## ILLINOIS POLLUTION CONTROL BOARD June 5, 2003

IN THE MATTER OF:	)	
	)	R03-18
RCRA SUBTITLE C UPDATE, USEPA	)	(Identical-in-Substance
AMENDMENTS (July 1, 2002 through	)	Rulemaking - Land)
December 31, 2002)	)	

Adopted Rule. Final Order.

ORDER OF THE BOARD (by M.E. Tristano):

This identical-in-substance rulemaking updates the Illinois hazardous waste regulations to incorporate revisions to the federal regulations. The United States Environmental Protection Agency (USEPA) made the federal amendments that prompted this action during the period of July 1, 2002 through December 31, 2002. This proceeding adopts amendments to 35 Ill. Adm. Code 703, 720, 721, 726, and 728. This adoption also makes a series of non-substantive corrections and stylistic revisions to segments of the text of 35 Ill. Adm. Code 720, 721, 726, and 728 that are not otherwise affected by the covered federal amendments.

Sections 7.2 and 22.4(a) of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 22.4(a) (2002)) require the Board to adopt regulations that are "identical in substance" to hazardous waste regulations adopted by the USEPA. These USEPA rules implement Subtitle C of the federal Resource Conservation and Recovery Act of 1976 (RCRA Subtitle C) (42 U.S.C. §§ 6921 *et seq.* (2000)).

Sections 7.2 and 22.4(a) provide for quick adoption of regulations that are identical in substance to federal regulations that USEPA adopts to implement Sections 3001 through 3005 of RCRA (42 U.S.C. §§ 6921-6925 (2000)). 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 (2002)) do not apply to the Board's adoption of identical-in-substance regulations. The federal RCRA Subtitle C regulations are found at 40 C.F.R. 260 through 266, 268, 270, 271, 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.

### IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on June 5, 2003, by a vote of 6-0.

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board

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### 703. Appendix A Classification of Permit Modifications

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

SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14289, effective October 12, 1983; amended in R83-24 at 8 Ill. Reg. 206, effective December 27, 1983; amended in R84-9 at 9 Ill. Reg. 11899, effective July 24, 1985; amended in R85-22 at 10 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 November 12, 1987; amended in R87-26 at 12 III. Reg. 2584, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13069, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 447, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18477, effective November 13, 1989; amended in R89-9 at 14 III. Reg. 6278, effective April 16, 1990; amended in R90-2 at 14 III. Reg. 14492, effective August 22, 1990; amended in R90-11 at 15 III. Reg. 9616, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14554, effective September 30, 1991; amended in R91-13 at 16 Ill. Reg. 9767, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5774, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20794, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6898, effective April 26, 1994; amended in R94-7 at 18 III. Reg. 12392, effective July 29, 1994; amended in R94-5 at 18 III. 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 September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2153, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9381, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9765, effective June 20, 2000; amended in R01-21/R01-23 at 25 Ill. Reg. 9313, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 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. \_\_\_\_\_, effective \_\_\_\_\_.

### SUBPART D: APPLICATIONS

Section 703.205 Incinerators that Burn Hazardous Waste

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

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

- 1) Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both;
- Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is reactive (Hazard Code R) for characteristics other than those listed in 35 Ill. Adm. Code 721.123(a)(4) and (a)(5) and will not be burned when other hazardous wastes are present in the combustion zone;
- 3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability or corrosivity, or both, as determined by the tests for characteristics of hazardous wastes under Subpart C of 35 Ill. Adm. Code 721; or
- Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in 35 Ill. Adm. Code 721.123(a)(1) through (a)(3) or (a)(6) through (a)(8), and that it will not be burned when other hazardous wastes are present in the combustion zone.
- b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.222 et seq.
- c) In lieu of a trial burn, the applicant may submit the following information:
  - 1) An analysis of each waste or mixture of wastes to be burned including the following:
    - A) Heat value of the waste in the form and composition in which it will be burned;
    - B) Viscosity (if applicable) or description of physical form of the waste;
    - C) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721 that are present in the waste to be burned, except that the applicant need not analyze for

constituents listed in Appendix H to 35 Ill. Adm. Code 721 that would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111, or their equivalent;

- D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111; and
- E) A quantification of those hazardous constituents in the waste that may be designated as POHCs based on data submitted from other trial or operational burns that demonstrate compliance with the performance standard in 35 Ill. Adm. Code 724.443;
- 2) A detailed engineering description of the incinerator, including the following:
  - A) Manufacturer's name and model number of incinerator;
  - B) Type of incinerator;
  - C) Linear dimension of incinerator unit including cross sectional area of combustion chamber;
  - D) Description of auxiliary fuel system (type/feed);
  - E) Capacity of prime mover;
  - F) Description of automatic waste feed cutoff systems;

- G) Stack gas monitoring and pollution control monitoring system;
- H) Nozzle and burner design;
- I) Construction materials; and
- J) Location and description of temperature, pressure and flow indicating devices and control devices;
- A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (c)(1) of this Section. This analysis should specify the POHCs that the applicant has identified in the waste for which a permit is sought, and any differences from the POHCs in the waste for which burn data are provided;
- 4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;
- 5) A description of the results submitted from any previously conducted trial burns, including the following:
  - A) Sampling and analysis techniques used to calculate performance standards in 35 Ill. Adm. Code 724.443;
  - B) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement); and
  - C) The certification and results required by subsection (b) of this Section;
- 6) The expected incinerator operation information to demonstrate compliance with 35 Ill. Adm. Code 724.443 and 724.445, including the following:

- A) Expected carbon monoxide (CO) level in the stack exhaust gas;
- B) Waste feed rate;
- C) Combustion zone temperature;
- D) Indication of combustion gas velocity;
- E) Expected stack gas volume, flow rate, and temperature;
- F) Computed residence time for waste in the combustion zone;
- G) Expected hydrochloric acid removal efficiency;
- H) Expected fugitive emissions and their control procedures; and
- Proposed waste feed cut-off limits based on the identified significant operating parameters;
- 7) The Agency may, pursuant to 35 III. Adm. Code 705.122, request such additional information as may be necessary for the Agency to determine whether the incinerator meets the requirements of Subpart O of 35 III. Adm. Code 724 and what conditions are required by that Subpart and Section 39(d) of the Environmental Protection Act [415 ILCS 5/39(d)]; and
- Waste analysis data, including that submitted in subsection (c)(1) of this Section, sufficient to allow the Agency to specify as permit Principal Organic Hazardous Constituents (permit POHCs) those constituents for which destruction and removal efficiencies will be required.
- d) The Agency must approve a permit application without a trial burn if it finds the following:
  - 1) The wastes are sufficiently similar; and

- 2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (under 35 Ill. Adm. Code 724.445) operating conditions that will ensure that the performance standards in 35 Ill. Adm. Code 724.443 will be met by the incinerator.
- when an owner or operator demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR 63, subpart EEE, incorporated by reference in 35 Ill. Adm. Code 720.111 (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of 40 CFR 63, subpart EEE), the requirements of this Section do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) if the owner or operator elects to comply with Section 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(ab)(2).

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

(Source:	Amended at 27	Ill. Reg		, (	effective		)

Section 703.208 Boilers and Industrial Furnaces Burning Hazardous Waste

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

shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

- a) Trial burns.
  - 1) General. Except as provided below, an owner or operator that is subject to the standards to control organic emissions provided by 35 Ill. Adm. Code 726.204, standards to control particulate matter provided by 35 Ill. Adm. Code 726.205, standards to control metals emissions provided by 35 Ill. Adm. Code 726.206, or standards to control hydrogen chloride (HCl) or chlorine gas emissions provided by 35 Ill. Adm. Code 726.207 must conduct a trial burn to demonstrate conformance with those standards and must submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.232.
    - A) Under subsections (a)(2) through (a)(5) of this Section and 35 Ill. Adm. Code 726.204 through 726.207, the Agency may waive a trial burn to demonstrate conformance with a particular emission standard; and
    - B) The owner or operator may submit data in lieu of a trial burn, as prescribed in subsection (a)(6) of this Section.
  - 2) Waiver of trial burn of DRE (destruction removal efficiency).
    - A) Boilers operated under special operating requirements. When seeking to be permitted under 35 Ill. Adm. Code 726.204(a)(4) and 726.210, which automatically waive the DRE trial burn, the owner or operator of a boiler must submit documentation that the boiler operates under the special operating requirements provided by 35 Ill. Adm. Code 726.210.
    - B) Boilers and industrial furnaces burning low risk waste. When seeking to be permitted under the provisions for low risk waste provided by 35 Ill. Adm. Code 726.204(a)(5) and 726.209(a),

which waive the DRE trial burn, the owner or operator must submit the following:

- i) Documentation that the device is operated in conformance with the requirements of 35 Ill. Adm. Code 726.209(a)(1).
- ii) Results of analyses of each waste to be burned, documenting the concentrations of nonmetal compounds listed in Appendix H to 35 Ill. Adm. Code 721, except for those constituents that would reasonably not be expected to be in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained. The analysis must rely on analytical techniques specified in Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods, incorporated by reference in 35 Ill. Adm. Code 720.111.
- iii) Documentation of hazardous waste firing rates and calculations of reasonable, worst-case emission rates of each constituent identified in subsection (a)(2)(B)(ii) of this Section using procedures provided by 35 Ill. Adm. Code 726.209(a)(2)(B).
- iv) Results of emissions dispersion modeling for emissions identified in subsection (a)(2)(B)(iii) of this Section using modeling procedures prescribed by 35 Ill. Adm. Code 726.206(h). The Agency must review the emission modeling conducted by the applicant to determine conformance with these procedures. The Agency must either approve the modeling or determine that alternate or supplementary modeling is appropriate.
- v) Documentation that the maximum annual average ground level concentration of each constituent identified in subsection (a)(2)(B)(ii) of this Section quantified in conformance with subsection (a)(2)(B)(iv) of this Section does not exceed the allowable ambient level established in

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

- Waiver of trial burn for metals. When seeking to be permitted under the Tier I (or adjusted Tier I) metals feed rate screening limits provided by 35 Ill. Adm. Code 726.206(b) and (e) that control metals emissions without requiring a trial burn, the owner or operator must submit the following:
  - A) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
  - B) Documentation of the concentration of each metal controlled by 35 Ill. Adm. Code 726.206(b) or (c) in the hazardous waste, other fuels and industrial furnace feedstocks, and calculations of the total feed rate of each metal;
  - C) Documentation of how the applicant will ensure that the Tier I feed rate screening limits provided by 35 Ill. Adm. Code 726.206(b) or (e) will not be exceeded during the averaging period provided by that subsection;
  - D) Documentation to support the determination of the TESH (terrain-adjusted effective stack height), good engineering practice stack height, terrain type, and land use, as provided by 35 Ill. Adm. Code 726.206(b)(3) through (5);
  - E) Documentation of compliance with the provisions of 35 Ill. Adm. Code 726.206(b)(6), if applicable, for facilities with multiple stacks;

- F) Documentation that the facility does not fail the criteria provided by 35 Ill. Adm. Code 726.206(b)(7) for eligibility to comply with the screening limits; and
- G) Proposed sampling and metals analysis plan for the hazardous waste, other fuels, and industrial furnace feed stocks.
- Waiver of trial burn for PM (particulate matter). When seeking to be permitted under the low risk waste provisions of 35 Ill. Adm. Code 726.209(b), which waives the particulate standard (and trial burn to demonstrate conformance with the particulate standard), applicants must submit documentation supporting conformance with subsections (a)(2)(B) and (a)(3) of this Section.
- Waiver of trial burn for HCl and chlorine gas. When seeking to be permitted under the Tier I (or adjusted Tier I) feed rate screening limits for total chlorine and chloride provided by 35 Ill. Adm. Code 726.207(b)(1) and (e) that control emissions of HCl and chlorine gas without requiring a trial burn, the owner or operator must submit the following:
  - A) Documentation of the feed rate of hazardous waste, other fuels, and industrial furnace feed stocks;
  - B) Documentation of the levels of total chlorine and chloride in the hazardous waste, other fuels and industrial furnace feedstocks, and calculations of the total feed rate of total chlorine and chloride;
  - C) Documentation of how the applicant will ensure that the Tier I (or adjusted Tier I) feed rate screening limits provided by 35 Ill. Adm. Code 726.207(b)(1) or (e) will not be exceeded during the averaging period provided by that subsection;
  - D) Documentation to support the determination of the TESH, good engineering practice stack height, terrain type and land use as provided by 35 Ill. Adm. Code 726.207(b)(3);

- E) Documentation of compliance with the provisions of 35 Ill. Adm. Code 726.207(b)(4), if applicable, for facilities with multiple stacks;
- F) Documentation that the facility does not fail the criteria provided by 35 Ill. Adm. Code 726.207(b)(3) for eligibility to comply with the screening limits; and
- G) Proposed sampling and analysis plan for total chlorine and chloride for the hazardous waste, other fuels, and industrial furnace feedstocks.
- 6) Data in lieu of trial burn. The owner or operator may seek an exemption from the trial burn requirements to demonstrate conformance with Section 703.232 and 35 Ill. Adm. Code 726.204 through 726.207 by providing the information required by Section 703.232 from previous compliance testing of the device in conformance with 35 Ill. Adm. Code 726.203 or from compliance testing or trial or operational burns of similar boilers or industrial furnaces burning similar hazardous wastes under similar conditions. If data from a similar device is used to support a trial burn waiver, the design and operating information required by Section 703.232 must be provided for both the similar device and the device to which the data is to be applied, and a comparison of the design and operating information must be provided. The Agency must approve a permit application without a trial burn if the Agency finds that the hazardous wastes are sufficiently similar, the devices are sufficiently similar, the operating conditions are sufficiently similar, and the data from other compliance tests, trial burns, or operational burns are adequate to specify (under 35 III. Adm. Code 726.102) operating conditions that will ensure conformance with 35 Ill. Adm. Code 726.102(c). In addition, the following information must be submitted:
  - A) For a waiver from any trial burn, the following:
    - A description and analysis of the hazardous waste to be burned compared with the hazardous waste for which data from compliance testing or operational or trial burns are

- provided to support the contention that a trial burn is not needed;
- ii) The design and operating conditions of the boiler or industrial furnace to be used, compared with that for which comparative burn data are available; and
- iii) Such supplemental information as the Agency finds necessary to achieve the purposes of this subsection (a).
- B) For a waiver of the DRE trial burn, the basis for selection of POHCs (principal organic hazardous constituents) used in the other trial or operational burns that demonstrate compliance with the DRE performance standard in 35 Ill. Adm. Code 726.204(a). This analysis should specify the constituents in Appendix H to 35 Ill. Adm. Code 721 that the applicant has identified in the hazardous waste for which a permit is sought and any differences from the POHCs in the hazardous waste for which burn data are provided.
- b) Alternative HC limit for industrial furnaces with organic matter in raw materials. An owner or operator of industrial furnaces requesting an alternative HC limit under 35 Ill. Adm. Code 726.204(f) must submit the following information at a minimum:
  - 1) Documentation that the furnace is designed and operated to minimize HC emissions from fuels and raw materials;
  - Documentation of the proposed baseline flue gas HC (and CO) concentration, including data on HC (and CO) levels during tests when the facility produced normal products under normal operating conditions from normal raw materials while burning normal fuels and when not burning hazardous waste;
  - 3) Test burn protocol to confirm the baseline HC (and CO) level including information on the type and flow rate of all feedstreams, point of introduction of all feedstreams, total organic carbon content (or other

appropriate measure of organic content) of all nonfuel feedstreams, and operating conditions that affect combustion of fuels and destruction of hydrocarbon emissions from nonfuel sources;

- 4) Trial burn plan to do the following:
  - A) Demonstrate To demonstrate when burning hazardous waste that flue gas HC (and CO) concentrations do not exceed the baseline HC (and CO) level; and
  - B) Identify, To identify, in conformance with Section 703.232(d), the types and concentrations of organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 that are emitted when burning hazardous waste;
- 5) Implementation plan to monitor over time changes in the operation of the facility that could reduce the baseline HC level and procedures to periodically confirm the baseline HC level; and
- 6) Such other information as the Agency finds necessary to achieve the purposes of this subsection (b).
- c) Alternative metals implementation approach. When seeking to be permitted under an alternative metals implementation approach under 35 Ill. Adm. Code 726.206(f), the owner or operator must submit documentation specifying how the approach ensures compliance with the metals emissions standards of 35 Ill. Adm. Code 726.106(c) or (d) and how the approach can be effectively implemented and monitored. Further, the owner or operator must provide such other information that the Agency finds necessary to achieve the purposes of this subsection (c).
- d) Automatic waste feed cutoff system. An owner or operator must submit information describing the automatic waste feed cutoff system, including any prealarm systems that may be used.
- e) Direct transfer. An owner or operator that uses direct transfer operations to feed hazardous waste from transport vehicles (containers, as defined in 35 Ill. Adm. Code 726.211) directly to the boiler or industrial furnace must submit information

supporting conformance with the standards for direct transfer provided by 35 Ill. Adm. Code 726.211.

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

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

(Source:	Amended at 27 Ill Reg	effective	

### SUBPART E: SHORT TERM AND PHASED PERMITS

Section 703.221 Alternative Compliance with the Federal NESHAPS

When an owner or operator demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR 63, subpart EEE, incorporated by reference in 35 Ill. Adm. Code 720.111 (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance with all applicable requirements of 40 CFR 63, subpart EEE), the requirements of Sections 703.221 through 703.225 do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) if the owner or operator elects to comply with Section 703.310(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of Sections 703.221 through 703.225, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

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

(Source:	Amended at 27 Ill. Reg.	. effective	
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Section 703.232 Permits for Boilers and Industrial Furnaces Burning Hazardous Waste

When the owner or operator of a cement or lightweight aggregate kiln demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 40 CFR 63, subpart EEE, incorporated by reference in 35 Ill. Adm. Code 720.111 (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance under 40 CFR 63.1207(j) and 63.1210(b) documenting compliance

with all applicable requirements of 40 CFR 63, subpart EEE), the requirements of this Section do not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 726.202(e)(1) and (e)(2)(C) if the owner or operator elects to comply with Section 703.310(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188 and 703.241(a)(2).

