroethane. 1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
U209 1,1,2,2-Tetrachloroethane. 1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
U210 Tetrachloroethylene. Tetrachloroethylene	127-18-4	0.056	6.0
U211 Carbon tetrachloride. Carbon tetrachloride	56-23-5	0.057	6.0
U213 Tetrahydrofuran. Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U214 Thallium (I) acetate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U215 Thallium (I) carbonate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U216 Thallium (I) chloride. Thallium (measured in	7440-28-0	1.4	RTHRM; or

U217 Thallium (I) nitrate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U218 Thioacetamide. Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U219 Thiourea. Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U220 Toluene. Toluene	108-88-3	0.080	10
U221 Toluenediamine. Toluenediamine	25376-45-8	CARBN; or CMBST	CMBST
U222 o-Toluidine hydrochloride. o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U223 Toluene diisocyanate. Toluene diisocyanate	26471-62-5	CARBN; or CMBST	CMBST
U225 Bromoform (Tribromomethane). Bromoform (Tribromomethane)	75-25-2	0.63	15

U226 1,1,1-Trichloroethane. 1,1,1-Trichloroethane	71-55-6	0.054	6.0
U227 1,1,2-Trichloroethane. 1,1,2-Trichloroethane	79-00-5	0.054	6.0
U228 Trichloroethylene. Trichloroethylene	79-01-6	0.054	6.0
U234 1,3,5-Trinitrobenzene. 1,3,5-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U235 tris-(2,3-Dibromopropyl)-phospha tris-(2,3-Dibromopropyl)- phosphate	te. 126-72-7	0.11	0.10
U236 Trypan Blue. Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U237 Uracil mustard. Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U238 Urethane (Ethyl carbamate). Urethane (Ethyl carbamate)	51-79-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U239 Xylenes. Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
U240			
2,4-D (2,4-Dichlorophenoxyacetic 2,4-D (2,4-Dichloro-	acid). 94-75-7	0.72	10
phenoxyacetic acid)	NIA	(WETOV - "	CMDCT
2,4-D (2,4-Dichloro- phenoxyacetic acid) salts and esters	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U243			
Hexachloropropylene. Hexachloropropylene	1888-71-7	0.035	30
U244			
Thiram. Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U246			
Cyanogen bromide. Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247			
Methoxychlor Methoxychlor	72-43-5	0.25	0.18
U248			
Warfarin, & salts, when present at Warfarin	concentrations of 0 81-81-2	0.3 percent or less. (WETOX or CHOXD) fb CARBN; or CMBST	CMBST

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Zinc phosphide, Zn ₃ P ₂ , when prese Zinc Phosphide	nt at concentrations 1314-84-7	of 10 percent or less. CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U271 Benomyl. Benomyl	17804-35-2	0.056	1.4
U278 Bendiocarb. Bendiocarb	22781-23-3	0.056	1.4
U279 Carbaryl. Carbaryl	63-25-2	0.006	0.14
U280 Barban. Barban	101-27-9	0.056	1.4
U328 o-Toluidine. o-Toluidine	95-53-4	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U353 p-Toluidine. p-Toluidine	106-49-0	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST

U359 2-Ethoxyethanol. 2-Ethoxyethanol	110-80-5	CMBST; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST
U364 Bendiocarb phenol. ¹⁰ Bendiocarb phenol	22961-82-6	0.056	1.4
U367 Carbofuran phenol. Carbofuran phenol	1563-38-8	0.056	1.4
U372 Carbendazim. Carbendazim	10605-21-7	0.056	1.4
U373 Propham. Propham	122-42-9	0.056	1.4
U387 Prosulfocarb. Prosulfocarb	52888-80-9	0.042	1.4
U389 Triallate. Triallate	2303-17-5	0.042	1.4
U394 A2213. ¹⁰ A2213	30558-43-1	0.042	1.4
U395 Diethylene glycol, dicarbamate. ¹⁰ Diethylene glycol, dicarbamate	5952-26-1	0.056	1.4
U404 Triethylamine. Triethylamine	101-44-8	0.081	1.5

U409 Thiophanate-methyl. Thiophanate-methyl	23564-05-8	0.056	1.4
U410 Thiodicarb. Thiodicarb	59669-26-0	0.019	1.4
U411 Propoxur. Propoxur	114-26-1	0.056	1.4

Notes:

- The waste descriptions provided in this table do not replace waste descriptions in 35 Ill. Adm. Code 721. Descriptions of Treatment or Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.
- 2 CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.
- Concentration standards for wastewaters are expressed in mg/ℓ and are based on analysis of composite samples.
- All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in Table C of this Part, "Technology Codes and Descriptions of Technology-Based Standards." "fb" inserted between waste codes denotes "followed by," so that the first-listed treatment is followed by the second-listed treatment. A semicolon (;) separates alternative treatment schemes.
- Except for Metals (EP or TCLP) and Cyanides (Total and Amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or based on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.
- Where an alternate treatment standard or set of alternate standards has been indicated, a facility may comply with this alternate standard, but only for the Treatment or Regulatory Subcategory or physical form (i.e., wastewater or nonwastewater) specified for that alternate standard.
- 7 Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed

using Method 9010C or 9012B, in "Test Methods for Evaluating Solid Waste, Physical or Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.