- a) General. The owner or operator of a new boiler or industrial furnace (one not operating under the interim status standards of 35 Ill. Adm. Code 726.203) is subject to subsections (b) through (f) of this Section. A boiler or industrial furnace operating under the interim status standards of 35 Ill. Adm. Code 726.203 is subject to subsection (g) of this Section.
- b) Permit operating periods for a new boiler or industrial furnace. A permit for a new boiler or industrial furnace must specify appropriate conditions for the following operating periods:
  - Pretrial burn period. For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the boiler or industrial furnace to a point of operation readiness to conduct a trial burn, not to exceed 720 hours operating time when burning hazardous waste, the Agency must establish permit conditions in the pretrial burn period, including but not limited to allowable hazardous waste feed rates and operating conditions. The Agency must extend the duration of this operational period once, for up to 720 additional hours, at the request of the applicant when good cause is shown. The permit must be modified to reflect the extension according to Sections 703.280 through 703.283.
    - A) Applicants must submit a statement, with Part B of the permit application, that suggests the conditions necessary to operate in compliance with the standards of 35 Ill. Adm. Code 726.204 through 726.207 during this period. This statement should include, at a minimum, restrictions on the applicable operating requirements identified in 35 Ill. Adm. Code 726.202 (e).
    - B) The Agency must review this statement and any other relevant information submitted with Part B of the permit application and specify requirements for this period sufficient to meet the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.

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

### 3) Post-trial burn period.

- A) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation and submission of the trial burn results by the applicant, and review of the trial burn results and modification of the facility permit by the Agency to reflect the trial burn results, the Agency must establish the operating requirements most likely to ensure compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.
- B) Applicants must submit a statement, with Part B of the application, that identifies the conditions necessary to operate during this period in compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207. This statement should include, at a minimum, restrictions on the operating requirements provided by 35 Ill. Adm. Code 726.202 (e).
- C) The Agency must review this statement and any other relevant information submitted with Part B of the permit application and specify requirements of this period sufficient to meet the performance standards of 35 Ill. Adm. Code 726.204 through 726.207 based on the Agency's engineering judgment.
- 4) Final permit period. For the final period of operation the Agency must develop operating requirements in conformance with 35 Ill. Adm. Code 726.202(e) that reflect conditions in the trial burn plan and are likely to ensure compliance with the performance standards of 35 Ill. Adm. Code 726.204 through 726.207. Based on the trial burn results, the Agency must make any necessary modifications to the operating requirements to ensure compliance with the performance standards. The permit modification must proceed according to Sections 703.280 through 703.283.

- c) Requirements for trial burn plans. The trial burn plan must include the following information. The Agency, in reviewing the trial burn plan, must evaluate the sufficiency of the information provided and may require the applicant to supplement this information, if necessary, to achieve the purposes of this subsection (c).
  - 1) An analysis of each feed stream, including hazardous waste, other fuels, and industrial furnace feed stocks, as fired, that includes the following:
    - A) Heating value, levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, thallium, total chlorine and chloride, and ash; and
    - B) Viscosity or description of the physical form of the feed stream.
  - 2) An analysis of each hazardous waste, as fired, including the following:
    - A) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721 that are present in the feed stream, except that the applicant need not analyze for constituents listed in Appendix H that would reasonably not be expected to be found in the hazardous waste. The constituents excluded from analysis must be identified and the basis for this exclusion explained. The analysis must be conducted in accordance with analytical techniques specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or their equivalent;
    - B) An approximate quantification of the hazardous constituents identified in the hazardous waste, within the precision produced by the analytical methods specified in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," USEPA Publication SW-846, as incorporated by reference at 35 Ill. Adm. Code 720.111 and Section 703.110, or other equivalent; and
    - C) A description of blending procedures, if applicable, prior to firing the hazardous waste, including a detailed analysis of the hazardous waste prior to blending, an analysis of the material with which the hazardous waste is blended, and blending ratios.
  - A detailed engineering description of the boiler or industrial furnace, including the following:

- A) Manufacturer's name and model number of the boiler or industrial furnace;
- B) Type of boiler or industrial furnace;
- C) Maximum design capacity in appropriate units;
- D) Description of the feed system for the hazardous waste and, as appropriate, other fuels and industrial furnace feedstocks;
- E) Capacity of hazardous waste feed system;
- F) Description of automatic hazardous waste feed cutoff systems;
- G) Description of any pollution control system; and
- H) Description of stack gas monitoring and any pollution control monitoring systems.
- 4) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and sample analysis.
- A detailed test schedule for each hazardous waste for which the trial burn is planned, including dates, duration, quantity of hazardous waste to be burned, and other factors relevant to the Agency's decision under subsection (b)(2) of this Section.
- A detailed test protocol, including, for each hazardous waste identified, the ranges of hazardous waste feed rate, and, as appropriate, the feed rates of other fuels and industrial furnace feedstocks, and any other relevant parameters that may affect the ability of the boiler or industrial furnace to meet the performance standards in 35 Ill. Adm. Code 726.204 through 726.207.
- 7) A description of and planned operating conditions for any emission control equipment that will be used.
- 8) Procedures for rapidly stopping the hazardous waste feed and controlling emissions in the event of an equipment malfunction.
- 9) Such other information as the Agency finds necessary to determine whether to approve the trial burn plan in light of the purposes of this subsection (c) and the criteria in subsection (b)(2) of this Section.

- d) Trial burn procedures.
  - 1) A trial burn must be conducted to demonstrate conformance with the standards of 35 III. Adm. Code 726.104 through 726.107.
  - 2) The Agency must approve a trial burn plan if the Agency finds as follows:
    - A) That the trial burn is likely to determine whether the boiler or industrial furnace can meet the performance standards of 35 Ill. Adm. Code 726.104 through 726.107;
    - B) That the trial burn itself will not present an imminent hazard to human health and the environment;
    - C) That the trial burn will help the Agency to determine operating requirements to be specified under 35 Ill. Adm. Code 726.102(e); and
    - D) That the information sought in the trial burn cannot reasonably be developed through other means.
  - The Agency must send a notice to all persons on the facility mailing list, as set forth in 35 Ill. Adm. Code 705.161(a), and to the appropriate units of State and local government, as set forth in 35 Ill. Adm. Code 705.163(a)(5), announcing the scheduled commencement and completion dates for the trial burn. The applicant may not commence the trial burn until after the Agency has issued such notice.
    - A) This notice must be mailed within a reasonable time period before the trial burn. An additional notice is not required if the trial burn is delayed due to circumstances beyond the control of the facility or the Agency.
    - B) This notice must contain the following:
      - i) The name and telephone number of applicant's contact person;
      - ii) The name and telephone number of the Agency regional office appropriate for the facility;
      - iii) The location where the approved trial burn plan and any supporting documents can be reviewed and copied; and

- iv) An expected time period for commencement and completion of the trial burn.
- The applicant must submit to the Agency a certification that the trial burn has been carried out in accordance with the approved trial burn plan, and submit the results of all the determinations required in subsection (c) of this Section. The Agency must, in the trial burn plan, require that the submission be made within 90 days after completion of the trial burn, or later if the Agency determines that a later date is acceptable.
- 5) All data collected during any trial burn must be submitted to the Agency following completion of the trial burn.
- All submissions required by this subsection (d) must be certified on behalf of the applicant by the signature of a person authorized to sign a permit application or a report under 35 Ill. Adm. Code 702.126.
- e) Special procedures for DRE trial burns. When a DRE trial burn is required under 35 Ill. Adm. Code 726.104, the Agency must specify (based on the hazardous waste analysis data and other information in the trial burn plan) as trial Principal Organic Hazardous Constituents (POHCs) those compounds for which destruction and removal efficiencies must be calculated during the trial burn. These trial POHCs will be specified by the Agency based on information including the Agency's estimate of the difficulty of destroying the constituents identified in the hazardous waste analysis, their concentrations or mass in the hazardous waste feed, and, for hazardous waste containing or derived from wastes listed in Subpart D of 35 Ill. Adm. Code 721, the hazardous waste organic constituents identified in Appendix G to 35 Ill. Adm. Code 721 as the basis for listing.
- f) Determinations based on trial burn. During each approved trial burn (or as soon after the burn as is practicable), the applicant must make the following determinations:
  - 1) A quantitative analysis of the levels of antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, thallium, silver, and chlorine/chloride in the feed streams (hazardous waste, other fuels, and industrial furnace feedstocks);
  - 2) When a DRE trial burn is required under 35 Ill. Adm. Code 726.204(a), the following determinations:

- A) A quantitative analysis of the trial POHCs in the hazardous waste feed;
- B) A quantitative analysis of the stack gas for the concentration and mass emissions of the trial POHCs; and
- C) A computation of destruction and removal efficiency (DRE), in accordance with the DRE formula specified in 35 Ill. Adm. Code 726.204(a);
- When a trial burn for chlorinated dioxins and furans is required under 35 Ill. Adm. Code 726.204(e), a quantitative analysis of the stack gas for the concentration and mass emission rate of the 2,3,7,8-chlorinated tetrathrough octa-congeners of chlorinated dibenzo-p-dioxins and furans, and a computation showing conformance with the emission standard;
- When a trial burn for PM, metals, or HCl and chlorine gas is required under 35 Ill. Adm. Code 726.205, 726.206(c) or (d), or 726.207(b)(2) or (c), a quantitative analysis of the stack gas for the concentrations and mass emissions of PM, metals, or HCl and chlorine gas, and computations showing conformance with the applicable emission performance standards;
- When a trial burn for DRE, metals, and HCl and chlorine gas is required under 35 Ill. Adm. Code 726.204(a), 726.206(c) or (d), or 726.207(b)(2) or (c), a quantitative analysis of the scrubber water (if any), ash residues, other residues, and products for the purpose of estimating the fate of the trial POHCs, metals, and chlorine and chloride;
- 6) An identification of sources of fugitive emissions and their means of control;
- 7) A continuous measurement of carbon monoxide (CO), oxygen, and, where required, hydrocarbons (HC) in the stack gas; and
- Such other information as the Agency specifies as necessary to ensure that the trial burn will determine compliance with the performance standards 35 Ill. Adm. Code 726.204 through 726.207 and to establish the operating conditions required by 35 Ill. Adm. Code 726.204 through 726.207 and of determining adequate operating conditions under 35 Ill. Adm. Code 726.203, and to establish the operating conditions required by 35 Ill. Adm. Code 726.202(e) as necessary to meet those performance standards.

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

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

(Source:	Amended at 27 III Reg	effective	)

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

PART 720 HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

Section

720.101 Purpose, Scope, and Applicability

720.102	Availability of Information; Confidentiality of Information
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#### <del>720.</del>Appendix A Overview of 40 CFR, Subtitle C Regulations

waste Hazardous Waste Recycling Activities

**Boiler Determinations** 

Procedures for Determinations

720.132

720.133

720.140

720.141

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].

Waste Recycling Activities on a case-by-case Case-by-Case Basis

Additional regulation Regulation of certain hazardous waste-Certain Hazardous

Procedures for <del>case-by-case regulation</del>-Case-by-Case Regulation of <del>hazardous</del>

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 III. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6017, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective November 12, 1987; amended in R87-26 at 12 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 November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3075, effective February 20, 1990; amended in R89-9 at 14 III. Reg. 6225, effective April 16, 1990; amended in R90-10 at 14 Ill. Reg. 16450, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7934, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9323, effective June 17, 1991; amended in R91-1 at 15 III. Reg. 14446, effective September 30, 1991; amended in R91-13 at 16 III. Reg. 9489, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17636, effective November 6, 1992;

amended in R92-10 at 17 III. Reg. 5625, effective March 26, 1993; amended in R93-4 at 17 III. Reg. 20545, effective November 22, 1993; amended in R93-16 at 18 III. Reg. 6720, effective April 26, 1994; amended in R94-7 at 18 III. Reg. 12160, effective July 29, 1994; amended in R94-17 at 18 III. Reg. 17480, effective November 23, 1994; amended in R95-6 at 19 III. Reg. 9508, effective June 27, 1995; amended in R95-20 at 20 III. Reg. 10929, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 III. 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 September 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 III. Reg. 9094, effective July 26, 1999; amended in R00-5 at 24 III. Reg. 1063, effective January 6, 2000; amended in R00-13 at 24 III. Reg. 9443, effective June 20, 2000; amended in R01-3 at 25 III. Reg. 1266, effective January 11, 2001; amended in R01-21/R01-23 at 25 III. Reg. 9168, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 III. Reg. 6550, effective April 22, 2002; amended in R03-7 at 27 III. Reg. 3712, effective February 14, 2003; amended in R03-18 at 27 III. Reg. , effective

SUBPART A: GENERAL PROVISIONS

Section 720.101 Purpose, Scope, and Applicability

- a) This Part provides definitions of terms, general standards, and overview information applicable to 35 Ill. Adm. Code 720 through 725, 726, 728, 733, and 739.
- b) In this Part:
  - 1) Section 720.102 sets forth the rules that the Board and the Agency will use in making information it receives available to the public and sets forth the requirements that a generator, transporter, or owner or operator of a treatment, storage, or disposal facility must follow to assert claims of business confidentiality with respect to information that is submitted to the Board or the Agency under 35 Ill. Adm. Code 720 through 725 and 728.
  - 2) Section 720.103 establishes rules of grammatical construction for 35 III. Adm. Code 720 through <del>725, 726, 728, 733, and 739.</del>
  - 3) Section 720.110 defines terms which that are used in 35 Ill. Adm. Code 720 through 725, 726, 728, 733, and 739.

(	Source:	Amended at 27 Ill. Reg.	, effective	)
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Section 720.103 Use of Number and Gender

As used in 35 III. Adm. Code 720 through <del>725</del>-726, <del>and 728, 733, and 739:</del>

- a) Words in the masculine gender also include the feminine and neuter genders;
- b) Words in the singular include the plural; and
- c) Words in the plural include the singular.

(Source:	Amended at 27 Ill. Reg.	, effective	
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### SUBPART B: DEFINITIONS AND REFERENCES

Section 720.110 Definitions

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

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

"Act" or "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.)

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

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

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

"Agency" means the Illinois Environmental Protection Agency.

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

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

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

"Battery" means a device <u>consisting that consists</u> of one or more electrically connected electrochemical cells <u>that which</u> 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 which that the Board has determined, on a case-by-case basis, to be a boiler, after considering the standards in Section 720.132.

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

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

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

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

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

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

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

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

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

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

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 (1999) (2002);

The facility has received a RCRA permit from a state authorized by USEPA pursuant to 40 CFR 271 (1999) (2002); or

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

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

If a waste is destined to a facility in a state other than Illinois 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 penta-, hexa hexa-, hepta hepta-, and octa-chlorinated dibenzo dioxins and furans.

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

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

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

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

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

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

Is It is used for neutralizing wastes which 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.Subpart D only for this reason; and

Meets 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 <u>Subpart D of 35 Ill.</u> Adm. Code 721. Subpart D and to each characteristic identified in <u>Subpart C of 35 Ill.</u> Adm. Code 721. Subpart C.

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

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

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

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

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

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

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

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

Region VII: Nebraska, Kansas, Missouri, and Iowa

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

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

Region X: Washington, Oregon, Idaho, and Alaska

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

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

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

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

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

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

construction of the site or installation of the tank system and if either of the following is true:

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

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

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

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

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

"Facility" means the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The facility uses controlled flame combustion, and it neither both of the following are true of the facility:

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

Is The facility is not listed as an industrial furnace; or

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

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

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

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

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

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

Cement kilns;
Lime kilns;
Aggregate kilns;
Phosphate kilns;
Coke ovens;
Blast furnaces;
Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces);
Titanium dioxide chloride process oxidation reactors;

Methane reforming furnaces;

Pulping liquor recovery furnaces;

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

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

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

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

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

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

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

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

Other relevant factors.

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

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

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

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

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

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

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

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

"Lamp" or "universal waste lamp" means the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, or <a href="infrared">infrared</a> regions of the electromagnetic spectrum. Examples of common universal waste lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, <a href="high-pressure-high-pressure-sodium">high-pressure-high-pressure-sodium</a>, 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 originated and signed by the generator that contains the information required by <u>Subpart B of 35 Ill. Adm. Code 722. Subpart B.</u>

"Manifest document number" means the USEPA twelve digit identification number assigned to the generator plus a unique <u>five digit five-digit</u> document number assigned to the manifest by the generator for recording and reporting purposes.

"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 nonnuclear 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 which that is removed to gain access to that deposit and is then used for reclamation of a surface mine.

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

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

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

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

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

"On-site" means the same or geographically contiguous property which 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 which he that the owner controls and to which the public does not have access is also considered on-site property.

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

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

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

Control of emission of the gaseous combustion products.

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

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

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

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

waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

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

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

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

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

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, 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, that bears or contains any substances described in either of the two preceding paragraphs of this definition.

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

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

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

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

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

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

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

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

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

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

"Replacement unit" means a landfill, surface impoundment, or waste pile unit from which all or substantially all of the waste is removed, and which is subsequently reused to treat, store, or dispose of hazardous waste. Replacement unit does not

include a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with a closure or corrective action plan approved by USEPA or the Agency.

- "Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) that can be expected to exhibit the average properties of the universe or whole.
- "Runoff" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.
- "Runon" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.
- "SIC Code" means Standard Industrial Classification Code as defined in Standard Industrial Classification Manual, incorporated by reference in Section 720.111.
- "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.
- "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and which has a total thermal input, excluding the heating value of the sludge itself, of 2500 Btu/lb or less of sludge treated on a wet weight wet-weight basis.
- "Small quantity generator" means a generator that generates less than 1000 kg of hazardous waste in a calendar month
- "Solid waste" means a solid waste as defined in 35 Ill. Adm. Code 721.102.
- "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. "Sorb" means to either adsorb or absorb, or both.
- "Staging pile" means an accumulation of solid, non-flowing "remediation waste" (as defined in this Section) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the Agency according to the requirements of 35 Ill. Adm. Code 724.654.

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

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

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

"Surface impoundment" or "impoundment" means a facility or part of a facility that is a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials (although it may be lined with manmade materials) which 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) which that provide structural support.

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

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

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

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

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

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

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

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

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

"Treatability study" means the following:

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

Whether the waste is amenable to the treatment process;

What pretreatment (if any) is required;

The optimal process conditions needed to achieve the desired treatment:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

a wastewater treatment sludge which that is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or treats or stores a wastewater treatment sludge which 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 27 Ill. Reg.	, effective	
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Section 720.111 References

The following documents are incorporated by reference for the purposes of this Part and 35 Ill. Adm. Code 703 through 705, 721 through 726, 728, 730, 733, 738, and 739:

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

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

ACI 318-83: "Building Code Requirements for Reinforced Concrete," adopted September 1983.

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

ANSI B31.3 and B31.4. See ASME/ANSI B31.3 and B31.4.

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.

"Evaporative Loss from External Floating-Roof Tanks," API Publication 2517, Third Edition, February 1989.

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

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

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

"Chemical Plant and Petroleum Refinery Piping," ASME/ANSI B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988. Also available from ANSI.

"Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI B31.4-1986, as supplemented by B31.4a-1987. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 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.

ASTM D 88-87, Standard Test Method for Saybolt Viscosity, April 24, 1981, reapproved January 1987.

ASTM D 93-85, Standard Test Methods for Flash Point by Pensky-Martens Closed Tester, approved October 25, 1985.

ASTM D 140–70, Standard Practice for Sampling Bituminous Materials, approved 1970.

ASTM D 346–75, Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis, approved 1975.

ASTM D 420–69, Guide to Site Characterization for Engineering, Design, and Construction Purposes, approved 1969.

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

ASTM D 1946-90, Standard Practice for Analysis of Reformed Gas by Gas Chromatography, approved March 30, 1990.

ASTM D 2161-87, Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity, March 27, 1987.

ASTM D 2234–76, Standard Practice for Collection of a Gross Sample of Coal, approved 1976.

ASTM D 2267-88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, approved November 17, 1988.

ASTM D 2382-88, Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method), approved October 31, 1988.

ASTM D 2879-92, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved 1992.

ASTM D 3828-87, Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester, approved December 14, 1988.

ASTM E 168-88, Standard Practices for General Techniques of Infrared Quantitative Analysis, approved May 27, 1988.

ASTM E 169-87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, approved February 1, 1987.

ASTM E 260-85, Standard Practice for Packed Column Gas Chromatography, approved June 28, 1985.

ASTM Method G 21-70 (1984a), Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi.

ASTM Method G 22-76 (1984b), Standard Practice for Determining Resistance of Plastics to Bacteria.

MICE. Methods Information Communication Exchange Service, 703-821-4690:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number SW-846, Update IIIA (April 1998).

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

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

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication number SW-846 (Third Edition, November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August, 1993), IIB (January 1995), and III (December 1996) (document number 955-001-00000-1).

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

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP-02-85, approved March 1985.

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

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

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

APTI Course 415: Control of Gaseous Emissions, PB80-208895, December 1981.

- "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," EPA/530-SW-87-011, March 15, 1987 (document number PB88-170766).
- "Guideline on Air Quality Models," Revised 1986 (document number PB86-245-248 (Guideline) and PB88-150-958 (Supplement), also set forth at 40 CFR 51, Appendix W).
- "Method 164, 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" (document number PB99-121949).
- "Methods for Chemical Analysis of Water and Wastes," Third Edition, March 1983 (document number PB84-128677).
- "Methods Manual for Compliance with BIF Regulations," December 1990 (document number PB91-120-006).
- "Petitions to Delist Hazardous Wastes A Guidance Manual, Second Edition," EPA/530-R-93-007, March 1993 (document number PB93-169-365).
- "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources," October 1992, publication number EPA-450/R-92-019.
- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA Publication number SW-846 (Third Edition, November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998) (document number 955-001-00000-1).
- OECD. Organisation for Economic Co-operation and Development, Environment Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France:
  - OECD Guideline for Testing of Chemicals, Method 301B: "CO<sub>2</sub> Evolution (Modified Sturm Test)," adopted 17 July 1992.
  - Table 2.B of the Annex of OECD Council Decision C(88)90(Final) of 27 May 1988.

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).

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.

The Motor Vehicle Inspection Report (DD Form 626), as in effect on November 8, 1995.

Requisition Tracking Form (DD Form 1348), as in effect on November 8, 1995.

The Signature and Tally Record (DD Form 1907), as in effect on November 8, 1995.

Special Instructions for Motor Vehicle Drivers (DD Form 836), as in effect on November 8, 1995.

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

"Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells," EPA 570/9-87-002, August 1987.

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

"Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2–80–018, January 1980.

"Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, publication number EPA-450/R-92-019.

USEPA. Available from RCRA <u>Docket</u> Information Center<del>(RIC), 1235</del> <del>Jefferson Davis Highway, first floor, Arlington, VA 22202, 401 M Street, SW, Washington, D.C. 20460 (phone: 202-566-0270)</del> (Docket # F-94-IEHF-FFFF):

OECD Amber List of Wastes, Appendix 4 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1993).

OECD Green List of Wastes, Appendix 3 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1994).

OECD Red List of Wastes, Appendix 5 to the OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations) (May 1993).

Table 2.B of the Annex of OECD Council Decision C(88)90(Final) (May 27, 1988).

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

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

USGSA. Available from the United States Government Services Administration:

Government Bill of Lading (GBL) (GSA Standard Form 1109), as in effect on November 8, 1995.

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 (2002)

10 CFR 20, Appendix B (2002)

10 CFR 71 (2002)

40 CFR 51.100(ii) (2002)

40 CFR 51, Appendix W (2002)

40 CFR 52.741, Appendix B (2002)

40 CFR 60 (2002)

40 CFR 61, Subpart V (2002)

40 CFR 63 (2002), as amended at 67 Fed. Reg. 77687 (December 19, 2002)

40 CFR 136 (2002), as amended at 67 Fed. Reg. 65220 (October 23, 2002) and 67 Fed. Reg. 65876 (October 29, 2002)

40 CFR 142 (2002)

40 CFR 220 (2002)

40 CFR 232.2 (2002)

40 CFR 260.20 (2002)

40 CFR 264 (2002)

40 CFR 268.41 (1990)

40 CFR 268, Appendix IX (2002)

40 CFR 270.5 (2002)

40 CFR 302.4, 302.5, and 302.6 (2002)

40 CFR 423, appendix A (2002)

40 CFR 761 (2002)

49 CFR 107<del>(2001)</del>(2002)

49 CFR 171<del>(2001)</del> (2002)

49 CFR 172<del>(2001)</del> (2002)

49 CFR 173<del>(2001)</del>(2002)

49 CFR 178<del>(2001)</del> (2002)

#### 49 CFR 179<del>(2001)</del> (2002)

c) Federal Statutes

Sections 201(v), 201(w), and 360b(j) of the Federal Food, Drug, and Cosmetic Act (FFDCA; 21 USC 321(v), 321(w), and 512(j)), as amended through October 25, 1994.

Section 1412 of the Department of Defense Authorization Act of 1986, Pub. L. 99-145, 50 USC 1521(j)(1) (1997).

d)	This Section incorporates no later editions or amendments
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(Source:	Amended at 27 Ill. Reg.	, effective	

#### SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section 720.120 Rulemaking

- a) Any person may petition the Board to adopt as State regulations rules that are identical in substance with newly-adopted federal amendments or regulations. The petition shall-must take the form of a proposal for rulemaking pursuant to 35 Ill. Adm. Code 102. The proposal shall-must include a listing of all amendments to 40 CFR 260 through 266, 268, or 273, or 279 that have been made since the last preceding amendment or proposal to amend 35 Ill. Adm. Code 720 through 726, 728, or 733, or 739, pursuant to Section 22.4(a) of the Environmental Protection Act [415 ILCS 5/22.4(a)].
- b) Any person may petition the Board to adopt amendments or additional regulations not identical in substance with federal regulations. Such proposal shall-must conform to 35 Ill. Adm. Code 102 and Title VII and Section 22.4(b) or 22.4(c) and Title VII of the Environmental Protection Act [415 ILCS 5/22.4(b) or (c) and Title VII].

(Source:	Amended at 27 Ill. Reg.	, effective	`

Section 720.121 Alternative Equivalent Testing Methods

a) The Agency has no authority to alter the universe of regulated wastes. Modification of testing methods that are stated in 35 Ill. Adm. Code 721 requires rulemaking pursuant to Section 720.120. However, deviation from these methods is allowed under 35 Ill. Adm. Code 721, as <u>observed</u>, for example, <u>by in the Board Note appended to 35 Ill. Adm. Code 721.120(c).</u>

- b) The Agency may approve alternative equivalent testing methods for a particular person's use to determine whether specified waste streams are subject to these regulations. This shall-must be done by permit condition or letter.
- c) The testing methods specified in 35 Ill. Adm. Code 721 or alternative equivalent testing methods approved by the Agency need not be applied to identify or distinguish waste streams that are known, admitted, or assumed to be subject to these regulations. In this case, any method may be used, subject to the Agency's authority over to approve the testing procedures (Section 725.113) used.
- d) Any petition to the Board or request to the Agency concerning alternative equivalent testing methods must include the information required by 40 CFR Section 260.21(b).
- e) Alternative equivalent testing methods will not be approved if the result of the approval would make the Illinois RCRA Subtitle C program less than substantially equivalent to the federal.

(Source: Amended a	t 27 Ill. Reg	, effective	)	
Section 720.122	Waste Delisting			

- a) Any person seeking to exclude a waste from a particular generating facility from the lists in <u>Subpart D of 35 Ill.</u> Adm. Code 721. Subpart D may file a petition, as specified in subsection (n) below of this Section. The Board will grant the petition if the following occur:
  - 1) The petitioner demonstrates that the waste produced by a particular generating facility does not meet any of the criteria under which the waste was listed as a hazardous or acute hazardous waste; and
  - If the Board determines that there is a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be a hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "Petitions to Delist—A Guidance Manual", "EPA RCRA Delisting Program—Guidance Manual for the Petitioner," incorporated by reference in Section 720.111. A waste that is so excluded, however, still may be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721. Subpart C.

- b) Listed wastes and mixtures. A person may also petition the Board to exclude from 35 Ill. Adm. Code 721.103(a)(2)(B) or (a)(2)(C), a waste that is described in these Sections and is either a waste listed in Subpart D of 35 Ill. Adm. Code 721. Subpart D, or is derived from a waste listed in that Subpart. This exclusion may only be granted for a particular generating, storage, treatment, or disposal facility. The petitioner shall must make the same demonstration as required by subsection (a) above of this Section. Where the waste is a mixture of a solid waste and one or more listed hazardous wastes or is derived from one or more listed hazardous wastes, the demonstration must be made with respect to the waste mixture as a whole; analyses must be conducted for not only those constituents for which the listed waste contained in the mixture was listed as hazardous, but also for factors (including additional constituents) that could cause the waste mixture to be a hazardous waste. A waste that is so excluded may still be a hazardous waste by operation of Subpart C of 35 III. Adm. Code 721. Subpart C.
- c) Ignitable, corrosive, reactive and toxicity characteristic wastes. If the waste is listed in codes "I<sub>2</sub>", "C<sub>2</sub>", "R" or "E" in <u>Subpart D of 35 Ill.</u> Adm. Code 721. Subpart D:
  - The petitioner shall-must demonstrate that the waste does not exhibit the relevant characteristic for which the waste was listed, as defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections. The petitioner shall-must also show that the waste does not exhibit any of the other characteristics, defined in those Sections, using any applicable methods prescribed in those Sections;
  - Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "Petitions to Delist—A Guidance Manual", "EPA RCRA Delisting Program—Guidance Manual for the Petitioner," incorporated by reference in Section 720.111. A waste that is so excluded, however, may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721. Subpart C.
- d) Toxic waste. If the waste is listed in code "T" in <u>Subpart D of 35 III.</u> Adm. Code 721<del>.Subpart D</del>:
  - 1) The petitioner <u>shall must</u> demonstrate that the waste <u>fulfills the following</u> criteria:

- A) Does It does not contain the constituent or constituents (as defined in Appendix G of 35 Ill. Adm. Code 721. Appendix G) that caused U.S. EPA USEPA to list the waste, using the appropriate test methods prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", U.S. EPA USEPA Publication SW-846, as incorporated by reference in Section 720.111; or
- B) Although containing one or more of the hazardous constituents (as defined in <u>Appendix G of 35 Ill.</u> Adm. Code 721. Appendix G) that caused <u>U.S. EPA USEPA</u> to list the waste, the waste does not meet the criterion of 35 Ill. Adm. Code 721.111(a)(3) when considering the factors used in 35 Ill. Adm. Code 721.111(a)(3)(A) through (a)(3)(K) under which the waste was listed as hazardous; and
- 2) Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste.
- The petitioner shall must demonstrate that the waste does not exhibit any of the characteristics, defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections.
- A waste that is so excluded, however, may still be a hazardous waste by operation of Subpart C of 35 Ill. Adm. Code 721<del>.Subpart C</del>.
- e) Acute hazardous waste. If the waste is listed with the code "H" in <u>Subpart D of</u> 35 Ill. Adm. Code 721<del>.Subpart D</del>:
  - 1) The petitioner shall must demonstrate that the waste does not meet the criterion of 35 Ill. Adm. Code 721.111(a)(2); and
  - 2) Based on a complete petition, the Board will determine, if it has a reasonable basis to believe that factors (including additional constituents) other than those for which the waste was listed could cause the waste to be hazardous waste, that such factors do not warrant retaining the waste as a hazardous waste. A Board determination under the preceding sentence must be made by reliance on, and in a manner consistent with, "Petitions to Delist—A Guidance Manual", "EPA RCRA Delisting Program—Guidance Manual for the Petitioner," incorporated by reference in Section 720.111.

- The petitioner shall must demonstrate that the waste does not exhibit any of the characteristics, defined in 35 Ill. Adm. Code 721.121, 721.122, 721.123, or 721.124, using any applicable methods prescribed in those Sections.
- A waste that is so excluded, however, may still be a hazardous waste by operation of <u>Subpart C of</u> 35 Ill. Adm. Code 721<del>.Subpart C</del>.
- h) Demonstration samples must consist of enough representative samples, but in no case less than four samples, taken over a period of time sufficient to represent the variability or the uniformity of the waste.
- i) Each petition must include, in addition to the information required by subsection (n) below of this Section:
  - 1) The name and address of the laboratory facility performing the sampling or tests of the waste;
  - 2) The names and qualifications of the persons sampling and testing the waste;
  - 3) The dates of sampling and testing;
  - 4) The location of the generating facility;
  - A description of the manufacturing processes or other operations and feed materials producing the waste and an assessment of whether such processes, operations, or feed materials can or might produce a waste that is not covered by the demonstration;
  - A description of the waste and an estimate of the average and maximum monthly and annual quantities of waste covered by the demonstration;
  - Pertinent data on and discussion of the factors delineated in the respective criterion for listing a hazardous waste, where the demonstration is based on the factors in 35 Ill. Adm. Code 721.111(a)(3);
  - 8) A description of the methodologies and equipment used to obtain the representative samples;
  - 9) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, and preservation of the samples;

- 10) A description of the tests performed (including results);
- 11) The names and model numbers of the instruments used in performing the tests; and
- 12) The following statement signed by the generator or the generator's authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

- j) After receiving a petition, the Board may request any additional information that the Board needs to evaluate the petition.
- k) An exclusion will only apply to the waste generated at the individual facility covered by the demonstration and will not apply to waste from any other facility.
- 1) The Board will exclude only part of the waste for which the demonstration is submitted if the Board determines that variability of the waste justifies a partial exclusion.
  - BOARD NOTE: See "Petitions to Delist—A Guidance Manual", "EPA RCRA Delisting Program—Guidance Manual for the Petitioner," incorporated by reference in Section 720.111.
- m) Delisting of specific wastes from specific sources that have been adopted by <del>U.S.</del> <u>EPA-USEPA</u> may be proposed as State regulations that are identical in substance pursuant to Section 720.120(a).
- n) Delistings that have not been adopted by <u>U.S. EPA USEPA</u> may be proposed to the Board pursuant to a petition for adjusted standard pursuant to <u>Subpart D of 35</u> Ill. Adm. Code—106.Subpart G 104. The justification for the adjusted standard is as specified in subsections (a) through (g)—above of this Section, as applicable to the waste in question. The petition must be clearly labeled as a RCRA delisting adjusted standard petition.

1) In accordance with 35 Ill. Adm. Code <u>106.710 101.304</u>, the petitioner <u>shall must</u> serve copies of the petition, and any other documents filed with the Board, on <u>U.S. EPA USEPA</u> at the following addresses:

U.S. EPAUSEPA

Office of Solid Waste and Emergency Response 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

U.S. EPAUSEPA, Region-V 5 230 S. Dearborn Street 77 West Jackson Boulevard Chicago, IL 60604

- 2) The Board will mail copies of all opinions and orders to <u>U.S. EPA-USEPA</u> at the above addresses.
- 3) In conjunction with the normal updating of the RCRA regulations, the Board will maintain, in <u>Appendix I of 35 Ill.</u> Adm. Code 721. Appendix I, a listing of all adjusted standards granted by the Board.
- o) The Agency may determine in a permit or a letter directed to a generator that, based on 35 Ill. Adm. Code 721, a waste from a particular source is not subject to these regulations. Such a finding is evidence against the Agency in any subsequent proceedings but <a href="mailto:shall-will">shall-will</a> not be conclusive with reference to other persons or the Board.
- p) Any petition to delist directed to the Board or request for determination directed to the Agency must include a showing that the waste will be generated or managed in Illinois.
- q) The Board will not grant any petition that would render the Illinois RCRA program less stringent than if the decision were made by <u>U.S. EPA USEPA</u>.
- r) Delistings apply only within Illinois. Generators shall-must comply with 35 Ill. Adm. Code 722 for waste that is hazardous in any state to which it is to be transported.

(Source: Amended a	t 27 Ill. Reg.	, effective _		)
Section 720.123	Petitions for	Regulation as Unive	rsal Waste	

a) Any person seeking to add a hazardous waste or a category of hazardous waste to the universal waste regulations of 35 Ill. Adm. Code 733 may petition for a

regulatory amendment under this Section, Section 720.120, and <u>Subpart G of 35</u> Ill. Adm. Code 733<del>.Subpart G</del>.

- b) Petition and Demonstration.
  - 1) To be successful, the petitioner must demonstrate each of the following:
    - A) That regulation under the universal waste regulations of 35 Ill. Adm. Code 733 is appropriate for the waste or category of waste;
    - B) That regulation under 35 Ill. Adm. Code 733 will improve management practices for the waste or category of waste; and
    - C) That regulation under 35 Ill. Adm. Code 733 will improve implementation of the hazardous waste program.
  - 2) The petition must include the information required by Section 720.120(b). The petition should also address as many of the factors listed in 35 Ill. Adm. Code 733.181 as are appropriate for the waste or category of waste addressed in the petition.
- c) The Board will grant or deny a petition using the factors listed in 35 Ill. Adm. Code 733.181. The decision will be based on the weight of evidence that shows the following with regard to regulation under 35 Ill. Adm. Code 733:
  - 1) That it is appropriate for the waste or category of waste,
  - 2) That it will improve management practices for the waste or category of waste, and
  - 3) That it will improve implementation of the hazardous waste program.
- d) The Board may request additional information to that set forth in 35 Ill. Adm. Code 733.181, as needed to evaluate the merits of the petition.