- These wastes, when rendered non-hazardous and then subsequently managed in CWA or CWA-equivalent systems, are not subject to treatment standards. (See Section 728.101(c)(3) and (c)(4).)
- These wastes, when rendered non-hazardous and then subsequently injected in a Class I SDWA well, are not subject to treatment standards. (See 35 Ill. Adm. Code 738.101(d).)
- The treatment standard for this waste may be satisfied by either meeting the constituent concentrations in the table in this Section or by treating the waste by the specified technologies: combustion, as defined by the technology code CMBST at Table C, for nonwastewaters; and biodegradation, as defined by the technology code BIODG; carbon adsorption, as defined by the technology code CARBN; chemical oxidation, as defined by the technology code CHOXD; or combustion, as defined as technology code CMBST, at Table C, for wastewaters.
- For these wastes, the definition of CMBST is limited to any of the following that have obtained a determination of equivalent treatment under Section 728.142(b): (1) combustion units operating under 35 Ill. Adm. Code 726, (2) combustion units permitted under Subpart O of 35 Ill. Adm. Code 724, or (3) combustion units operating under Subpart O of 35 Ill. Adm. Code 725.
- Disposal of USEPA hazardous waste number K175 waste that has complied with all applicable Section 728.140 treatment standards must also be macroencapsulated in accordance with Table F of this Part, unless the waste is placed in either of the following types of facilities:
 - a) A RCRA Subtitle C monofill containing only K175 wastes that meet all applicable 40 CFR 268.40 treatment standards; or
 - b) A dedicated RCRA Subtitle C landfill cell in which all other wastes being codisposed are at pH≤6.0.

BOARD NOTE: Derived from table to 40 CFR 268.40-(2005) (2007).	
NA means not applicable.	
(Source: Amended at 32 Ill. Reg, effective)

Section 728. Table U Universal Treatment Standards (UTS)

			Nonwastewater
			Standard
		Wastewater	Concentration ³ (in
		Standard	mg/kg ³ unless
Regulated Constituent-	1	Concentration ² (in	noted as "mg/ ℓ
Common Name	CAS ¹ No.	mg/ℓ^2)	TCLP")
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	38
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylamide	79-06-1	19	23
Acrylonitrile	107-13-1	0.24	84
Aldicarb sulfone ⁶	1646-88-4	0.056	0.28
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
o-Anisidine (2-methoxy-	90-04-0	0.010	0.66
aniline)			
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
α-ВНС	319-84-6	0.00014	0.066
β-ВНС	319-85-7	0.00014	0.066
δ-ВНС	319-86-8	0.023	0.066
ү-ВНС	58-89-9	0.0017	0.066
Barban ⁶	101-27-9	0.056	1.4
Bendiocarb ⁶	22781-23-3	0.056	1.4
Benomyl ⁶	17804-35-2	0.056	1.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzene	71-43-2	0.14	10
Benzo(b)fluoranthene	205-99-2	0.11	6.8
(difficult to distinguish from			
benzo(k)fluoranthene)			
Benzo(k)fluoranthene	207-08-9	0.11	6.8
(difficult to distinguish from			
benzo(b)fluoranthene)			
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-	74-83-9	0.11	15
methane)			
,			

4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butylate ⁶	2008-41-5	0.042	1.4
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitrophenol	88-85-7	0.066	2.5
(Dinoseb)	00 03 7	0.000	2.3
Carbaryl ⁶	63-25-2	0.006	0.14
Carbenzadim ⁶	10605-21-7	0.056	1.4
Carbofuran ⁶	1563-66-2	0.006	0.14
Carbofuran phenol ⁶	1563-38-8	0.056	1.4
Carbon disulfide	75-15-0	3.8	4.8 mg/ℓ TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
Carbosulfan ⁶	55285-14-8	0.028	1.4
Chlordane (α and γ isomers)	57-74-9	0.0033	0.26
p-Chloroaniline	106-47-8	0.46	16
Chlorobenzene	108-90-7	0.057	6.0
Chlorobenzilate	510-15-6	0.10	NA
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
p-Chloro-m-cresol	59-50-7	0.018	14
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloroethoxy)methane	111-91-1	0.036	7.2
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloroform	67-66-3	0.046	6.0
bis(2-Chloroisopropyl)ether	39638-32-9	0.055	7.2
Chloromethane (Methyl	74-87-3	0.19	30
chloride)			
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
p-Cresidine	120-71-8	0.010	0.66
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to	108-39-4	0.77	5.6
distinguish from p-cresol)			
p-Cresol (difficult to	106-44-5	0.77	5.6
distinguish from m-cresol)			
m-Cumenyl methyl-	64-00-6	0.056	1.4
carbamate ⁶			
Cyclohexanone	108-94-1	0.36	$0.75 \text{ mg/}\ell \text{ TCLP}$
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087

nn' DDT	50-29-3	0.0039	0.087
p,p'-DDT Dibenz(a,h)anthracene	53-70-3	0.0039	8.2
	192-65-4	0.053	NA
Dibenz(a,e)pyrene 1,2-Dibromo-3-chloro-	96-12-8	0.11	15
	90-12-0	0.11	13
propane 1.2 Dibramaethana/Ethylana	106-93-4	0.028	15
1,2-Dibromoethane/Ethylene dibromide	100-93-4	0.028	13
	74.05.2	0.11	1.5
Dibromomethane m-Dichlorobenzene	74-95-3	0.11	15
	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	87-65-0	0.044	14
2,4-Dichlorophenoxyacetic	94-75-7	0.72	10
acid/2,4-D			
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
Dieldrin	60-57-1	0.017	0.13
Diethyl phthalate	84-66-2	0.20	28
p-Dimethylaminoazobenzene	60-11-7	0.13	NA
2,4-Dimethylaniline (2,4-	95-68-1	0.010	0.66
xylidine)			
2,4-Dimethyl phenol	105-67-9	0.036	14
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
1,4-Dinitrobenzene	100-25-4	0.32	2.3
4,6-Dinitro-o-cresol	534-52-1	0.28	160
2,4-Dinitrophenol	51-28-5	0.12	160
2,4-Dinitrotoluene	121-14-2	0.32	140
2,6-Dinitrotoluene	606-20-2	0.55	28
Di-n-octyl phthalate	117-84-0	0.017	28
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	12.0	170
Diphenylamine (difficult to	122-39-4	0.92	13
distinguish from			
diphenylnitrosamine)			
Diphenylnitrosamine	86-30-6	0.92	13
(difficult to distinguish from			
diphenylamine)			
1,2-Diphenylhydrazine	122-66-7	0.087	NA
1,2 Dipilonymydiazmo	122 00 /	0.007	1 1/1 1

Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total) ⁶	137-30-4	0.028	28
Endosulfan I	959-98-8	0.023	0.066
Endosulfan II	33213-65-9	0.029	0.13
Endosulfan sulfate	1031-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
EPTC ⁶	759-94-4	0.042	1.4
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl cyanide	107-12-0	0.24	360
(Propanenitrile)			
Ethylene oxide	75-21-8	0.12	NA
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Formetanate hydrochloride ⁶	23422-53-9	0.056	1.4
Heptachlor	76-44-8	0.0012	0.066
1,2,3,4,6,7,8-Heptachloro-	35822-46-9	0.00012	0.000
dibenzo-p-dioxin	33022-40-9	0.000033	0.0023
(1,2,3,4,6,7,8-HpCDD)			
• • • • • • • • • • • • • • • • • • •	67562-39-4	0.000035	0.0025
1,2,3,4,6,7,8-Heptachloro-	0/302-39-4	0.000033	0.0023
dibenzofuran (1,2,3,4,6,7,8-			
HpCDF)	55(72.00.7	0.000025	0.0025
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035	0.0025
dibenzofuran (1,2,3,4,7,8,9-			
HpCDF)	1024 57 2	0.016	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-	NA	0.000063	0.001
dibenzo-p-dioxins)	***	0.00006	0.004
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)			
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-0	0.0011	0.13

Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg/ℓ TCLP
Methapyrilene	91-80-5	0.081	1.5
Methiocarb ⁶	2032-65-7	0.056	1.4
Methomyl ⁶	16752-77-5	0.028	0.14
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloro-	101-14-4	0.50	30
aniline)			
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Metolcarb ⁶	1129-41-5	0.056	1.4
Mexacarbate ⁶	315-18-4	0.056	1.4
Molinate ⁶	2212-67-1	0.042	1.4
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
o-Nitroaniline	88-74-4	0.27	14
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
o-Nitrophenol	88-75-5	0.028	13
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	2.3
N-Nitroso-di-n-butylamine	924-16-3	0.40	17
N-Nitrosomethylethylamine	10595-95-6	0.40	2.3
N-Nitrosomorpholine	59-89-2	0.40	2.3
N-Nitrosopiperidine	100-75-4	0.013	35
N-Nitrosopyrrolidine	930-55-2	0.013	35
1,2,3,4,6,7,8,9-Octachloro-	3268-87-9	0.000063	0.005
dibenzo-p-dioxin			
(1,2,3,4,6,7,8,9-OCDD)			
1,2,3,4,6,7,8,9-Octachloro-	39001-02-0	0.000063	0.005
dibenzofuran (1,2,3,4,6,7,8,9-			
OCDF)			
Oxamyl ⁶	23135-22-0	0.056	0.28
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB	1336-36-3	0.10	10
isomers, or all Aroclors) ⁸			
Pebulate ⁶	1114-71-2	0.042	1.4
Pentachlorobenzene	608-93-5	0.055	10

PeCDDs (All Pentachloro- dibenzo-p-dioxins)	36088-22-9	0.000063	0.001
PeCDFs (All Pentachloro-	30402-15-4	0.000035	0.001
dibenzofurans)	30402-13-4	0.000033	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
	87-86-5	0.089	7.4
Pentachlorophenol Phenacetin	62-44-2	0.089	16
Phenanthrene			
Phenol	85-01-8 108-95-2	0.059 0.039	5.6 6.2
1,3-Phenylenediamine	108-45-2	0.010	0.66
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
Physostigmine ⁶	57-47-6	0.056	1.4
Physostigmine salicylate ⁶	57-64-7	0.056	1.4
Promecarb ⁶	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham ⁶	122-42-9	0.056	1.4
Propoxur ⁶	114-26-1	0.056	1.4
Prosulfocarb ⁶	52888-80-9	0.042	1.4
Pyrene	129-00-0	0.067	8.2
Pyridine	110-86-1	0.014	16
Safrole	94-59-7	0.081	22
Silvex (2,4,5-TP)	93-72-1	0.72	7.9
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Thiodicarb ⁶	59669-26-0	0.019	1.4
Thiophanate-methyl ⁶	23564-05-8	0.056	1.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate ⁶	2303-17-5	0.042	1.4
Tribromomethane	75-25-2	0.63	15
(Bromoform)	70 20 2	0.03	10
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-00-5	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
1 1101101011011011011101011110111111111	13-03-4	0.020	30