(Source: Amended at	27 Ill. Reg,	effective _	)	)
Section 720.132	Boiler Determinations			

In accordance with the standards and criteria in Section 720.110 (definition of "boiler"), and the procedures in 720.133, the Board will determine on a case-by-case basis that certain enclosed devices using controlled flame combustion are boilers, even though they do not otherwise meet the definition of boiler contained in Section 720.110, after considering the following criteria:

- a) The extent to which the unit has provisions for recovering and exporting thermal energy in the form of steam, heated fluids or heated gases; and
- b) The extent to which the combustion chamber and energy recovery equipment are of integral design; and
- c) The efficiency of energy recovery, calculated in terms of the recovered energy compared with the thermal value of the fuel;—and
- d) The extent to which exported energy is utilized; and
- e) The extent to which the device is in common and customary use as a "boiler" functioning primarily to produce steam, heated fluids or heated gases; and
- f) Other relevant factors.

Source: Amended at	27 Ill. Reg.	, effective	)
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Section 720.133 Procedures for Determinations

The Board will use the procedures of <u>Subpart D of 35 Ill.</u> Adm. Code <u>106-104</u> for determining whether a material is a solid waste or for determining whether a particular enclosed flame combustion device is a boiler.

(	Source:	Amended at 27	Ill. Reg.	, effective	,
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Section 720.140 Additional <u>regulation Regulation of certain hazardous waste Certain Hazardous Waste Recycling Activities on a case-by-case Case-by-Case Basis</u>

- a) The Agency may decide on a case-by-case basis that persons accumulating or storing the recyclable materials described in 35 III. Adm. Code 721.106(a)(2)(D) should be regulated under 35 III. Adm. Code 721.106(b) and (c) rather than under the provisions of <a href="Subpart F of">Subpart F of</a> 35 III. Adm. Code 726. Subpart F. The basis for this decision is that the materials are being accumulated or stored in a manner that does not protect human health and the environment because the materials or their toxic constituents have not been adequately contained, or because the materials being accumulated or stored together are incompatible. In making this decision, the Agency <a href="https://shall-must.consider">shall-must.consider</a> the following factors:
  - 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 procedures	for this decision	are set forth	in Section 720.141
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(Source: Amended at	27 Ill. Reg, effective	_)
Section 720.141	Procedures for case-by-case regulation Case-by-Case Reg hazardous Waste Recycling Activities	<u>ulation</u> of

The Agency shall-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) 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.Subpart F.

- If a generator is accumulating the waste, the Agency shall-must issue a notice a) setting forth the factual basis for the decision and stating that the person shall must comply with the applicable requirements of Subparts A, C, D and E of 35 Ill. Adm. Code 722. Subparts A, C, D and E. 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 shall-must hold a public hearing. The Agency shall must provide notice of the hearing to the public and allow public participation at the hearing. The Agency shall-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 shall-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 shall-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 shall 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 shall 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-Subparts D and E, and in any subsequent hearing.

(Source: Amended at 27 Ill.	Reg, effective	)
Section 720. Appendix A	Overview of 40 CFR, Subtitle C Regulations	
See Appendix I to 40 CFR 2	60.	
(Source: Amended at 27 III.	Reg, effective	)

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

## PART 721 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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

Section	
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#### 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 721.138 Comparable or Syngas Fuel Exclusion 721. Appendix A Representative Sampling Methods Method 1311 Toxicity Characteristic Leaching Procedure (TCLP) <del>721.</del>Appendix B <del>721.</del>Appendix C Chemical Analysis Test Methods Analytical Characteristics of Organic Chemicals (Repealed) Table A Table B Analytical Characteristics of Inorganic Species (Repealed) Table C Sample Preparation/Sample Introduction Techniques (Repealed) Basis for Listing Hazardous Wastes 721. Appendix G 721. Appendix H **Hazardous Constituents** <del>721.</del>Appendix I Wastes Excluded by Administrative Action Wastes Excluded by U.S. EPA-USEPA under 40 CFR 260.20 and 260.22 Table A from Non-Specific Sources Table B Wastes Excluded by USEPA under 40 CFR 260.20 and 260.22 from **Specific Sources** Table C Wastes Excluded by U.S. EPA-USEPA under 40 CFR 260.20 and 260.22 from Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof Wastes Excluded by the Board by Adjusted Standard Table D 721. Appendix J Method of Analysis for Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (Repealed) Table to Section 721.138 <del>721.</del>Appendix Y <del>721.</del>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 September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 III. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 III. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 III. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 III. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective September 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17490, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 17531, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 III. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1281, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9108, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6584, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. , effective

#### SUBPART A: GENERAL PROVISIONS

#### Section 721.101 Purpose and Scope

a) This Part identifies those solid wastes which that are subject to regulation as hazardous wastes under 35 Ill. Adm. Code 702, 703, 705, and 722 through 725, and 728, and which are subject to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. USC 6901 et seq.). In this Part:

- Subpart A of this Part defines the terms "solid waste" and "hazardous waste," identifies those wastes which that are excluded from regulation under 35 Ill. Adm. Code 702, 703, 705, and 722 through 726, and 728, and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste which that is recycled.
- 2) Subpart B<u>of this Part</u> sets forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes.
- 3) Subpart C of this Part identifies characteristics of hazardous wastes.
- 4) Subpart D<u>of this Part</u> lists particular hazardous wastes.
- b) Limitations on definition of solid waste:
  - The definition of solid waste contained in this Part applies only to wastes that also are hazardous for purposes of the regulations implementing Subtitle C of RCRA. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles or rubber) that are not otherwise hazardous wastes and that are recycled.
  - This Part identifies only some of the materials which that are solid wastes and hazardous wastes under Sections 1004(5), 1004(27) and 7003 of RCRA. A material which that is not defined as a solid waste in this Part, or is not a hazardous waste identified or listed in this Part, is still a hazardous waste for purposes of those Sections if, in the case of Section 7003 of RCRA, the statutory elements are established.
- c) For the purposes of Sections 721.102 and 721.106 the following definitions apply:
  - 1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.
  - 2) "Sludge" has the same meaning used in 35 Ill. Adm. Code 720.110.
  - A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

- 4) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.
- 5) A material is "used or reused" if it is either of the following is true:
  - A) Employed It is employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or
  - B) Employed It is employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment).
- 6) "Scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, railroad box cars) which that when worn or superfluous can be recycled.
- 7) A material is "recycled" if it is used, reused or reclaimed.
- 8) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that, —during the calendar year (commencing on January 1), —the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under Section 721.104(c) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

- 9) "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.
- "Processed scrap metal" is scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal that has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and fines, drosses and related materials that have been agglomerated. (Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (Section 721.104(a)(13))).
- "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries, such as turnings, cuttings, punchings, and borings.
- "Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries, and it includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap metal is also known as industrial or new scrap metal.
- d) The Agency has inspection authority pursuant to Section 3007 of RCRA and Section 4 of the Environmental Protection Act [415 ILCS 5/4].

(Source: Amended at	27 Ill. Reg	, effective	)
Section 721.102	Definition of S	Solid Waste	

- a) Solid waste.
  - 1) A solid waste is any discarded material that is not excluded by Section 721.104(a) or that is not excluded pursuant to 35 Ill. Adm. Code 720.130 and 720.131.
  - 2) A discarded material is any material that is <u>described as follows</u>:
    - A) Abandoned, as explained in subsection (b) of this Section;
    - B) Recycled, as explained in subsection (c) of this Section;
    - C) Considered inherently waste-like, as explained in subsection (d) of this Section; or

- D) A military munition identified as a solid waste in 35 Ill. Adm. Code 726.302.
- b) Materials are A material is a solid waste if they are it is abandoned by being in one of the following ways:
  - 1) Disposed-It is disposed of; or
  - 2) Burned It is burned or incinerated; or
  - 3) Accumulated, It is accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated.
- c) Materials are A material is a solid wastes waste if they are it is recycled--or accumulated, stored, or treated before recycling--as specified in subsections (c)(1) through (c)(4) of this Section, if they are one of the following occurs with regard to the material:
  - 1) Used The material is used in a manner constituting disposal.
    - A) Materials A material that is noted with a "yes" in column 1 of the table in Appendix Z of this Part are is a solid wastes waste when they are one of the following occurs:
      - i) Applied The material is applied to or placed on the land in a manner that constitutes disposal; or
      - ii) Used The material is used to produce products that are applied to or placed on the land or are otherwise contained in products that are applied to or placed on the land (in which cases the product itself remains a solid waste).
    - B) However, <u>a</u> commercial chemical <u>products product that is</u> listed in Section 721.133 <u>are is not a solid wastes waste</u> if they are it is applied to the land and that is their its ordinary manner of use.
  - 2) Burned The material is burned for energy recovery.
    - A) Materials A material that is noted with a "yes" in column 2 of the table in Appendix Z of this Part are is a solid wastes waste when they are one of the following occurs:

- i) Burned It is burned to recover energy;
- ii) Used It is used to produce a fuel or are is otherwise contained in fuels (in which case the fuel itself remains a solid waste);
- iii) Contained It is contained in fuels (in which case the fuel itself remains a solid waste).
- B) However, <u>a</u> commercial chemical <u>products product that is</u> listed in Section 721.133 <u>are is not a solid wastes waste if they are themselves fuels</u> it is itself a fuel.
- Reclaimed. Materials A material noted with a "yes" in column 3 of the table in Appendix Z of this Part are is a solid wastes waste when reclaimed (except as provided under Section 721.104(a)(17)). Materials A material noted with a "--" in column 3 of Appendix Z of this Part are is not a solid wastes waste when reclaimed.
- 4) Accumulated speculatively. Materials A material noted with "yes" in column 4 of the table in Appendix Z of this Part are is a solid wastes when accumulated speculatively.
- d) Inherently waste-like materials. The following materials are solid wastes when they are recycled in any manner:
  - 1) Hazardous waste numbers F020, F021 (unless used as an ingredient to make a product at the site of generation), F022, F023, F026, and F028.
  - 2) Secondary materials A secondary material fed to a halogen acid furnace that exhibit exhibits a characteristic of a hazardous waste or are which is listed as a hazardous waste, as defined in Subpart C or D of this Part, except for brominated material that meets the following criteria:
    - A) The material must contain a bromine concentration of at least 45 percent;
    - B) The material must contain less than a total of one percent of toxic organic compounds listed in Appendix H of this Part; and
    - C) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).
  - 3) The following criteria are used to add wastes to the list:

- A) Disposal method or toxicity.
  - i) The materials are material is ordinarily disposed of, burned, or incinerated; or
  - ii) The materials contain material contains toxic constituents listed in Appendix H of this Part and these constituents are not ordinarily found in raw materials or products for which the materials substitute material substitutes (or are found in raw materials or products in smaller concentrations) and are is not used or reused during the recycling process; and
- B) The material may pose a substantial hazard to human health and the environment when recycled.
- e) Materials that are not solid waste when recycled.
  - 1) Materials are A material is not solid wastes a waste when they it can be shown to be recycled by being fulfilling one of the following conditions:
    - A) <u>Used It is used or reused as ingredients an ingredient in an industrial process to make a product, provided the materials are material is not being reclaimed; or </u>
    - B) <u>Used It is used or reused as effective substitutes for commercial products; or</u>
    - C) Returned It is returned to the original process from which they are it is generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the materials material must be managed in such a manner that there is no placement on the land. In cases where the materials are material is generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at Section 721.104(a)(17) apply rather than this provision.
  - 2) The following materials are solid wastes, even if the recycling involves use, reuse, or return to the original process (described in subsections (e)(1)(A) through (e)(1)(C) of this Section):

- A) Materials A material used in a manner constituting disposal or used to produce products a product that are is applied to the land; or
- B) Materials A material burned for energy recovery, used to produce a fuel, or contained in fuels; or
- C) Materials A material accumulated speculatively; or
- D) Materials A material listed in subsections (d)(1) and (d)(2) of this Section.
- f) Documentation of claims that materials are a material is not a solid wastes waste or are is conditionally exempt from regulation. Respondents A respondent in an actions action to enforce regulations implementing Subtitle C of RCRA or Section 21 of the Environmental Protection Act that raise raises a claim that a certain material is not a solid waste or that the material is conditionally exempt from regulation must demonstrate that there is a known market or disposition for the material and that they meet the material meets the terms of the exclusion or exemption. In doing so, the person must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste or that the material is exempt from regulation. In addition, owners an owner or operators operator of facilities a facility claiming that they it actually are is recycling materials a material must show that they have it has the necessary equipment to do so recycle that material.

(Source: Amended a	at 27 Ill. Reg	, effective	e)
Section 721 103	Definition of H	Iazardous Waste	

- a) A solid waste, as defined in Section 721.102, is a hazardous waste if the following is true of the waste:
  - 1) It is not excluded from regulation as a hazardous waste under Section 721.104(b); and
  - 2) It meets any of the following criteria:
    - A) It exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded under Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under Subpart C of

this Part is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if the mixture continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Section 721.124 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

- B) It is listed in Subpart D of this Part and has not been excluded from the lists in Subpart D of this Part under 35 Ill. Adm. Code 720.120 and 720.122.
- C) This subsection corresponds with 40 CFR 261.3(a)(2)(iii), which USEPA removed and marked as "reserved" at 66 Fed. Reg. 27266 (May 16, 2001). This statement maintains structural consistency with the federal regulations.
- D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this Part and has not been excluded from this subsection (a)(2) under 35 Ill. Adm. Code 720.120 and 720.122, subsection (g) of this Section, or subsection (h) of this Section; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D of this Part are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this Section) if the generator demonstrates that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities that have eliminated the discharge of wastewater) and the following is true of the waste:
  - One It is one or more of the following solvents listed in Section 721.131: carbon tetrachloride, tetrachloroethylene, trichloroethylene, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million;

- ii) One-It is one or more of the following spent solvents listed in Section 721.131: methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million;
- One 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) A-It is a discarded commercial chemical product or chemical intermediate listed in Section 721.133 arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals: sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing;

- v) Wastewater 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) One It is one or more of the following wastes listed in Section 721.132: wastewaters from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight; or
- vii) Wastewaters It is wastewater derived from the treatment of one or more of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA Hazardous Waste No. K156), provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter.
- E) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of this Part. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846,

incorporated by reference at 35 Ill. Adm. Code 720.111, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of this Part).

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

Constituent

Maximum for any single composite sample (mg/L)

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:

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

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

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

BOARD NOTE: This subsection would normally correspond with 40 CFR 261.3(e), a subsection which 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, or 730:
  - 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 <u>Table F to 35 Ill.</u> Adm. Code 728. Table F; 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<u>of this Part</u> 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 under this subection (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.
  - Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of <u>Subpart N of</u> 35 Ill. Adm. Code 726. Subpart N (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 under this subsection (h) must meet the eligibility criteria and specified conditions in 35 Ill. Adm. Code 726.325 and 726.330 (for storage and treatment) and in 35 Ill. Adm. Code 726.410 and 726.415 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

(Source: Amended at	27 Ill. Reg	, effective	)
Section 721.104	Exclusions		

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

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

- 3) Irrigation return flows.
- 4) Source, by-product, or special nuclear material, as defined by the Atomic Energy Act of 1954, as amended (42 USC 2011 et seq.).
- 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 twelve-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 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 <u>Subpart W of 35 Ill.</u> Adm. Code 725. Subpart W, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and
- v) Prior to operating pursuant to this exclusion, the plant owner or operator submits a one-time notification to the Agency stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records for a period of no less than three years from the date specified in the notice. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Agency for reinstatement. The Agency must reinstate the exclusion in writing if it finds that the plant has returned to compliance with all conditions and that violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. The applicant under this subsection (a)(9)(C)(v) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].
- 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, and 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 III. 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 which 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 which 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 <u>Subpart D of 35 Ill.</u> Adm. Code 703. Subpart D 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 which prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and it must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. A tank used for this purpose must be structurally sound and, if outdoors, it must have a roof or cover that prevents contact with wind and rain. A container used for this purpose must be kept closed, except when it is necessary to add or remove

- material, and it must be in sound condition. Containers that are stored outdoors must be managed within storage areas that fulfill the conditions of subsection (a)(20)(F) of this Section:
- iii) With each off-site shipment of excluded hazardous secondary materials, it must provide written notice to the receiving facility that the material is subject to the conditions of this subsection (a)(20).
- iv) It must maintain records at the generator's or intermediate handler's facility for no less than three years of all shipments of excluded hazardous secondary materials. For each shipment these records must, at a minimum, contain the information specified in subsection (a)(20)(G) of this Section.
- C) A manufacturer of zinc fertilizers or zinc fertilizer ingredients

  made from excluded hazardous secondary materials must fulfill the
  following conditions:
  - i) It must store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subsection (a)(20)(B)(ii) of this Section.
  - ii) It must submit a one-time notification to the Agency that, at a minimum, specifies the name, address, and USEPA identification number of the manufacturing facility and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).
  - iii) It must maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, the name of transporter, and the date on which the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

- iv) It must submit an annual report to the Agency that

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

BOARD NOTE: Subsections (a)(20)(F)(i) through (a)(20)(F)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(B)(1) through (a)(20)(ii)(B)(3). The Board added the preamble to these federal paragraphs as subsection (a)(20)(F) to comport with Illinois Administrative Code codification requirements.

- G) Required records of shipments of excluded hazardous secondary materials must, at a minimum, contain the following information:
  - i) The name of the transporter and date of the shipment;

- ii) The name and address of the facility that received the excluded material, along with documentation confirming receipt of the shipment; and
- iii) The type and quantity of excluded secondary material in each shipment.

BOARD NOTE: Subsections (a)(20)(G)(i) through (a)(20)(G)(iii) are derived from 40 CFR 261.4(a)(20)(ii)(D)(1) through (a)(20)(ii)(D)(3). The Board added the preamble to these federal paragraphs as subsection (a)(20)(G) to comport with Illinois Administrative Code codification requirements.

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

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

- ii) For dioxin contaminants, the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).
- B) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less frequently than once every six months, and for dioxins no less frequently than once every 12 months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are

- unbiased, precise, and representative of the products introduced into commerce.
- C) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with the requirements of subsection (a)(21)(B) of this Section. Such records must at a minimum include the following:
  - i) The dates and times product samples were taken, and the dates the samples were analyzed;
  - ii) The names and qualifications of the persons taking the samples:
  - iii) A description of the methods and equipment used to take the samples;
  - iv) The name and address of the laboratory facility at which analyses of the samples were performed;
  - v) A description of the analytical methods used, including any cleanup and sample preparation methods; and
  - vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (a)(21).
- b) Solid wastes that are not hazardous wastes. The following solid wastes are not hazardous wastes:
  - Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste must not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this Part, if the following describe the such-facility:
    - A) Receives The facility receives and burns only the following waste:

- i) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); and or
- ii) Solid waste from commercial or industrial sources that does not contain hazardous waste; and
- B) Such 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 (Sections Section 721.124 and 721. 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 it is shown by a waste generator or by waste generators that 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) Specific 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)-are:
  - i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
  - ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
  - iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue;

- iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
- v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;
- vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;
- vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; 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.
- 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 certain 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 is-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

- ii) The solid wastes described in subsection (b)(15)(A)(i) of this Section were disposed of prior to the effective date of the listing (as set forth in that subsection);
- iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor is derived from any other listed hazardous waste; and

- iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under section 307(b) or 402 of the federal Clean Water Act.
- B) Leachate or gas condensate derived from K169, K170, K171, or K172 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, or K178 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subsection (b)(15) of this Section after the emergency ends.
- 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, 705, and 722 through 725, and 728 or to the notification requirements of section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing or for storage or transportation of product or raw materials.

## d) Samples.

- 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, 705, and 722 through 726, and 728. The sample qualifies when it fulfills one of the following conditions:
  - A) The sample is being transported to a laboratory for the purpose of testing;

- B) The sample is being transported back to the sample collector after testing;
- C) The sample is being stored by the sample collector before transport to a laboratory for testing;
- D) The sample is being stored in a laboratory before testing;
- E) The sample is being stored in a laboratory for testing but before it is returned to the sample collector; or
- F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
- 2) In order to qualify for the exemption in subsection (d)(1)(A) or (d)(1)(B) of this Section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must do the following:
  - A) Comply with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or
  - B) Comply with the following requirements if the sample collector determines that USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
    - i) Assure that the following information accompanies the sample: The sample collector's name, mailing address, and telephone number; the laboratory's name, mailing address, and telephone number; the quantity of the sample; the date of the shipment; and a description of the sample-; and
    - ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.
- 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, 1000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, or 2500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;
  - B) The mass of each shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2500 kg of media contaminated with acute hazardous waste, 1000 kg of hazardous waste, and 1 kg of acute hazardous waste;
  - C) The sample must be packaged so that it does not leak, spill, or vaporize from its packaging during shipment and the requirements of subsections (e)(2)(C)(i) or (e)(2)(C)(ii) of this Section are met.
    - i) The transportation of each sample shipment complies with U.S. Department of Transportation (USDOT), U.S. Postal Service (USPS), or any other applicable shipping requirements; or

- ii) If the USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number;
- D) The sample is shipped to a laboratory or testing facility that is exempt under subsection (f) of this Section, or has an appropriate RCRA permit or interim status;
- E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:
  - i) Copies of the shipping documents;
  - ii) A copy of the contract with the facility conducting the treatability study; and
  - iii) Documentation showing the following: The amount of waste shipped under this exemption; the name, address, and USEPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and whether or not unused samples and residues were returned to the generator; and
- F) The generator reports the information required in subsection (e)(2)(E)(iii) of this Section in its report under 35 Ill. Adm. Code 722.141.
- 3) The Agency may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsections (e)(2)(A), (e)(2)(B), and (f)(4) of this Section, for up to an additional 5000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2500 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, 705, 722 through 726, and 728 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act, provided that the requirements of subsections (f)(1) through (f)(11) 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, 2500 kg of media contaminated with acute hazardous waste, or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

- 4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2500 kg of media contaminated with acute hazardous waste, 1000 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.
- No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.
- 6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- 7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:
  - A) The name, address, and USEPA identification number of the generator or sample collector of each waste sample;
  - B) The date the shipment was received;
  - C) The quantity of waste accepted;
  - D) The quantity of "as received" waste in storage each day;
  - E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
  - F) The date the treatability study was concluded;
  - G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample

- collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.
- 8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.
- 9) The facility prepares and submits a report to the Agency by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
  - A) The name, address, and USEPA identification number of the facility conducting the treatability studies;
  - B) The types (by process) of treatability studies conducted;
  - C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);
  - D) The total quantity of waste in storage each day;
  - E) The quantity and types of waste subjected to treatability studies;
  - F) When each treatability study was conducted; and
  - G) The final disposition of residues and unused sample from each treatability study.
- 10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703, and 721 through 728, unless the residues and unused samples are returned to the sample originator under the exemption of subsection (e) of this Section.
- 11) The facility notifies the Agency by letter when the facility is no longer planning to conduct any treatability studies at the site.
- g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under section 404 of the Federal Water Pollution Control Act (33 USC 1344) is not a hazardous waste. For the purposes of this subsection (g), the following definitions apply:

"Dredged material" has the same meaning as in 40 CFR 232.2, incorporated by reference in 35 Ill. Adm. Code 720.111.

"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 a	t 27 III. Reg	, effective		)
Section 721.105	Special Requireme	ents for Hazardous	Waste Generated by	Small Quantity

Generators

exception of 35 Ill. Adm. Code 809.

- a) A generator is a conditionally exempt small quantity generator in a calendar month if it generates no more than 100 kilograms of hazardous waste in that month. 35 Ill. Adm. Code 700 explains the relation of this to the 100 kg/mo
- b) Except for those wastes identified in subsections (e), (f), (g), and (j) of this Section, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under 35 Ill. Adm. Code 702, 703, 705 and 722 through 726, and 728, and the notification requirements of section 3010 of Resource Conservation and Recovery Act, provided the generator complies with the requirements of subsections (f), (g), and (j) of this Section.
- c) When making the quantity determinations of this Part and 35 Ill. Adm. Code 722, the generator must include all hazardous waste that it generates, except the following hazardous waste:
  - Hazardous waste that is exempt from regulation under Section 721.104(c) through (f), 721.106(a)(3), 721.107(a)(1), or 721.108;

- 2) Hazardous waste that is managed immediately upon generation only in onsite elementary neutralization units, wastewater treatment units, or totally enclosed treatment facilities, as defined in 35 Ill. Adm. Code 720.110;
- 3) Hazardous waste that is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under Section 721.106(c)(2);
- 4) Hazardous waste that is used oil managed under the requirements of Section 721.106(a)(4) and 35 Ill. Adm. Code 739;
- 5) Hazardous waste that is spent lead-acid batteries managed under the requirements of <u>Subpart G of 35 Ill.</u> Adm. Code 726. Subpart G; and
- 6) Hazardous waste that is universal waste managed under Section 721.109 and 35 Ill. Adm. Code 733.
- d) In determining the quantity of hazardous waste it generates, a generator need not include the following:
  - 1) Hazardous waste when it is removed from on-site storage; or
  - 2) Hazardous waste produced by on-site treatment (including reclamation) of its hazardous waste so long as the hazardous waste that is treated was counted once; or
  - 3) Spent materials that are generated, reclaimed, and subsequently reused onsite, so long as such spent materials have been counted once.
- e) If a generator generates acute hazardous waste in a calendar month in quantities greater than set forth below, all quantities of that acute hazardous waste are subject to full regulation under 35 Ill. Adm. Code 702, 703, 705 and 722 through 726, and 728, and the notification requirements of section 3010 of the Resource Conservation and Recovery Act:
  - 1) A total of one kilogram of one or more of the acute hazardous wastes listed in Section 721.131, 721.132, or 721.133(e); or
  - A total of 100 kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any one or more of the acute hazardous wastes listed in Section 721.131, 721.132, or 721.133(e).

- BOARD NOTE: "Full regulation" means those regulations applicable to generators of greater than 1000 kg of non-acute hazardous waste in a calendar month.
- f) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those set forth in subsection (e)(1) or (e)(2) of this Section to be excluded from full regulation under this Section, the generator must comply with the following requirements:
  - 1) 35 Ill. Adm. Code 722.111.
  - The generator may accumulate acute hazardous waste on-site. If the generator accumulates at any time acute hazardous wastes in quantities greater than set forth in subsection (e)(1) or (e)(2) of this Section, all of those accumulated wastes are subject to regulation under 35 Ill. Adm. Code 702, 703, 705 and 722 through 726, and 728, and the applicable notification requirements of section 3010 of the Resource Conservation and Recovery Act. The time period of 35 Ill. Adm. Code 722.134(a), for accumulation of wastes on-site, begins when the accumulated wastes exceed the applicable exclusion limit.
  - A conditionally exempt small quantity generator may either treat or dispose of its acute hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, any of which, if located in the United States, meets any of the following conditions:
    - A) The facility is permitted under 35 Ill. Adm. Code 702 and 703;
    - B) The facility has interim status under 35 Ill. Adm. Code 702, 703, and 725:
    - C) The facility is authorized to manage hazardous waste by a state with a hazardous waste management program approved by USEPA pursuant to 40 CFR 271;
    - D) The facility is permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill facility, the landfill is subject to 35 Ill. Adm. Code 810 through 814 or 40 CFR 258;
    - E) The facility is permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a

non-municipal non-hazardous waste disposal unit, the unit is subject to the requirements of 40 CFR 257.5 through 257.30;

BOARD NOTE: The Illinois non-hazardous waste landfill regulations, 35 Ill. Adm. Code 810 through 814, do not allow the disposal of hazardous waste in a landfill regulated under those rules. The Board intends that subsections (f)(3)(D) and (f)(3)(E) of this Section impose a federal requirement on the hazardous waste generator. The Board specifically does not intend that these subsections authorize any disposal of conditionally-exempt small quantity generator waste in a landfill not specifically permitted to accept the particular hazardous waste.

- F) The facility is one that <u>fulfills one of the following conditions</u>:
  - i) Beneficially It beneficially uses or reuses or legitimately recycles or reclaims its waste; or
  - ii) Treats It treats its waste prior to beneficial use or reuse, or legitimate recycling or reclamation; or
- G) For universal waste managed under 35 Ill. Adm. Code 733 or 40 CFR 273, the facility is a universal waste handler or destination facility subject to the requirements of 35 Ill. Adm. Code 733 or 40 CFR 273.
- g) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of less than 100 kilograms of hazardous waste during a calendar month to be excluded from full regulation under this Section, the generator must comply with the following requirements:
  - 1) 35 Ill. Adm. Code 722.111;
  - The conditionally exempt small quantity generator may accumulate hazardous waste on-site. If it accumulates at any time more than a total of 1000 kilograms of the generator's hazardous waste, all of those accumulated wastes are subject to regulation under the special provisions of 35 Ill. Adm. Code 722 applicable to generators of between 100 kg and 1000 kg of hazardous waste in a calendar month, as well as the requirements of 35 Ill. Adm. Code 702, 703, 705 and 723 through 726, and 728, and the applicable notification requirements of Section 3010 of the Resource Conservation and Recovery Act. The time period of 35 Ill. Adm. Code 722.134(d) for accumulation of wastes on-site begins for a

- small quantity generator when the accumulated wastes exceed 1000 kilograms;
- A conditionally exempt small quantity generator may either treat or dispose of its hazardous waste in an on-site facility or ensure delivery to an off-site treatment, storage, or disposal facility, any of which, if located in the United States, meets any of the following conditions:
  - A) The facility is permitted under 35 Ill. Adm. Code 702 and 703;
  - B) The facility has interim status under 35 Ill. Adm. Code 702, 703, and 725;
  - C) The facility is authorized to manage hazardous waste by a state with a hazardous waste management program approved by USEPA under 40 CFR 271-(1986) (2002);
  - D) The facility is permitted, licensed, or registered by a state to manage municipal solid waste and, if managed in a municipal solid waste landfill facility, the landfill is subject to 35 Ill. Adm. Code 810 through 814 or 40 CFR 258;
  - E) The facility is permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, the unit is subject to the requirements of 40 CFR 257.5 through 257.30;
    - BOARD NOTE: The Illinois non-hazardous waste landfill regulations, 35 Ill. Adm. Code 810 through 814, do not allow the disposal of hazardous waste in a landfill regulated under those rules. The Board intends that subsections (g)(3)(D) and (g)(3)(E) of this Section impose a federal requirement on the hazardous waste generator. The Board specifically does not intend that these subsections authorize any disposal of conditionally-exempt small quantity generator waste in a landfill not specifically permitted to accept the particular hazardous waste.
  - F) The facility is one that <u>fulfills the following conditions</u>:
    - i) Beneficially It beneficially uses or re-uses, or legitimately recycles or reclaims the small quantity generator's waste; or

- ii) Treats It treats its waste prior to beneficial use or re-use, reuse or legitimate recycling or reclamation; or
- G) For universal waste managed under 35 Ill. Adm. Code 733 or 40 CFR 273, the facility is a universal waste handler or destination facility subject to the requirements of 35 Ill. Adm. Code 733 or 40 CFR 273.
- h) Hazardous waste subject to the reduced requirements of this Section may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this Section, unless the mixture meets any of the characteristics of hazardous wastes identified in Subpart C of this Part.
- i) If a small quantity generator mixes a solid waste with a hazardous waste that exceeds a quantity exclusion level of this Section, the mixture is subject to full regulation.
- j) If a conditionally exempt small quantity generator's hazardous wastes are mixed with used oil, the mixture is subject to 35 Ill. Adm. Code 739 if it is destined to be burned for energy recovery. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated if it is destined to be burned for energy recovery.

(Source: Amended at	27 Ill. Reg, effective
Section 721.106	Requirements for Recyclable Materials

- a) Recyclable materials:
  - Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of subsections (b) and (c) of this Section, except for the materials listed in subsections (a)(2) and (a)(3) of this Section. Hazardous wastes that are recycled will be known as "recyclable materials.":
  - The following recyclable materials are not subject to the requirements of this Section but are regulated under <u>Subparts C through H of 35 Ill.</u> Adm. Code 726. Subparts C through H and all applicable provisions in 35 Ill. Adm. Code 702, and 703, and 705.
    - A) Recyclable materials used in a manner constituting disposal (Subpart C of 35 Ill. Adm. Code 726.Subpart C);

- B) Hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under <u>Subpart O of 35 III.</u> Adm. Code 724. Subpart O or 725. Subpart O of this Part (Subpart H of 35 III. Adm. Code 726. Subpart H);
- C) Recyclable materials from which precious metals are reclaimed (Subpart F of 35 Ill. Adm. Code 726. Subpart F); and
- D) Spent lead-acid batteries that are being reclaimed (Subpart G of 35 Ill. Adm. Code 726. Subpart G).
- The following recyclable materials are not subject to regulation under 35 Ill. Adm. Code 722 through 726, 728, or 702, and 703, or 705 and are not subject to the notification requirements of section 3010 of the Resource Conservation and Recovery Act:
  - A) Industrial ethyl alcohol that is reclaimed except that, unless provided otherwise in an international agreement as specified in 35 Ill. Adm. Code 722.158, the following requirements continue to apply:
    - i) A person initiating a shipment for reclamation in a foreign country and any intermediary arranging for the shipment shall-must comply with the requirements applicable to a primary exporter in 35 Ill. Adm. Code 722.153; 722.156(a)(1) through (a)(4), (a)(6), and (b); and 722.157; shall-must export such materials only upon consent of the receiving country and in conformance with the USEPA Acknowledgment of Consent, as defined in Subpart E of 35 Ill. Adm. Code 722.Subpart E; and shall-must provide a copy of the USEPA Acknowledgment of Consent to the shipment to the transporter transporting the shipment for export; and
    - ii) Transporters transporting a shipment for export shall-must not accept a shipment if the transporter knows that the shipment does not conform to the USEPA Acknowledgement of Consent, shall-must ensure that a copy of the USEPA Acknowledgement of Consent accompanies the shipment, and shall-must ensure that it is delivered to the facility designated by the person initiating the shipment;
  - B) Scrap metal that is not excluded under Section 721.104(a)(13);

- C) Fuels produced from the refining of oil-bearing hazardous wastes along with normal process streams at a petroleum refining facility if such wastes result from normal petroleum refining, production, and transportation practices (this exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste where such recovered oil is already excluded under Section 721.104(a)(12));
- D) Petroleum refining wastes.
  - i) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil, so long as the resulting fuel meets the used oil specification under 35 Ill. Adm. Code 739.111 and so long as no other hazardous wastes are used to produce the hazardous waste fuel;
  - ii) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production, and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under 35 Ill. Adm. Code 739.111; and
  - iii) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil fuel specification under 35 Ill. Adm. Code 739.111.
- 4) Used oil that is recycled and is also a hazardous waste solely because it exhibits a hazardous characteristic is not subject to the requirements of 35 Ill. Adm. Code 720 through 728, but it is regulated under 35 Ill. Adm. Code 739. Used oil that is recycled includes any used oil that is reused for any purpose following its original use (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

- Hazardous waste that is exported to or imported from designated member countries of the Organization for Economic Cooperation and Development (OECD), as defined in Section 722.158(a)(1), for the purpose of recovery is subject to the requirements of Subpart H of 35 Ill. Adm. Code 722.Subpart H if it is subject to either the hazardous waste manifesting requirements of 35 Ill. Adm. Code 722 or the universal waste management standards of 35 Ill. Adm. Code 733.
- b) Generators and transporters of recyclable materials are subject to the applicable requirements of 35 Ill. Adm. Code 722 and 723 and the notification requirements under section 3010 of the Resource Conservation and Recovery Act, except as provided in subsection (a) of this Section.
- c) Storage and recycling:
  - Owners or operators of facilities that store recyclable materials before they are recycled are regulated under all applicable provisions of <a href="Subparts A">Subparts A</a> <a href="Millingstander-Hough L">Millingstander-Hough L</a>, AA, BB, and CC of 35 Ill. Adm. Code 702, 703, and 705; 724. <a href="Subparts A through L">Subparts A through L</a>, AA, BB, and CC of 35 Ill. Adm. Code 725. <a href="Subparts A through L">Subparts A through L</a>, AA, BB, and CC; 726; 728; and the notification requirement under section 3010 of the Resource Conservation and Recovery Act, except as provided in subsection (a) of this Section. (The recycling process itself is exempt from regulation, except as provided in subsection (d) of this Section.)
  - Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in subsection (a) of this Section, the following requirements continue to apply:
    - A) Notification requirements under section 3010 of the Resource Conservation and Recovery Act,
    - B) 35 Ill. Adm. Code 725.171 and 725.172 (dealing with the use of the manifest and manifest discrepancies), and
    - C) <u>subsection Subsection (d) of this Section.</u>
- d) Owners or operators of facilities required to have a RCRA permit pursuant to 35 Ill. Adm. Code 703 with hazardous waste management units that recycle hazardous wastes are subject to <u>Subparts AA and BB of 35 Ill. Adm. Code 724-Subparts AA and BB</u> and <u>Subparts AA and BB of 35 Ill. Adm. Code 725-Subparts AA and BB.</u>

(Source:	Amended at 27 Ill. R	eg. , effective	

Section 721.107 Residues of Hazardous Waste in Empty Containers

- a) Applicability of rules:
  - Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in subsection (b), is not subject to regulation under 35 Ill. Adm. Code 702, 703, 705, 721 through 725, or 728, or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.
  - Any hazardous waste in either a container that is not empty or an inner liner that is removed from a container that is not empty, as defined in subsection (b), is subject to regulations under 35 Ill. Adm. Code 702, 703, 705, 721 through 725, and 728 and to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.
- b) Definition of "empty:":
  - A container or an empty inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Sections 721.131, 721.132, or 721.133(e), is empty if the conditions of subsections (b)(1)(A) and (b)(1)(B) of this Section exist, subject to the limitations of subsection (b)(1)(C) of this Section:
    - A) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and
    - B) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or
    - C) Weight limits:
      - i) No more than 3-three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 110 gallons in size, or
      - ii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 110 gallons in size.