2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic	93-76-5	0.72	7.9
acid/2,4,5-T			
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-	76-13-1	0.057	30
trifluoroethane			
Triethylamine ⁶	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl)	126-72-7	0.11	0.10
phosphate	120 /2 /	V.11	0.10
Vernolate ⁶	1929-77-7	0.042	1.4
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum	1330-20-7	0.32	30
of o-, m-, and p-xylene	1550 20 7	0.52	50
concentrations)			
Antimony	7440-36-0	1.9	1.15 mg/ℓ TCLP
Arsenic	7440-38-2	1.4	$5.0 \text{ mg/}\ell \text{ TCLP}$
Barium	7440-39-3	1.2	21 mg/ ℓ TCLP
Beryllium	7440-41-7	0.82	1.22 mg/ℓ TCLP
Cadmium	7440-43-9	0.69	$0.11 \text{ mg/}\ell \text{ TCLP}$
Chromium (Total)	7440-47-3	2.77	$0.60 \text{ mg/}\ell \text{ TCLP}$
Cyanides (Total) ⁴	57-12-5	1.2	590
Cyanides (Amenable) ⁴	57-12-5 57-12-5	0.86	30
Fluoride ⁵	16984-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg/ℓ TCLP
Mercury-Nonwastewater	7439-97-6	NA	$0.75 \text{ mg/}\ell \text{ TCLP}$
from Retort	1437-71-0	IVA	0.20 mg/t TCLI
Mercury-All Others	7439-97-6	0.15	0.025 mg/ℓ TCLP
Nickel	7440-02-0	3.98	11 mg/ ℓ TCLP
Selenium ⁷	7782-49-2	0.82	5.7 mg/ ℓ TCLP
Silver	7440-22-4	0.43	0.14 mg/ℓ TCLP
Sulfide	18496-25-8	14	NA
Thallium			
Vanadium ⁵	7440-28-0	1.4	0.20 mg/ ℓ TCLP
Zinc ⁵	7440-62-2	4.3	1.6 mg/ ℓ TCLP
Zinc	7440-66-6	2.61	4.3 mg/ℓ TCLP

CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.

Concentration standards for wastewaters are expressed in mg/ ℓ are based on analysis of composite samples.

Except for metals (EP or TCLP) and cyanides (total and amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of Subpart O

of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 or on combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in Section 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

- Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010C or 9012B, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), with a sample size of 10 grams and a distillation time of one hour and 15 minutes.
- These constituents are not "underlying hazardous constituents" in characteristic wastes, according to the definition at Section 728.102(i).
- This footnote corresponds with footnote 6 to the table to 40 CFR 268.48(a), which has already expired by its own terms. This statement maintains structural consistency with the corresponding federal regulations.
- This constituent is not an underlying hazardous constituent, as defined at Section 728.102(i), because its UTS level is greater than its TC level. Thus, a treated selenium waste would always be characteristically hazardos unless it is treated to below its characteristic level.
- This standard is temporarily deferred for soil exhibiting a hazardous characteristic due to USEPA hazardous waste numbers D004 through D011 only.

Note: NA means not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.48(a) (2005) (2007).

(Source: Amended at 32 Ill. Reg. _____, effective _____

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

PART 739 STANDARDS FOR THE MANAGEMENT OF USED OIL

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

SOURCE: Adopted in R93-4 at 17 Ill. Reg. 20954, effective Nov. 22, 1993; amended in R93-16 at 18 Ill. Reg. 6931, effective April 26, 1994; amended in R94-17 at 18 Ill. Reg. 17616, effective Nov. 23, 1994; amended in R95-6 at 19 Ill. Reg. 10036, effective June 27, 1995; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 767, effective December 16, 1997; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2274, effective January 19, 1999; amended in R04-16 at 28 Ill. Reg. 10706, effective July 19, 2004; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 4094, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 1413, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. _______, effective

SUBPART B: APPLICABILITY

Section 739.110 Applicability

This Section identifies those materials that are subject to regulation as used oil under this Part.

This Section also identifies some materials that are not subject to regulation as used oil under this Part, and indicates whether these materials may be subject to regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, and 720 through 728.

- a) Used oil. Used oil is presumed to be recycled, unless a used oil handler disposes of used oil or sends used oil for disposal. Except as provided in Section 739.111, the regulations of this Part apply to used oil and to materials identified in this Section as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721.
- b) Mixtures of used oil and hazardous waste.
 - 1) Listed hazardous waste.
 - A) A mixture of used oil and hazardous waste that is listed in Subpart D of 35 Ill. Adm. Code 721 is subject to regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, and 720 through 728, rather than as used oil under this Part.
 - B) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. An owner or operator 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 Appendix H of 35 Ill. Adm. Code 721).
 - i) This rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils or fluids. This presumption does apply to metalworking oils or fluids if such oils or fluids are recycled in any other manner, or disposed.
 - ii) This rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. This rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.
 - 2) Characteristic hazardous waste. A mixture of used oil and hazardous

waste that <u>solely</u> exhibits <u>a one or more of the</u> hazardous waste <u>characteristic characteristics</u> identified in Subpart C of 35 Ill. Adm. Code 721 and a mixture of used oil and hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721 is subject to the following:

- A) Except as provided in subsection (b)(2)(C) of this Section, regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, and 720 through 728 rather than as used oil under this Part, if the resultant mixture exhibits any characteristics of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721; or
- B) Except as provided in subsection (b)(2)(C) of this Section, regulation as used oil under this Part, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under Subpart C of 35 Ill. Adm. Code 721.
- C) Regulation as used oil under this Part, if the mixture is of used oil and a waste that is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability under 35 Ill. Adm. Code 721.121.
- 3) Conditionally exempt small quantity generator hazardous waste. A mixture of used oil and conditionally exempt small quantity generator hazardous waste regulated under 35 Ill. Adm. Code 721.105 is subject to regulation as used oil under this Part.
- c) Materials containing or otherwise contaminated with used oil.
 - 1) Except as provided in subsection (c)(2) of this Section, the following is true of a material containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible so that no visible signs of free-flowing oil remain in or on the material:
 - A) The material is not used oil, so it is not subject to this Part, and
 - B) If applicable, the material is subject to the hazardous waste regulations of 35 Ill. Adm. Code 702, 703, and 720 through 728.
 - 2) A material containing or otherwise contaminated with used oil that is burned for energy recovery is subject to regulation as used oil under this Part.