- 2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches <u>ambient</u> atmospheric <u>pressure</u>.
- A container or an inner liner removed from a container that has held an acute hazardous waste listed in Sections 721.131, 721.132, or 721.133(e) is empty if any of the following occurs:
  - A) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;
  - B) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or
  - C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

(Source: Amended at	t 27 Ill. Reg, effective	)
Section 721.108	PCB Wastes Regulated under TSCA	

Polychlorinatedbiphenyl-(PCB-)containing dielectric fluid and electric equipment containing such fluid, which that are authorized for use and regulated under 40 CFR 761, incorporated by reference in 35 Ill. Adm. Code 720.111, and which are hazardous only because they fail the test for toxicity characteristic (hazardous waste codes D018 through D043 only), are exempt from regulation under 35 Ill. Adm. Code 702, 703, 705, 721 through 725, and 728, and from the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

(Source:	Amended at 27 Ill. Reg.	, effective	

Section 721.109 Requirements for Universal Waste

The wastes listed in this Section are exempt from regulation under 35 Ill. Adm. Code 702 through 705, 703, 722 through 726, and 728, except as specified in 35 Ill. Adm. Code 733, and are therefore not fully regulated as hazardous waste. The <u>following</u> wastes <del>listed in this Section</del> are subject to regulation under 35 Ill. Adm. Code 733:

- a) Batteries, as described in 35 Ill. Adm. Code 733.102;
- b) Pesticides, as described in 35 Ill. Adm. Code 733.103;

c)	Thermostats, as described in 35 Ill. Adm. Code 733.104; and			
d)	Lamps, as described in 35 Ill. Adm. Code 733.105.			
(Source: Am	ended a	t 27 Ill.	Reg)	
			ERIA FOR IDENTIFYING THE CHARACTERISTICS OF WASTE AND FOR LISTING HAZARDOUS WASTES	
Section 721.1	.10	Criteri	ia for Identifying the Characteristics of Hazardous Waste	
a)	charac		d in corresponding 40 CFR 261.10 that it identifies and defines a of hazardous waste in Subpart C of this Part only upon determining ving:	
	1)		t a solid waste which that exhibits the characteristic may do either following:	
		A)	Cause, It could cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or	
		B)	Pose It could pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of or otherwise managed; and	
	2)	The T	hat the characteristic can be as follows:	
		A)	Measured It can be measured by an available standardized test method which that is reasonable within the capability of generators of solid waste or private sector laboratories which that are available to serve generators of solid waste; or	
		B)	Reasonably It can reasonably be detected by generators of solid waste through their knowledge of their waste.	
b)	Delist	ing proc	cedures are contained in 35 Ill. Adm. Code 720.122.	
(Source: Am	ended a	t 27 Ill.	Reg)	

### Section 721.111 Criteria for Listing Hazardous Waste

- a) USEPA <u>stated in corresponding 40 CFR 261.11 that it lists</u> a solid waste as a hazardous waste only upon determining that the solid waste meets one of the following criteria:
  - 1) It-The solid waste exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part; or
  - Acute hazardous waste. It The solid waste has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 mg/kg, an inhalation LC 50 toxicity (rat) of less than 2 mg/L, or a dermal LD 50 toxicity (rabbit) of less than 200 mg/kg or is otherwise capable of causing or significantly contributing to an increase in serious irreversible or incapacitating reversible, illness.
    - BOARD NOTE: Waste listed in accordance with these criteria are designated Acute Hazardous Waste.
  - Toxic waste. It The solid waste contains any of the toxic constituents listed in Appendix H of this Part and, after considering the following factors, USEPA concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed:

BOARD NOTE: Substances are listed in Appendix H of this Part only if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic, or teratogenic effects on humans or other life forms.

- A) The nature of the toxicity presented by the constituent.
- B) The concentration of the constituent in the waste:
- C) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in subsection (a)(3)(G): of this Section;
- D) The persistence of the constituent or any toxic degradation product of the constituent.

- E) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation—:
- F) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems-;
- G) The plausible types of improper management to which the waste could be subjected—:
- H) The quantities of the waste generated at individual generation sites or on a regional or national basis-;
- I) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of the wastes containing the constituent.
- J) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent—; and
- K) Such other factors as may be appropriate.

BOARD NOTE: Wastes listed in accordance with these criteria are designated toxic wastes.

- b) USEPA stated in corresponding 40 CFR 261.11(b) that it may list classes or types of solid waste as hazardous waste if USEPA has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of hazardous waste found in Section 1004(5) of the Resource Conservation and Recovery Act (42 USC-6901 et seq. 6904(5)).
- c) USEPA will use the criteria for listing specified in this Section to establish the exclusion limits referred to in Section 721.105(c).

(Source: Amended a	t 27 Ill. Reg, effective
SUBP	ART C: CHARACTERISTICS OF HAZARDOUS WASTE
Section 721 120	General

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

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

- b) A hazardous waste which that is identified by a characteristic in this Subpart C is assigned every USEPA Hazardous Waste Number which hazardous waste number that is applicable as set forth in this Subpart C. This number must be used in complying with the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (42 USC 6910) and all applicable recordkeeping and reporting requirements under 35 Ill. Adm. Code 702, 703, 722 through 726 and 728.
- c) For purposes of this Subpart <u>C</u>, a sample obtained using any of the applicable sampling methods specified in Appendix A <u>of this Part</u> is a representative sample within the meaning of 35 Ill. Adm. Code 720.

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

(Source: Amended at	27 Ill. Reg, effective)
Section 721.121	Characteristic of Ignitability

- a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:
  - 1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume, and has a flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM D-93, incorporated by reference in 35 Ill. Adm. Code 720.111, or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3828, incorporated by reference in 35 Ill. Adm. Code 720.111, or as determined by an equivalent test method approved by the Board (35 Ill. Adm. Code 720.120).
  - 2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard

- 3) It is an ignitable compressed gas, as defined in 49 CFR 173.300, incorporated by reference in 35 Ill. Adm. Code 720.111, 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).
- 4) It is an oxidizer, as defined in 49 CFR 173.151, incorporated by reference in 35 Ill. Adm. Code 720.111.
- b) A solid waste that exhibits the characteristic of ignitability has the EPA Hazardous Waste Number USEPA hazardous waste number of D001.

(Source: Amended a	t 27 III. Reg	, effective	
Section 721 122	Characteristic of	f Corrosivity	

- a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:
  - 1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using Method 9040 in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,"; incorporated by reference in 35 Ill. Adm. Code 720.111.
  - It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55° C (130° F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods,"; incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: The corrosivity characteristic determination currently does not apply to non-liquid wastes, as discussed by <u>U.S. EPA-USEPA</u> at 45 Fed. Reg. 33109, May 19, 1980 and at 55 Fed. Reg. 22549, June 1, 1990.

b) A solid waste that exhibits the characteristic of corrosivity has the U.S. EPA Hazardous Waste Number-USEPA hazardous waste number of D002.

Source:	Amended at 27 Ill. Reg	, effective	)	

Characteristic of Reactivity

Section 721.123

a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has any of the following properties:

- 1) It is normally unstable and readily undergoes violent change without detonating.
- 2) It reacts violently with water.
- 3) It forms potentially explosive mixtures with water.
- 4) When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- 5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5 can generate toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment.
- 6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.
- 7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.
- 8) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53 or a Class B explosive, as defined in 49 CFR 173.88, incorporated by reference in 35 Ill. Adm. Code 720.111.
- b) A solid waste that exhibits the characteristic of reactivity has the EPA Hazardous Waste Number-USEPA hazardous waste number of D003.

(Source: Amended a	t 27 Ill. Reg	, effective	)
Section 721.124	Toxicity Charac	cteristic	

A solid waste (except manufactured gas plant waste) exhibits the characteristic of toxicity if, using the Toxicity Characteristic Leaching Procedure (TCLP), test Method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, as incorporated by reference in 35 Ill. Adm. Code 720.111, the extract from a representative sample of the waste contains any of the contaminants listed in the table in subsection (b) below of this Section at a concentration equal to or greater than the respective value given in that table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be the extract for the purpose of this Section.

- BOARD NOTE: The reference to the "EP toxicity test" in 35 Ill. Adm. Code 808.410(b)(4) is to be understood as referencing the test required by this Section.
- b) A solid waste that exhibits the characteristic of toxicity has the USEPA hazardous waste number specified in the following table that corresponds to the toxic contaminant causing it to be hazardous.

# MAXIMUM CONCENTRATION OF CONTAMINANTS FOR THE TOXICITY CHARACTERISTIC

USEPA			
Hazardous	~ .		Regulatory
Waste No.	Contaminant	CAS Number Note	e Level (mg/L)
D004	Arsenic	7440-38-2	5.0
D005	Barium	7440-39-3	100.0
D018	Benzene	71-43-2	0.5
D006	Cadmium	7440-43-9	1.0
D019	Carbon tetrachloride	56-23-5	0.5
D020	Chlordane	57-74-9	0.03
D021	Chlorobenzene	108-90-7	100.0
D022	Chloroform	67-66-3	6.0
D007	Chromium	7440-47-3	5.0
D023	o-Cresol	95-48-7 4 <u>2</u>	
D024	m-Cresol	108-39-4 4 <u>2</u>	200.0
D025	p-Cresol	108-39-4 4 <u>2</u> 106-44-5 4 <u>2</u>	200.0
D026	Cresol	4 <u>2</u>	200.0
D016	2,4-D	94-75-7	10.0
D027	1,4-Dichlorobenzene	106-46-7	7.5
D028	1,2-Dichloroethane	107-06-2	0.5
D029	1,1-Dichloroethylene	75-35-4	0.7
D030	2,4-Dinitrotoluene	121-14-2 <u>31</u>	0.13
D012	Endrin	72-20-8	0.02
D031	Heptachlor (and its	76-44-8	0.008
	epoxide)		
D032	Hexachlorobenzene	118-74-1 <u>31</u>	0.13
D033	Hexachlorobutadiene	87-68-3	0.5
D034	Hexachloroethane	67-72-1	3.0
D008	Lead	7439-92-1	5.0
D013	Lindane	58-89-9	0.4
D009	Mercury	7439-97-6	0.2
D014	Methoxychlor	72-43-5	10.0
D035	Methyl ethyl ketone	78-93-3	200.0

D036	Nitrobenzene	98-95-3		2.0
D037	Pentachlorophenol	87-86-5		100.0
D038	Pyridine	110-86-1	<u>31</u>	5.0
D010	Selenium	7782-49-2		1.0
D011	Silver	7440-22-4		5.0
D039	Tetrachloroethylene	127-18-4		0.7
D015	Toxaphene	8001-35-2		0.5
D040	Trichloroethylene	79-01-6		0.5
D041	2,4,5-Trichlorophenol	95-95-4		400.0
D042	2,4,6-Trichlorophenol	88-06-2		2.0
D017	2,4,5-TP (Silvex)	93-72-1		1.0
D043	Vinyl chloride	75-01-4		0.2

#### Notes to Table:

- Quantitation limit is greater than the calculated regulatory level. The quantitation limit therefore becomes the regulatory level.
- 42 If o-, m-, p-cresol concentrations cannot be differentiated, the total cresol (D026) concentration is used. The regulatory level of total cresol is 200.0 mg/L.

(Source: Amended at 27 III. Reg, effective	)
SUBPART D: LISTS OF HAZARDOUS WASTE	

#### Section 721.130 General

- a) A solid waste is a hazardous waste if it is listed in this Subpart <u>D</u>, unless it has been excluded from this list under 35 Ill. Adm. Code 720.120 and 720.122.
- b) The basis for listing the classes or types of wastes listed in this Subpart <u>D</u> is indicated by employing one or more of the <u>Hazard Codes</u> following hazard codes:
  - 1) Hazard Codes:
    - A) Ignitable <u>Waste</u> waste (I)
    - B) Corrosive Waste waste (C)
    - C) Reactive Waste waste (R)
    - D) Toxicity Characteristic waste (E)

- E) Acute <u>Hazardous Waste</u> <u>hazardous waste</u> (H)
- F) Toxic-Waste waste (T)
- 2) Appendix G of this Part identifies the constituent which that caused the Administrator to list the waste as a Toxicity Characteristic toxicity characteristic waste (E) or Toxic Waste toxic waste (T) in Sections 721.131 and 721.132.
- Each hazardous waste listed in this Subpart <u>D</u> is assigned an <u>EPA Hazardous</u> Waste Number which <u>USEPA hazardous waste number that precedes the name of the waste.</u> This number must be used in complying with the notification requirements of Section 3010 of the <u>Act-RCRA (42 USC 6910)</u> and certain recordkeeping and reporting requirements under 35 Ill. Adm. Code 702, 703, 722 through 725, and 728 and 40 CFR 122.
- d) The following hazardous wastes listed in Section 721.131 or 721.132 are subject to the exclusion limits for acute hazardous wastes established in Section 721.105: hazardous wastes numbers F020, F021, F022, F023, F026, and F027.

(Source:	Amended at 27 Ill. Reg.	, effective

### Section 721.131 Hazardous Wastes from Nonspecific Sources

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

**USEPA** 

Hazardous		Hazard
Waste No.	Industry and Hazardous Waste	Code

F001

The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

(T)

F002

The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, orthodichlorobenzene, trichlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

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, (I, T 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.	(T)
F007	Spent cyanide plating bath solutions from electroplating operations.	(R, T)
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010	Quenching bath residues from oil baths from metal heat treating 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 heat-treating operations.	(R, T)
F012	Quenching wastewater treatment sludges from metal heat treating 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)

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.

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.

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.

	- 1	
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.	(H)
F027	Discarded unused formulations containing tri-, tetra- or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)	(H)
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026, and F027.	(T)
F032	Wastewaters (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.	(T)
F034	Wastewaters (except those that have not come into	(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 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.

F035

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.

(T)

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.

F038

Petroleum refinery secondary (emulsified) oil/water/solids separation sludge -- Any sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in 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.

(T)

F039

Leachate (liquids which 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.

- b) <u>Listing specific Listing-specific definitions.</u>
  - 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 which 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 that 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.
- Time of generation. For the purposes of the designated waste, the <u>"time of generation"</u> is <u>defined</u> 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 27 Ill. Reg.	, effective

#### Hazardous Waste from Specific Sources Section 721.132

The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under 35 Ill. Adm. Code 720.120 and 720.122 and listed in Appendix I of this Part.			
USEPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code	
	Wood Preservation Process Wastes:		
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)	
	Inorganic Pigments <u>Production Wastes</u> :		
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)	
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)	
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)	
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)	
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)	
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)	
K008	Oven residue from the production of chrome oxide green pigments.	(T)	

## Organic Chemicals <u>Production Wastes</u>:

K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R,_T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)

K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R,_T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)

K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(C,_T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I <u>,</u> T)
K109	Spent filter cartridges from the product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product wastewaters from the production of dinitrotoluene via nitration of toluene.	(C <u>,</u> T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)

K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K159	Organics from the treatment of thiocarbamate wastes.	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R,_T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other wastewater), unless the sludges meet the following conditions: (1) they the sludges are disposed of in a subtitle RCRA Subtitle C (42 USC 6921-6939e) or non-hazardous landfill licensed or permitted by the a state or the federal government; (2) they the sludges are not otherwise placed on the land prior to final disposal; and (3) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Upon a showing by the government that a respondent in any enforcement action brought to enforce	(T)

the requirements of Subtitle C of this Part managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, the respondent must demonstrate that it meets the conditions of the exclusion that are set forth above. In doing so, the respondent must provide appropriate documentation that the terms of the exclusion were met (e.g., contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.).

Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. (T)

## Inorganic Chemicals Production Wastes:

- K071 Brine purification muds from the mercury cell process in chlorine (T) production, where separately prepurified brine is not used.
- K073 Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. (T)
- Wastewater treatment sludge from the mercury cell process in chlorine production. (T)
- K176 Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).
- K177 Slag from the production of antimony oxide that is speculatively accumulated or disposed of, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).
- 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.