- 3) Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under this Part.
- d) Mixtures of used oil with products.
 - 1) Except as provided in subsection (d)(2) of this Section, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this Part.
 - 2) Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to this Part once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of Subpart C of this Part.
- e) Materials derived from used oil.
 - The following is true of materials that are reclaimed from used oil, which are used beneficially, and which are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants):
 - A) The materials are not used oil and thus are not subject to this Part, and
 - B) The materials are not solid wastes and are thus not subject to the hazardous waste regulations of 35 Ill. Adm. Code 702, 703, and 720 through 728, as provided in 35 Ill. Adm. Code 721.103(e)(1).
 - 2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this Part.
 - 3) Except as provided in subsection (e)(4) of this Section, the following is true of materials derived from used oil that are disposed of or used in a manner constituting disposal:
 - A) The materials are not used oil and thus are not subject to this Part, and
 - B) The materials are solid wastes and thus are subject to the hazardous waste regulations of 35 Ill. Adm. Code 702, 703, and 720 through 728 if the materials are listed or identified as hazardous waste.
 - 4) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to this Part.

- Wastewater. Wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the federal Clean Water Act (including wastewaters at facilities that have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil are not subject to the requirements of this Part. For purposes of this subsection, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.
- g) Used oil introduced into crude oil pipelines or a petroleum refining facility.
 - 1) Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of this Part. The used oil is subject to the requirements of this Part prior to the mixing of used oil with crude oil or natural gas liquids.
 - 2) Mixtures of used oil and crude oil or natural gas liquids containing less than one percent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of this Part.
 - 3) Used oil that is inserted into the petroleum refining process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of this Part, provided that the used oil contains less than one percent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining process, the used oil is subject to the requirements of this Part.
 - 4) Except as provided in subsection (g)(5) of this Section, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of this Part only if the used oil meets the specification of Section 739.111. Prior to insertion into the petroleum refining facility process, the used oil is subject to the requirements of this Part.
 - Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of this Part. This exemption does not extend to used oil that is intentionally introduced into a hydrocarbon

- recovery system (e.g., by pouring collected used oil into the wastewater treatment system).
- 6) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of this Part.
- h) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to this Part until it is transported ashore.
- Used oil containing PCBs. Used oil containing PCBs, as defined at 40 CFR 761.3 (Definitions), incorporated by reference at 35 Ill. Adm. Code 720.111(b), at any concentration less than 50 ppm is subject to the requirements of this Part unless, because of dilution, it is regulated under federal 40 CFR 761 as a used oil containing PCBs at 50 ppm or greater. PCB-containing used oil subject to the requirements of this Part may also be subject to the prohibitions and requirements of 40 CFR 761, including 40 CFR 761.20(d) and (e). Used oil containing PCBs at concentrations of 50 ppm or greater is not subject to the requirements of this Part, but is subject to regulation under federal 40 CFR 761. No person may avoid these provisions by diluting used oil containing PCBs, unless otherwise specifically provided for in this Part or federal 40 CFR 761.

(Source:	Amended at 32 Ill. Reg.	, effective)

Section 739.111 Used Oil Specifications

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 Part unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specification shown in the following table. Once used oil that is to be burned for energy recovery has been shown not to exceed any specification allowable level and the person making that showing complies with Sections 739.172, 739.173, and 739.174(b), the used oil is no longer subject to this Part.

Used Oil Specification Allowable Levels When Burned for Energy Recovery¹

Constituent/property	Allowable level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 °F minimum
Total halogens	4,000 ppm maximum ²

FOOTNOTE: ¹ The specification does allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see Section 739.110(b)).

FOOTNOTE: ² Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under Section 739.110(b)(1). Such used oil is subject to Subpart H of 35 Ill. Adm. Code 726, rather than this Part, when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

NOTE: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).

(Source:	Amended at 32 Ill. Reg.	, effective)
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SUBPART E: STANDARDS FOR USED OIL TRANSPORTER AND TRANSFER FACILITIES

Section 739.143 Used Oil Transportation

- a) Deliveries. A used oil transporter must deliver all used oil received to one of the following:
 - 1) Another used oil transporter, provided that the transporter has obtained a USEPA identification number and an Illinois special waste identification number;
 - 2) A used oil processing facility that has obtained a USEPA identification number and an Illinois special waste identification number;
 - 3) An off-specification used oil burner facility that has obtained a USEPA identification number and an Illinois special waste identification number; or
 - 4) An on-specification used oil burner facility.
- USDOT requirements. A used oil transporter must comply with all applicable USDOT requirements in 49 CFR 171 through 180. A person transporting used oil that meets the definition of a hazardous material in 49 CFR 171.8 (Definitions and Abbreviations), incorporated by reference in 35 Ill. Adm. Code 720.111(b), must comply with all applicable USDOT Hazardous Materials Regulations in 49 CFR 171 (General Information, Regulations, and Definitions), 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), 173 (Shippers--General Requirements for Shipments and Packages), 174 (Carriage by Rail), 175 (Carriage by Aircraft), 176 (Carriage by Vessel), 177 (Carriage by Public Highway), 178 (Specifications for Packagings), 179 (Specifications for Tank Cars), and 180 (Continuing Qualification and Maintenance of Packagings),

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

- c) Used oil discharges.
 - 1) In the event of a discharge of used oil during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area).
 - If a discharge of used oil occurs during transportation and an official (State or local government or a federal agency) acting within the scope of official responsibilities determines that immediate removal of the used oil is necessary to protect human health or the environment, that official may authorize the removal of the used oil by a transporter that does not have a USEPA identification number and an Illinois special waste identification number.
 - 3) An air, rail, highway, or water transporter that has discharged used oil must do the following:
 - A) Give notice, if required by federal 49 CFR 171.15 (Immediate Notice of Certain Hazardous Materials Incidents), incorporated by reference in 35 III. Adm. Code 720.111(b), to the National Response Center (800-424-8802 or 202-426-2675); and
 - B) Report in writing as required by federal 49 CFR 171.16 (Detailed Hazardous Materials Incident Reports), incorporated by reference in 35 Ill. Adm. Code 720.111(b), to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, DC 20590.
 - 4) A water transporter that has discharged used oil must give notice as required by federal 33 CFR 153.203 (Procedure for the Notice of Discharge), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
 - 5) A transporter must clean up any used oil <u>discharged discharge</u> that occurs during transportation or take such action as may be required or approved by federal, state, or local officials so that the used oil discharge no longer presents a hazard to human health or the environment.

(Source: Amended at	32 Ill. Reg, effective)
Section 739.144	Rebuttable Presumption for Used Oil	

a) To ensure that used oil is not a hazardous waste under the rebuttable presumption of Section 739.110(b)(1)(ii), the used oil transporter must determine whether the total halogen content of used oil being transporter transported or stored at a transfer

facility is above or below 1,000 ppm.

- b) The transporter must make this determination by the following means:
 - 1) Testing the used oil; or
 - 2) Applying knowledge of the halogen content of the used oil in light of the materials or processes used.
- c) If the used oil contains greater than or equal to 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. The owner or operator may rebut the presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of 35 Ill. Adm. Code 721).
 - The rebuttable presumption does not apply to metalworking oils and fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils and fluids. The presumption does apply to metalworking oils and fluids if such oils and fluids are recycled in any other manner, or disposed.
 - The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units if the CFC CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.
- d) Record retention. Records of analyses conducted or information used to comply with subsections (a), (b), and (c) of this Section must be maintained by the transporter for at least three years.

(Source: Amended a	t 32 Ill. Reg	, effective)
Section 739.145	Used Oil Stor	rage at Transfer Facilities	

A used oil transporter is subject to all applicable Spill Prevention, Control and Countermeasures (40 CFR 112) in addition to the requirements of this Subpart E. A used oil transporter is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart.

a) Applicability. This Section applies to used oil transfer facilities. Used oil transfer facilities are transportation-related facilities including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than 24

hours during the normal course of transportation and not longer than 35 days. A transfer facility that store used oil for more than 35 days are subject to regulation under Subpart F of this Part.

- b) Storage units. An owner or operator of a used oil transfer facility may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.
- c) Condition of units. The following must be true of containers and aboveground tanks used to store used oil at a transfer facility:
 - 1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and
 - 2) The containers may not be leaking (no visible leaks).
- d) Secondary containment for containers. Containers used to store used oil at a transfer facility must be equipped with a secondary containment system.
 - 1) The secondary containment system must consist of the following, at a minimum:
 - A) Both of the following:
 - i) Dikes, berms, or retaining walls; and
 - ii) A floor. The floor must cover the entire area within the dikes, berms, or retaining walls; or
 - B) An equivalent secondary containment system.
 - 2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- e) Secondary containment for existing aboveground tanks. Existing aboveground tanks used to store used oil at a transfer facility must be equipped with a secondary containment system.
 - 1) The secondary containment system must consist of the following, at a minimum:
 - A) Both of the following:
 - i) Dikes, berms, or retaining walls; and

- ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or
- B) An equivalent secondary containment system.
- 2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- f) Secondary containment for new aboveground tanks. New aboveground tanks used to store used oil at a transfer facility must be equipped with a secondary containment system.
 - The secondary containment system must consist of the following, at a minimum:
 - A) Both of the following:
 - i) Dikes, berms, or retaining walls; and
 - ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or
 - B) An equivalent secondary containment system.
 - 2) The entire containment system, including walls and floors, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- g) Labels.
 - 1) Containers and aboveground tanks used to store used oil at transfer facilities must be labeled or marked clearly with the words "Used Oil."
 - 2) Fill pipes used to transfer used oil into underground storage tanks at transfer facilities must be labeled or marked clearly with the words "Used Oil."
- h) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280 and which has occurred after October 4, 1996, an owner or operator of a transfer facility must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.45(h) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective Nov. 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the Nov. 22, 1993 effective date of the Illinois used oil standards.

- 1) Stop the release;
- 2) Contain the released used oil;
- 3) Properly clean up and manage the released used oil and other materials; and
- 4) If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.