## **Pesticides Production Wastes:**

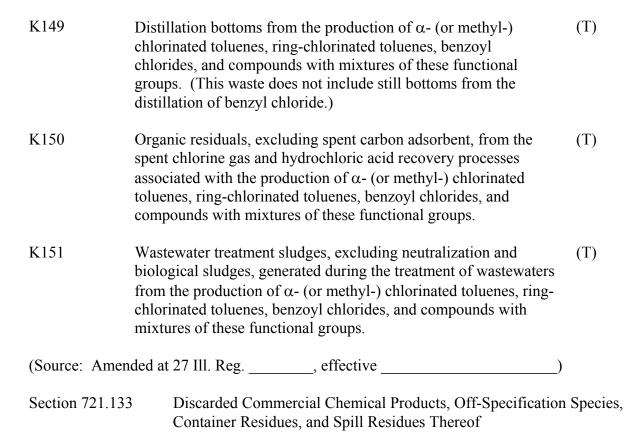
- K031 By-product salts generated in the production of MSMA and cacodylic acid. (T)
- K032 Wastewater treatment sludge from the production of chlordane. (T)

K033	Wastewater and scrub water from the chlorination of cyclopenta- diene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetra- chlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K124	Reactor vent scrubber water from the production of ethylenebis- dithiocarbamic acid and its salts.	(C,_T)

K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C,_T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
	Explosives Production Wastes:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
	Petroleum Refining Wastes:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations.	(T)

K170	Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations.	
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I <u>,</u> T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I <u>,</u> T)
	Iron and Steel <u>Production Wastes</u> :	
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332) (as defined in 35 Ill. Adm. Code 720.110).	(C, <u>T</u> )
	Primary Aluminum <u>Production Wastes</u> :	
K088	Spent potliners from primary aluminum reduction.	(T)
	Secondary Lead <u>Production Wastes</u> :	
K069	Emission control dust/sludge from secondary lead smelting.	(T)
	E: This listing is administratively stayed for sludge generated from segstems. The stay will remain in effect until this note is removed.	econdary
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.	(T)
	Veterinary Pharmaceuticals <u>Production Wastes</u> :	
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)

K102	production of veterinary pharmaceuticals from arsenic or organo- arsenic compounds.	(1)
	Ink Formulation Wastes:	
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, dryers, soaps and stabilizers containing chromium and lead.	(T)
	Coking Coke Production Wastes:	
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	(T)



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 which 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 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.

USEPA	Chemical	
Hazardous	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 <sub>3</sub> AsO <sub>4</sub>
P012	1327-53-3	Arsenic oxide As <sub>2</sub> O <sub>3</sub>
P011	1303-28-2	Arsenic oxide As <sub>2</sub> O <sub>5</sub>
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- <del>[(</del> 1-hydroxy-2-(methylamino)ethyl <del>])</del> -, (R)-
P046	122-09-8	Benzeneethanamine, $\alpha, \alpha$ -dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-,
<b>-</b> ,	- 0 0 0 0 <b>-</b>	methylcarbamate
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)

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- f(methylamino)carbonyl <sup>1</sup> ) oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide Ca(CN) <sub>2</sub>
P189	55285-14-8	Carbamic acid, <u>{((dibutylamino)- thio})</u> methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1- <u>f((dimethyl-amino)-carbonyl-)</u> -5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methyl-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
P095	75-44-5	Carbonic dichloride
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-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
		$(1\alpha,4\alpha,4a\beta,5\alpha,8\alpha,8a\beta)$ -
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-
		hexachloro-1,4,4a,5,8,8a-hexahydro-,
		$(1\alpha,4\alpha,4a\beta,5\beta,8\beta,8a\beta)$ -
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-
70.54	<b></b> *	octahydro-, $(1\alpha,2\beta,2\alpha,3\beta,6\beta,6\alpha\alpha,7\beta,7\alpha\alpha)$ -
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-, $(1\alpha\alpha,2\beta,2\alpha\beta,3\alpha,6\alpha,6\alpha\beta,7\beta,7\alpha\alpha)$ -,
D0 4 4	60.51.5	and metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	$\alpha, \alpha$ -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-,
D050	115 20 7	O- <u>{((methylamino)- carbonyl})</u> oxime Endosulfan
P050 P088	115-29-7 145-73-3	Endosulian
P088 P051	72-20-8	Endoman
P051 P051	72-20-8 72-20-8	Endrin, and metabolites
P031 P042	51-43-4	
P042 P031	460-19-5	Epinephrine Ethanedinitrile
P194	23135-22-0	Ethanimidothioc acid, 2-(dimethylamino)-N-
F 134	23133-22-0	ff(((methylamino)carbonyl))oxy)-2-oxo-,
		methyl ester
P066	16752-77-5	Ethanimidothioic acid, N- <u>f(f(</u> (methylamino)-
1 000	10/32-77-3	carbonyl <del>-</del> )oxy <del>-</del> )-, 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)
		/ J ( ) ··· ( )= /

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-
		<pre>[(f((methylamino)-carbonyl})oxy]phenyl})-, monohydrochloride</pre>
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-\(\frac{1}{2}\)-methyl-4-\(\frac{1}{1}\)(methylamino)carbonyl\(\frac{1}{2}\))oxy\(\frac{1}{2}\)phenyl\(\frac{1}{2}\).
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-
1 000	70 11 0	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) <sub>4</sub> , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) <sub>2</sub>

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 <sub>2</sub>
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 <sub>4</sub> , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclof(2.2.17)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-
		(ethylthio)ethyl <u>})</u> ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S- <u>{(</u> (ethyl-
		thio)methyl <u>})</u> ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[(2-
		(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-
		nitrophenyl) ester

P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O- <u>f(</u> 4- <u>f(</u> (dimethylamino)-sulfonyl) <del>]</del> )phenyl <del>]</del> ) O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-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
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-
		f((methylamino)carbonyl}) oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-
		{(methylamino)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 <sup>*</sup>	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and salts
P204	57-47-6	Pyrrolo <del>[</del> (2,3-b <del>]</del> )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 (1 ) surv
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 <sup>*</sup>	Strychnine and salts
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt
		, , ,

P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	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 <sub>2</sub> O <sub>3</sub>
P114	12039-52-0	Thallium (I) selenite
P115	7446-18-6	Thallium (I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide $\{((H_2N)C(S)\})_2NH$
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 <sub>2</sub> O <sub>5</sub>
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 <sub>3</sub> P <sub>2</sub> , when present at
		concentrations greater than 10 percent (R,_T)
P205	137-30-4	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 off-specification 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 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.

USEPA	Chemical	
Hazardous	Abstracts No.	
Waste No.	(CAS No.)	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	P 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and
		esters
U112	141-78-6	Acetic acid, ethyl ester (I)
U144	301-04-2	Acetic acid, lead (2+) salt
U214	563-68-8	Acetic acid, thallium (1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,_T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,_R,_T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,_T)
U136	75-60-5	Arsinic acid, dimethyl-
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U010	50-07-7	Azirino <del>[</del> (2',3':3,4 <del>]</del> )pyrrolo <del>[</del> (1,2-a <del>]</del> )indole-4,7-di-
		one, 6-amino-8-f(f((aminocarbonyl))oxy-)-
		methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-
		5-methyl-, $\frac{1}{2}(1a-S-(1a\alpha,8\beta,8a\alpha,8b\alpha))$ -
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb
U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz <del>[(j])</del> 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-propynyl)-
U018	56-55-3	Benzf(al)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-
		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-
		phenyl)-α-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-f(bis(2-chloroethyl)-
		amino <del>])</del> -
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)
		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-
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
U202	P 81-07-2	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and
		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
		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-
		phenylbutyl)-, and salts, when present at
		concentrations of 0.3 percent or less
U022	50-32-8	Benzo <u>{(a})</u> pyrene
U197	106-51-4	p-Benzoquinone
U023	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-, $7-\frac{(f(2,3-\text{dihydroxy-}2-(1-\text{methoxyethyl})-3-\text{methyl-}1-\text{oxobutoxy-})-\text{methyl-}1-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, }f(1S-f(1\alpha(Z), 7(2S*,3R*), 7a\alpha+)-1)-$
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
		ester
U271	17804-35-2	Carbamic acid, <u>{(1-{((butylamino)carbonyl})-1H-benzimidazol-2-yl</u> }, methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-
		butynyl ester
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, <u>f(1,2-phenylenebis(imino-</u>
		carbonothioyl) bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts
		and esters
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-
		dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-
		(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, $\alpha$ and $\gamma$ 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
U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H <sub>2</sub> CrO <sub>4</sub> , 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-,
		$(1\alpha,2\alpha,3\beta,4\alpha,5\alpha,6\beta)$ -
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 <u>{(a,h})</u> anthracene
U064	189-55-9	Dibenzo <del>[</del> (a,i <del>]</del> )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
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 <u>{(a})</u> anthracene
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	$\alpha$ , $\alpha$ -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-
		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'-oxybis- (I)
U025	111-44-4	Ethane, 1,1'-oxybis <del>[</del> (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-
11204	20550 42 1	imino)carbonyloxy})})bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-
11250	110 00 5	hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	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 (Í)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitroso-
		ureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-f(f((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
·	-, 00 <b>D</b>	

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 <sub>2</sub> S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione
U137	193-39-5	Indeno <del>[</del> (1,2,3-cd <del>]</del> )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-cyclobutaf(cd)pentalen-2-
		one, 1,1a,3,3a,4,5,5,5a,5b,6-decachloro-
		octahydro-
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- <u>[((</u> 3-amino-
		2,3,6-trideoxy)- $\alpha$ -L-lyxo-hexapyranosyl)oxyl $\frac{1}{2}$ )-
		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
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-f(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
U194	107-10-8	1-Propanamine (I,_T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
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'-oxybisf(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- <u>f(bis(2-chloro-</u>
		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
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- <u>f((3,4,5-trimethoxybenzoyl)oxy</u> -, methyl
		ester, $(3\beta, 16\beta, 17\alpha, 18\beta, 20\alpha)$ -
U249	1314-84-7	Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when present at
		concentrations of 10 percent or less
		1

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## Section 721.135 Wood Preserving Wastes

- a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (b) and (c) of this Section. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.
- b) Generators shall <u>must</u> either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner <u>which that</u> minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.
  - 1) Generators shall-must do one of the following:
    - A) Prepare and follow an equipment cleaning plan and clean equipment in accordance with this Section; or

- B) Prepare and follow an equipment replacement plan and replace equipment in accordance with this Section; or
- C) Document cleaning and replacement in accordance with this Section, carried out after termination of use of chlorophenolic preservatives.
- 2) Cleaning requirements.
  - A) Prepare The generator must prepare and sign a written equipment cleaning plan that describes the following:
    - i) The equipment to be cleaned:
    - ii) How the equipment will be cleaned-;
    - iii) The solvent to be used in cleaning-:
    - iv) How solvent rinses will be tested. And; and
    - v) How cleaning residues will be disposed of.
  - B) Equipment must be cleaned as follows:
    - i) Remove all visible residues from process equipment-; and
    - ii) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse
  - C) Analytical requirements.
    - i) Rinses must be tested in accordance with SW-846, Method 8290, incorporated by reference in 35 Ill. Adm. Code 720.111.
    - ii) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.
  - D) The generator must manage all residues from the cleaning process as F032 waste.
- 3) Replacement requirements.

- A) Prepare and sign a written equipment replacement plan that describes the following:
  - i) The equipment to be replaced;
  - ii) How the equipment will be replaced; and
  - iii) How the equipment will be disposed of.
- B) The generator must manage the discarded equipment as F032 waste.
- 4) Documentation requirements. Document that previous equipment cleaning and replacement was performed in accordance with this Section and ocurred after cessation of use of chlorophenolic preservatives.
- c) The generator shall must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:
  - 1) The name and address of the facility;
  - 2) Formulations previously used and the date on which their use ceased in each process at the plant;
  - 3) Formulations currently used in each process at the plant;
  - 4) The equipment cleaning or replacement plan;
  - 5) The name and address of any persons who conducted the cleaning and replacement;
  - 6) The dates on which cleaning and replacement were accomplished;
  - 7) The dates of sampling and testing;
  - 8) A description of the sample handling and preparation techniques used for extraction, containerization, preservation and chain-of-custody of the samples;
  - 9) A description of the tests performed, the date the tests were performed and the results of the tests;

- 10) The name and model numbers of the <u>instrument(s) instruments</u> used in performing the tests;
- 11) QA/QC documentation; and
- 12) The following statement signed by the generator or the generator's authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under 35 Ill. Adm. Code 721.135 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

(Source:	Amended at 27 Ill. Reg.	, effective	)

Section 721.138 Comparable or Syngas Fuel Exclusion

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

- a) Comparable fuel specifications.
  - 1) Physical specifications.
    - A) Heating value. The heating value must exceed 5,000 Btu/lb (11,500 J/g).
    - B) Viscosity. The viscosity must not exceed 50 cs, as fired 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 Appendix H 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 under <u>Subpart O of 35 Ill.</u> Adm. Code 724. Subpart O or <u>Subpart O of 35 Ill.</u> Adm. Code 725. Subpart O 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 waste analysis plan must be developed in accordance with the applicable sections of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846). The plan must be followed and retained at the facility excluding the waste.
  - A) At a minimum, the plan must specify the following:
    - 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 III. Adm. Code 722.111 that requires any person which that generates a solid waste to determine if that waste is a hazardous waste.
- E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification must be on the generator claiming the exclusion.
- F) The generator must conduct sampling and analysis in accordance with its waste analysis plan developed under subsection (c)(7) of this Section.
- G) Syngas fuel and comparable fuel that has not been blended in order to meet the kinematic viscosity specifications must be analyzed as generated.
- H) If a comparable fuel is blended in order to meet the kinematic viscosity specifications, the generator must undertake the following actions:
  - i) Analyze the fuel as generated to ensure that it meets the constituent and heating value specifications; and
  - ii) After blending, analyze the fuel again to ensure that the blended fuel continues to meet all comparable or syngas fuel specifications.
- I) Excluded comparable or syngas fuel must be retested, at a minimum, annually and must be retested after a process change that could change the chemical or physical properties of the waste.

Note to subsection (c)(8): Any claim under this Section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

9) Speculative accumulation. Any persons handling a comparable or syngas fuel are subject to the speculative accumulation test under Section 721.102(c)(4).

- 10) Records. The generator must maintain records of the following information on-site:
  - A) All information required to be submitted to the implementing authority as part of the notification of the claim:
    - The owner or operator name, address, and RCRA facility USEPA identification number of the person claiming the exclusion;
    - ii) The applicable USEPA hazardous waste codes for each hazardous waste excluded as a fuel; and
    - iii) The certification signed by the person claiming the exclusion or his authorized representative;
  - B) A brief description of the process that generated the hazardous waste and process that generated the excluded fuel, if not the same;
  - C) An estimate of the average and maximum monthly and annual quantities of each waste claimed to be excluded;
  - D) Documentation for any claim that a constituent is not present in the hazardous waste, as required under subsection (c)(8)(A) of this Section;
  - E) The results of all analyses and all detection limits achieved, as required under subsection (c)(8) of this Section;
  - F) If the excluded waste was generated through treatment or blending, documentation, as required under subsection (c)(3) or (c)(4) of this Section;
  - G) If the waste is to be shipped off-site, a certification from the burner, as required under subsection (c)(12) of this Section;
  - H) A waste analysis plan and the results of the sampling and analysis that include the following:
    - i) The dates and times waste samples were obtained, and the dates the samples were analyzed;

- ii) The names and qualifications of the persons that obtained the samples;
- iii) A description of the temporal and spatial locations of the samples;
- iv) The name and address of the laboratory facility at which analyses of the samples were performed;
- v) A description of the analytical methods used, including any clean-up and sample preparation methods;
- vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;
- vii) All laboratory analytical results demonstrating that the exclusion specifications have been met for the waste; and
- viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (c)(11) of this Section and also provides for the availability of the documentation to the claimant upon request; and
- I) If the generator ships comparable or syngas fuel off-site for burning, the generator must retain for each shipment the following information on-site:
  - i) The name and address of the facility receiving the comparable or syngas fuel for burning;
  - ii) The quantity of comparable or syngas fuel shipped and delivered;
  - iii) The date of shipment or delivery;
  - iv) A cross-reference to the record of comparable or syngas fuel analysis or other information used to make the determination that the comparable or syngas fuel meets the

- specifications, as required under subsection (c)(8) of this Section; and
- v) A one-time certification by the burner, as required under subsection (c)(12) of this Section.
- 11) Records retention. Records must be maintained for the period of three years. A generator must maintain a current waste analysis plan during that three year three-year period.
- Burner certification. Prior to submitting a notification to the Agency, a comparable or syngas fuel generator that intends to ship its fuel off-site for burning must obtain a one-time written, signed statement from the burner that includes the following:
  - A) A certification that the comparable or syngas fuel will only be burned in an industrial furnace or boiler, utility boiler, or hazardous waste incinerator, as required under subsection (c)(2) of this Section;
  - B) Identification of the name and address of the units that will burn the comparable or syngas fuel; and
  - C) A certification that the state in which the burner is located is authorized to exclude wastes as comparable or syngas fuel under the provisions of this Section.
- Ineligible waste codes. Wastes that are listed because of presence of dioxins or furans, as set out in Appendix G of this Part, are not eligible for this exclusion, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to full RCRA hazardous waste management requirements.
- d) Table Y of this Part sets forth the table of detection and detection limit values for comparable fuel specification.

(Source: Amended at 27 Ill.	Reg, effective)
Section 721.Appendix A	Representative Sampling Methods

See Appendix I to 40 CFR 261

The methods and equipment used for sampling waste materials will vary with the form and consistency of the waste materials to be sampled. Samples collected using the sampling

protocols listed below, for sampling waste with properties similar to the indicated materials, are considered by USEPA to be representative of the waste.

Extremely viscous liquid: ASTM Standard D140–70, Standard Practice for Sampling Bituminous Materials, incorporated by reference in 35 Ill. Adm. Code 720.111.

<u>Crushed or powdered material: ASTM Standard D346–75, Standard Practice for Collection and Preparation of Coke Samples for Laboratory Analysis, incorporated by reference in 35 Ill. Adm.</u> Code 720.111.

Soil or rock-like material: ASTM Standard D420–69, Guide to Site Characterization for Engineering, Design, incorporated by reference in 35 Ill. Adm. Code 720.111.

<u>Soillike material</u>: ASTM Standard D1452–65, Standard Practice for Soil Investigation and Sampling by Auger Borings, incorporated by reference in 35 Ill. Adm. Code 720.111.

Fly Ash-like material: ASTM Standard D2234–76, Standard Practice for Collection of a Gross Sample of Coal, incorporated by reference in 35 Ill. Adm. Code 720.111.

Containerized liquid wastes: "COLIWASA" described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: This method is also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2–80–018, January 1980.

<u>Liquid waste in pits, ponds, lagoons, and similar reservoirs: "Pond Sampler," described in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.</u>

BOARD NOTE: This manual also contains additional information on application of these protocols. This method is also described in "Samplers and Sampling Procedures for Hazardous Waste Streams," EPA 600/2–80–018, January 1980, incorporated by reference in 35 Ill. Adm. Code 720.111...