1	(Source:	Amended at 32 Ill. Reg.	, effective	
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SUBPART F: STANDARDS FOR USED OIL PROCESSORS

Section 739.152 General Facility Standards

- a) Preparedness and prevention. An owner or operator of a used oil processing or rerefining facility must comply with the following requirements:
 - 1) Maintenance and operation of a facility. All facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of used oil to air, soil, or surface water that could threaten human health or the environment.
 - 2) Required equipment. All facilities must be equipped with the following, unless none of the hazards posed by used oil handled at the facility could require a particular kind of equipment specified in subsections (a)(2)(A) through (a)(2)(D) of this Section:
 - A) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
 - B) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning

- emergency assistance from local police departments, fire departments, or State or local emergency response teams;
- C) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and
- D) Water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.
- 3) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.
- 4) Access to communications or alarm system.
 - A) Whenever used oil is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required in subsection (a)(2) of this Section.
 - B) If there is ever just one employee on the premises while the facility is operating, the employee must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required in subsection (a)(2) of this Section.
- Required aisle space. The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
- 6) Arrangements with local authorities.
 - A) The owner or operator must attempt to make the following arrangements, as appropriate for the type of used oil handled at the facility and the potential need for the services of these organizations:
 - i) Arrangements to familiarize police, fire departments, and

emergency response teams with the layout of the facility, properties of used oil handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

- ii) Where more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;
- iii) Agreements with State emergency response teams, emergency response contractors, and equipment suppliers; and
- iv) Arrangements to familiarize local hospitals with the properties of used oil handled at the facility and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.
- B) Where State or local authorities decline to enter into such arrangements, the owner or operator must document the refusal in the operating record.
- b) Contingency plan and emergency procedures. An owner or operator of a used oil processing or re-refining facility must comply with the following requirements:
 - 1) Purpose and implementation of contingency plan.
 - A) Each owner or operator must have a contingency plan for the facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of used oil to air, soil, or surface water.
 - B) The provisions of the plan must be carried out immediately whenever there is a fire, explosion, or release of used oil that could threaten human health or the environment.
 - 2) Content of contingency plan.
 - A) The contingency plan must describe the actions facility personnel must take to comply with subsections (b)(1) and (b)(6) of this Section in response to fires, explosions, or any unplanned sudden or non-sudden release of used oil to air, soil, or surface water at the facility.

- B) If the owner or operator has already prepared a Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with federal 40 CFR 112 or 40 CFR 300, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate used oil management provisions that are sufficient to comply with the requirements of this Part.
- C) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to subsection (a)(6) of this Section.
- D) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see subsection (b)(5) of this Section), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.
- E) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.
- F) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of used oil or fires).
- 3) Copies of contingency plan. Copies of the contingency plan and all revisions to the plan must be disposed of as follows:
 - A) Maintained at the facility; and
 - B) Submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services.
- 4) Amendment of contingency plan. The contingency plan must be reviewed, and immediately amended, if necessary, whenever one of the following occurs:

- A) Applicable regulations are revised;
- B) The plan fails in an emergency;
- C) The facility changes--in its design, construction, operation, maintenance, or other circumstances--in a way that materially increases the potential for fires, explosions, or releases of used oil, or changes the response necessary in an emergency;
- D) The list of emergency coordinators changes; or
- E) The list of emergency equipment changes.
- Emergency coordinator. At all times, there must be at least one employee either on the facility 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. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristic of used oil handled, the location of all records within the facility, and facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan.

BOARD NOTE: USEPA cited the following as guidance: "The emergency coordinator's responsibilities are more fully spelled out in [subsection (b)(6) of this Section]. Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of used oil handled by the facility, and type and complexity of the facility."

- 6) Emergency procedures.
 - A) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) must immediately do the following:
 - i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
 - ii) Notify appropriate State or local agencies with designated response roles if their help is needed.
 - B) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and a real areal extent of any released materials. He or she may do this by observation or review of facility records of or

manifests and, if necessary, by chemical analysts analyses.

- C) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water of or chemical agents used to control fire and heat-induced explosions).
- D) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health, or the environment, outside the facility, he or she must report his findings as follows:
 - i) If his assessment indicated that evacuation of local areas may be advisable, he or she must immediately notify appropriate local authorities. He or she must be available to help appropriate officials decide whether local areas should be evacuated; and
 - ii) He must immediately notify either the government official designated as the on-scene coordinator for the geographical area (in the applicable regional contingency plan under federal 40 CFR 300), or the National Response Center (using their 24-hour toll free number (800) 424-8802). The report must include the following information: name and telephone number of reporter; name and address of facility; time and type of incident (e.g., release, fire); name and quantity of materials involved, to the extent known; the extent of injuries, if any; and the possible hazards to human health, or the environment, outside the facility.
- E) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other used oil or hazardous waste at the facility. These measures must include, where applicable, stopping processes and operation, collecting and containing released used oil, and removing or isolating containers.
- F) If the facility stops operation in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

- G) Immediately after an emergency, the emergency coordinator must provide for recycling, storing, or disposing of recovered used oil, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.
- H) The emergency coordinator must ensure that the following occur, in the affected areas of the facility:
 - No waste or used oil that may be incompatible with the released material is recycled, treated, stored, or disposed of until cleanup procedures are completed; and
 - ii) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
 - iii) The owner or operator must notify the Agency, and all other appropriate State and local authorities that the facility is in compliance with subsections (b)(6)(H)(i) and (b)(6)(H)(ii) of this Section before operations are resumed in the affected areas of the facility.
- I) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, it must submit a written report on the incident to USEPA Region 5. The report must include the following:
 - i) The name, address, and telephone number of the owner or operator;
 - ii) The name, address, and telephone number of the facility;
 - iii) The date, time, and type of incident (e.g., fire, explosion);
 - iv) The name and quantity of materials involved;
 - v) The extent of injuries, if any;
 - vi) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
 - vii) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Amended at 32 Ill. Reg	, effective	_)
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Section 739.155 Analysis Plan

An owner or operator of a used oil processing or re-refining facility must develop and follow a written analysis plan describing the procedures that will be used to comply with the analysis requirements of Section 739.153 and, if applicable, Section 739.172. The owner or operator must keep the plan at the facility.

- a) Rebuttable presumption for used oil in Section 739.153. At <u>a</u> minimum, the plan must specify the following:
 - 1) Whether sample analyses or knowledge of the halogen content of the used oil will be used to make this determination;
 - 2) If sample analyses are used to make this determination, the following requirements must be fulfilled:
 - A) The sampling method used to obtain representative samples to be analyzed. A representative sample may be obtained using either of the following:
 - i) One of the sampling methods in Appendix I of 35 Ill. Adm. Code 721; or
 - ii) A method shown to be equivalent under 35 Ill. Adm. Code 720.120 and 720.121;
 - B) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and
 - C) The methods used to analyze used oil for the parameters specified in Section 739.153; and
 - 3) The type of information that will be used to determine the halogen content of the used oil.
- b) On-specification used oil fuel in Section 739.172. At a minimum, the plan must specify the following if Section 739.172 is applicable:
 - 1) Whether sample analyses or other information will be used to make this determination;
 - 2) If sample analyses are used to make this determination, the following must be specified:
 - A) The sampling method used to obtain representative samples to be

analyzed. A representative sample may be obtained using either of the following:

- i) One of the sampling methods in Appendix I of 35 Ill. Adm. Code 721; or
- ii) A method shown to be equivalent under 35 Ill. Adm. Code 720.120 and 720.121;
- B) Whether used oil will be sampled and analyzed prior to or after any processing;
- C) The frequency of sampling to be performed, and whether the analysis will be performed on-site or off-site; and
- D) The methods used to analyze used oil for the parameters specified in Section 739.172; and
- 3) The type of information that will be used to make the on-specification used oil fuel determination.

(Source: Amended at	t 32 Ill. Reg	, effective)
Section 739.159	Management of Resi	idues		
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(Source: Amended at	t 32 Ill. Reg	, effective)

SUBPART G: STANDARDS FOR USED OIL BURNERS THAT BURN OFF-SPECIFICATION USED OIL FOR ENERGY RECOVERY

Section 739.164 Used Oil Storage

A used oil burner is subject to all applicable Spill Prevention, Control and Countermeasures (federal 40 CFR 112) in addition to the requirements of this Subpart G. A used oil burner is also subject to the Underground Storage Tank (35 Ill. Adm. Code 731) standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste, in addition to the requirements of this Subpart G.

- a) Storage units. A used oil burner may not store used oil in units other than tanks, containers, or units subject to regulation under 35 Ill. Adm. Code 724 or 725.
- b) Condition of units. The following must be true of containers and aboveground tanks used to store used oil at a burner facility:

- 1) The containers must be in good condition (no severe rusting, apparent structural defects or deterioration); and
- 2) The containers may not be leaking (no visible leaks).
- c) Secondary containment for containers. Containers used to store used oil at a burner facility must be equipped with a secondary containment system.
 - 1) The secondary containment system must consist of the following, at a minimum:
 - A) Dikes, berms, or retaining walls; and
 - B) A floor. The floor must cover the entire area within the dike, berm, or retaining wall.
 - 2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- d) Secondary containment for existing aboveground tanks. Existing aboveground tanks used to store used oil at burner facilities must be equipped with a secondary containment system.
 - 1) The secondary containment system must consist of the following, at a minimum:
 - A) Both of the following:
 - i) Dikes, berms, or retaining walls; and
 - ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall except areas where existing portions of the tank meet the ground; or
 - B) An equivalent secondary containment system.
 - 2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- e) Secondary containment for <u>existing new aboveground</u> tanks. A new aboveground tank used to store used oil at burner facilities must be equipped with a secondary

containment system.

- 1) The secondary containment system must consist of the following, at a minimum:
 - A) Both of the following:
 - i) Dikes, berms, or retaining walls; and
 - ii) A floor. The floor must cover the entire area within the dike, berm, or retaining wall; or
 - B) An equivalent secondary containment system.
- 2) The entire containment system, including walls and floor, must be sufficiently impervious to used oil to prevent any used oil released into the containment system from migrating out of the system to the soil, groundwater, or surface water.
- f) Labels.
 - 1) A container or aboveground tank used to store used oil at a burner facility must be labeled or marked clearly with the words "Used Oil."
 - 2) Fill pipes used to transfer used oil into underground storage tanks at burner facilities must be labeled or marked clearly with the words "Used Oil."
- g) Response to releases. Upon detection of a release of used oil to the environment that is not subject to the federal requirements of subpart F of 40 CFR 280 and which has occurred after October 4, 1996, a burner must perform the following cleanup steps:

BOARD NOTE: Corresponding 40 CFR 279.64(g) applies to releases that "occurred after the effective date of the authorized used oil program for the State in which the release is located." The Board adopted the used oil standards in docket R93-4 at 17 Ill. Reg. 20954, effective Nov. 22, 1993. USEPA approved the Illinois standards at 61 Fed. Reg. 40521 (Aug. 5, 1996), effective October 4, 1996. The Board has interpreted "the effective date of the authorized used oil program" to mean the October 4, 1996 date of federal authorization of the Illinois program, and we substituted that date for the federal effective date language. Had USEPA written something like "the effective date of the used oil program in the authorized State in which the release is located," the Board would have used the Nov. 22, 1993 effective date of the Illinois used oil standards.

- 1) Stop the release;
- 2) Contain the released used oil;

3)	Properly clean u	p and manage	the released	used oil and	other materials;	and
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4)	If necessary, repair or replace any leaking used oil storage containers or tanks
	prior to returning them to service.

(Source:	Amended at 32 Ill. Reg.	, effective

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on March 20, 2008, by a vote of 4-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board