(Source: Amended at 27 Ill.	Reg, effe	ective	)
Section 721.Appendix B	Method 1311 Toxic	city Characteristic Leachin	ng Procedure (TCLP)
NOTE: The TCLP (Method Physical/Chemical Methods, reference in 35 Ill. Adm. Cod	<del>, U.S. EPA</del> - <u>USEPA</u>		
(Source: Amended at 27 Ill.	Reg, effe	ective	)

### Section 721.Appendix C Chemical Analysis Test Methods

NOTE: Appropriate analytical procedures to determine whether a sample contains a given toxic constituent are specified in Chapter Two, "Choosing the Correct Procedure,", found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", U.S. EPA-USEPA Publication SW-846, as-incorporated by reference in 35 Ill. Adm. Code 720.111. Prior to final sampling and analysis method selection, the individual should consult the specific section or method described in SW-846 for additional guidance on which of the approved methods should be employed for a specific sample analysis situation.

(Source: Amende	d at 27 Ill. Reg, effective)
Section 721.Apper	ndix G Basis for Listing Hazardous Wastes
USEPA hazard-	Hazardous constituents for which listed
ous waste No.	
F001	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-
	trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-
	trichloroethane, 1,1,2-trichlorethane, chlorobenzene, 1,1,2-trichloro-1,2,2-
	trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-
	ethoxyethanol, benzene, 2-nitropropane.
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and
	pentachlorodibenzofurans; tri- and tetrachlorophenols and their
F001	clorophenoxy derivative acids, esters, ethers, amines, and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and
F10.2.2	hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta-, and
F10.2.2	hexachlorodibenzofurans.
F023	Tetra- and pentachlorodibenzo-p-dioxins; tetra- and
	pentachlorodibenzofurans; tri- and tetra- chlorophenols and their
	chlorophenoxy derivative acids, esters, ethers, amines, and other salts.

F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, 1,1,2-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocylopentadiene, hexachlorocylohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.  Chloromethane, dicloromethane, trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene; pentachloroethane; hexachloroethane; allyl chloride (3-chloropropene); dichloropropane; dichloropropene; 2-chloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines, and other salts.
F032	Benz(a)anthracene; benzo(a)pyrene; dibenz(a,h)anthracene; indeno(1,2,3-cd)pyrene; pentachlorophenol; arsenic; chromium; tetra-, penta-, hexa-, and heptachlorodibenzo-p-dioxins; tetra-, penta-, hexa-, and heptachlorodibenzofurans.
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.
F035	Arsenic, chromium, lead.
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F038	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and non-wastewaters) under <u>Table B to 35 Ill.</u> Adm. Code 728. Table B (Constituent Concentrations in Waste).

K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-
<b>K</b> 001	dimethylphenol, 2,4- dinitrophenol, trichlorophenols, tetrachlorophenols,
	2,4- dinitrophenol, creosote, chrysene, naphthalene, fluoranthene,
	benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)
	anthracene, dibenz(a)anthracene, acenaphthalene.
K002	
K002 K003	Hexavalent chromium, lead.
K003 K004	Hexavalent chromium, lead. Hexavalent chromium.
K005	Hexavalent chromium, lead. Hexavalent chromium.
K006	
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride,
17.01.0	paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride,
77.01.1	paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride,
	hexachloroethane, perchloroethylene.
K017	Epichlorohydrin, chloroethers {(bis(chloromethyl) ether and bis- (2-
	chloroethyl) ethers]), trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene,
	hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane,
	tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane),
	trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform,
	vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloro-
	ethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane),
	trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform,
	vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoguinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2,4-diamine.
K028	1,1,1-trichloroethane, vinyl chloride.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene
	chloride, chloroform.

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K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-
K031	tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride. Arsenic.
K031 K032	
	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.
K035	Creosote, chrysene, naphthalene, fluoranthene, benzo(b) fluoranthene, benzo(a)-pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene,
	dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K064	Lead, cadmium.
K065	Lead, cadmium.
K066	Lead, cadmium.
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane,
17003	tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes,
V006	pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K088	Cyanide (complexes).
K090	Chromium.

17.001	
K091	Chromium.
K093	Phthalic anhydride, maleic anhydride.
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phynylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.
K111	2,4-Dinitrotoluene.
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K115	2,4-Toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K117	Ethylene dibromide.
K118	Ethylene dibromide.
K123	Ethylene thiourea.
K124	Ethylene thiourea.
K125	Ethylene thiourea.
K126	Ethylene thiourea.
K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene,
	benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene,
	benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene.
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene,
	benzo(k)fluoranthene, dibenz(a,h)anthracene.
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene,
	naphthalene.
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene,
	benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene,
	benzo(k)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene.

K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene,
K150	pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene. Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine.
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine.
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride.
K159	Benzene, butylate, EPTC, molinate, pebulate, vernolate.
K161	Antimony, arsenic, metam-sodium, ziram.
K169	Benzene.
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo (a) anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene.
K171	Benzene, arsenic.
K172	Benzene, arsenic.
K174	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), all hexachlorodibenzo-p-dioxins (HxCDDs), all hexachlorodibenzofurans (HxCDFs), all pentachlorodibenzo-p-dioxins (PeCDDs), 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin (OCDD), 1,2,3,4,6,7,8,9-octachlorodibenzofuran (OCDF), all pentachlorodibenzofurans (PeCDFs), all tetrachlorodibenzo-p-dioxins (TCDDs), all tetrachlorodibenzofurans (TCDFs).
K175	Mercury.
K176	Arsenic, lead.
K177	Antimony.
K178	Thallium.
N.AWaste is had or reactivity.	zardous because it fails the test for the characteristic of ignitability, corrosivity,
(Source: Amende	d at 27 Ill. Reg, effective)

Section 721.Appendix I Wastes Excluded by Administrative Action

Table A Wastes Excluded by <u>U.S. EPA USEPA</u> under 40 CFR 260.20 and 260.22 from Non-Specific Sources

Facility Addre	ess	Waste Description	
(None exclude	ed from an Illin	nois source at this time)	
(Source: Ame	ended at 27 III.	Reg, effective	)
Section 721.A	ppendix I	Wastes Excluded by Administrative	e Action
Table B	Wastes Exclu	ded by USEPA under 40 CFR 260.2	0 and 260.22 from Specific

## Sources Wastes Excluded by USEPA under 40 CFR 260.20 and 260.22 from Specific

### Facility Address Waste Description

Amoco Oil Company Wood River, Illinois

150 million gallons of DAF float from petroleum refining contained in four surge ponds after treatment with the Chemfix stabilization process. This waste contains USEPA hazardous waste number K048. This exclusion applies to the 150 million gallons of waste after chemical stabilization as long as the mixing ratios of the reagent with the waste are monitored continuously and do not vary outside of the limits presented in the demonstration samples and one grab sample is taken each hour from each treatment unit, composited, and EP toxicity TCLP tests performed on each sample. If the levels of lead or total chromium exceed 0.5 ppm in the EP extract, then the waste that was processed during the compositing period is considered hazardous; the treatment residue shall-must be pumped into bermed cells to ensure that the waste is identifiable in the event that removal is necessary.

USX Steel Corporation Chicago, Illinois

Fully-cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (USEPA hazardous waste number K061) generated from the primary production of steel after April 29, 1991. This exclusion (for 35,000 tons of CSEAFD per year) is conditioned on the data obtained from USX's full-scale CSEAFD treatment facility. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern once the full-scale treatment facility is in operation. USX

shall implement a testing program for the petitioned waste. This testing program must meet the following conditions for the exclusion to be valid:

- 1. Testing: Sample collection and analyses (including quality control (QC) procedures) must be performed according to SW-846 methodologies, incorporated by reference in 35 Ill. Adm. Code 720.111.
  - Initial Testing: During the first four weeks of operation of the full scale treatment system, USX shall collect representative grab samples of each treated batch of the CSEAFD and composite the grab samples daily. The daily composites, prior to disposal, must be analyzed for the EP leachate concentrations of all the EP toxic metals, nickel, and cyanide (using distilled water in the cyanide extractions), and the total concentrations of reactive sulfide and reactive cyanide. USX must report the analytical test data, including quality control information, obtained during this initial period no later than 90 days after the treatment of the first full-scale batch.
  - B. Subsequent Testing: USX shall collect representative grab samples from every treated batch of CSEAFD generated daily and composite all of the grab samples to produce a weekly composite sample. USX then shall analyze each weekly composite sample for all of the EP toxic metals and nickel. The analytical data, including quality control information, must be compiled and maintained on site for a minimum of three years. These data must be furnished upon request and made available for inspection by any employee or representative of USEPA or the Agency.
- 2. Delisting levels: If the EP extract concentrations for chromium, lead, arsenic, or silver exceed 0.315 mg/l; barium exceeds 6.3 mg/l; cadmium or

selenium exceed 0.063 mg/l; mecury exceeds 0.0126 mg/l; nickel exceeds 3.15 mg/l; or cyanide exceeds 4.42 mg/l or total reactive cyanide or total reactive sulfide levels exceed 250 mg/kg and 500 mg/kg, respectively, the waste must either be retreated until it meets these levels or managed and disposed of in accordance with Subpart C of Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

Data submittal to and enforcement by USEPA: Within one week of system start-up USX must notify the Section Chief, Delisting Section (see address below) when their full-scale stabilization system is on-line and waste treatment has begun. The data obtained through condition (1)(A) shall be submitted to the Section Chief, Delisting Section, CAD/OSW (OS-333), USEPA, 401 M Street, S.W., Washington, DC 20460 within the time period specified. At USEPA's request, USX must submit any other analytical data obtained through conditions (1)(A) or (1)(B) within the time peirod specified by the Section Chief. Failure to submit the required data obtained from conditions (1)(A) or (1)(B) within the specified time period or maintain the required records for the specified time will be considered by USEPA, at its decision, sufficient basis to revoke USX's Federal exclusion to the extent directed by USEPA. All data must be accompanied by the following certification statement: "Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations (pursuant to the applicable provisions of the Federal Code which include, but may not be limited to, 18 U.S.C. Section 6928), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the vertification that this information is true, accurate and complete. In the

event that any of this information is determined by USEPA in its sole discretion to be false, inaccurate or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this federal exclusion of wastes will be void as if it never had effect or to the extent directed by USEPA and that the company will be liable for any actions taken in contravention of the company's RCRA and CERCLA obligations premised upon the company's reliance on the void exclusion."

- Data Submittal to Agency: The data obtained through condition (1)(A) must be submitted to the Illinois Environmental Protection Agency, Planning and Reporting Section, 2200 Churchill Road, P.O. Box 19276, Springfield, IL 62794-9276 within the time period specified. At Agency's request, USX must submit any other analytical data obtained through conditions (1)(A) or (1)(B) within the time period specified by the Agency. All data must be accompanied by the following certification statement: "Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations (pursuant to the applicable provisions of Illinois' Environmental Protection Act), I certify that the information contained in or accompanying this document is true, accurate and complete. As to the (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate and complete."
- 5. Enforcement by the Agency: Whenever the Agency finds that USX has violated the standards in this exclusion, has failed to submit the required data obtained from conditions (1)(A) or (1)(B) within the specified time period, has failed to maintain the required records for the specified time or has submitted false, inaccurate or incomplete data, the Agency may take such action as is allowed by Title VIII of the Act.

6. Notification to the Board: Upon modification, termination, revocation, or other alteration of this exemption by USEPA, USX shall file a petition, pursuant to Part 102, with this Board requesting that the Board follow the USEPA action.

Conversion Systems, Inc. Horsham, Pennsylvania (Sterling, Illinois operations) Chemically stabilized electric arc furnace dust (CSEAFD) that is generated by Conversion Systems, Inc. (CSI) (using the Super Detox<sup>o</sup> treatment process, as modified by CSI to treat electric arc furnace dust (EAFD) (USEPA hazardous waste no. K061)), at the following site and which is disposed of in a RCRA Subtitle D municipal solid waste landfill (MSWLF): Northwestern Steel, Sterling, Illinois.

CSI must implement a testing program for each site that meets the following conditions:

1. Verification testing requirements: Sample collection and analyses, including quality control procedures, must be performed according to SW-846 methodologies, incorporated by reference in 35 Ill. Adm. Code 720.111.

A. Initial verification testing: During the first 20 days of full-scale operation of a newly-constructed Super Detox<sup>ô</sup> treatment facility, CSI shall-must analyze a minimum of four composite samples of CSEAFD representative of the full 20-day period. Composite samples must be composed of representative samples collected from every batch generated. The CSEAFD samples must be analyzed for the constituents listed in condition 3 below. CSI shall-must report the operational and analytical test data, including quality control information, obtained during this initial period no later than 60 days after the generation of the first batch of CSEAFD.

B. Addition of new Super Detox<sup>ô</sup> treatment facilities to the exclusion:

Option 1: If USEPA approves additional facilities, CSI may petition the Board for identical-in substance amendment of this exclusion pursuant to Section 22.4 for the Act and 35 Ill. Adm. Code 102

and 720.120(a), or

Option 2: If USEPA has not approved such amendment, CSI may petition the Board for amendment pursuant to the general rulemaking procedures of Section 27 of the Act and 35 Ill. Adm. Code 102 and 720.120(b); or

Option 3: Alternatively to options 1 or 2 above, CSI may petition the Board for a hazardous waste delisting pursuant to Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 104 and 35 Ill. Adm. Code 720.122.

If CSI pursues general rulemaking (option 2 above) or hazardous waste delisting (option 3 above), it must demonstrate that the CSEAFD generated by a specific Super Detox<sup>ô</sup> treatment facility consistently meets the delisting levels specified in condition 3 below.

- C. Subsequent verification testing: For the approved facility, CSI shall-must collect and analyze at least one composite sample of CSEAFD each month. The composite samples must be composed of representative samples collected from all batches treated in each month. These monthly representative samples must be analyzed, prior to the disposal of the CSEAFD, for the constituents listed in condition 3 below. CSI may, at its discretion, analyze composite samples gathered more frequently to demonstrate that smaller batches of waste are nonhazardous.
- 2. Waste holding and handling: CSI shall-must store as hazardous all CSEAFD generated until verification testing, as specified in condition 1A or 1C above, as appropriate, is completed and valid analyses demonstrate that condition 3 below is satisfied. If the levels of constituents measured in the samples of CSEAFD do not exceed the levels set forth in condition 3, then the CSEAFD is nonhazardous and may be disposed of in a RCRA Subtitle D municipal solid waste landfill. If constituent levels in a sample exceed any of the delisting levels set forth in condition 3 below, the CSEAFD

generated during the time period corresponding to this sample must be retreated until it meets these levels or managed and disposed of as hazardous waste, in accordance with 35 Ill. Adm. Code 702 through 705, 720 through 726, 728, and 733. CSEAFD generated by a new CSI treatment facility must be managed as a hazardous waste prior to the addition of the name and location of the facility to this exclusion pursuant to condition 1C above. After addition of the new facility to the exclusion pursuant to condition 1B above, CSEAFD generated during the verification testing in condition 1A is also non-hazardous if the delisting levels in condition 3 are satisfied.

- 3. Delisting levels: All leachable concentrations for metals must not exceed the following levels (in parts per million (ppm)): antimony--0.06; arsenic---0.50; barium--7.6; beryllium--0.010; cadmium--0.050; chromium--0.33; lead--0.15; mercury--0.009; nickel--1; selenium--0.16; silver--0.30; thallium--0.020; vanadium--2; and zinc--70. Metal concentrations must be measured in the waste leachate by the method specified in Section 721.124.
- 4. Changes in operating conditions: After initiating subsequent testing, as described in condition 1C, if CSI significantly changes the stabilization process established under condition 1 (e.g., use of new stabilization reagents), CSI shall-must seek amendment of this exclusion using one of the options set forth in condition 1B above. After written amendment of this exclusion, CSI may manage CSEAFD wastes generated from the new process as nonhazardous if the wastes meet the delisting levels set forth in condition 3 above.
- 5. Data submittals: At least one month prior to operation of a new Super Detox<sup>ô</sup> treatment facility, CSI must notify the Agency in writing when the Super Detox<sup>ô</sup> treatment facility is scheduled to be on-line. The data obtained through condition 1A must be submitted to the Agency within the time period specified. Records of operating conditions and analytical data from condition 1 must be compiled, summarized, and maintained on site for a minimum of five years. These records and data must be furnished to the Agency upon request and made available for inspection. Failure to submit the required data within

the specified time period or to maintain the required records on site for the specified time will be considered a violation of the Act and Board regulations. All data submitted must be accompanied by a signed copy of the following certification statement to attest to the truth and accuracy of the data submitted:

"Under civil and criminal penalty of law for the making or submission of false or fraudulent statements or representations, I certify that the information contained in or accompanying this document is true, accurate, and complete.

"As to (those) identified section(s) of this document for which I cannot personally verify its (their) truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

"In the event that any of this information is determined by the Board or a court of law to be false, inaccurate, or incomplete, and upon conveyance of this fact to the company, I recognize and agree that this exclusion of waste will be void as if it never had effect or to the extent directed by the Board or court and that the company will be liable for any actions taken in contravention of the company's obligations under the federal RCRA and Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§ 9601 et seq.) and corresponding provisions of the Act premised upon the company's reliance on the void exclusion."

BOARD NOTE: The obligations of this exclusion are derived from but also distinct from the obligations under the corresponding federally-granted exclusion of 40 CFR 261, Appendix IX, Table 2.

Source: Amended at 27 Ill. Reg	, effective	
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Section 721.Appendix I Wastes Excluded by Administrative Action

Table C Wastes Excluded by <u>U.S. EPA USEPA</u> under 40 CFR 260.20 and 260.22 from Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof

Facility Address	Waste Description
(None excluded from	an Illinois source at this time)
(Source: Amended a	t 27 III. Reg, effective)
Section 721.Appendi	x I Wastes Excluded by Administrative Action
Table D Waste	es Excluded by the Board by Adjusted Standard
The Board has entered pursuant to 35 Ill. Ac	ed the following orders on petitions for adjusted standards for delisting, dm. Code 720.122.
AS91-1	Petition of Keystone Steel and Wire Co. for Hazardous Waste Delisting, February 6, 1992, and modified at 133 PCB 189, April 23, 1992. (treated Treated K061 waste)
AS91-3	Petition of Peoria Disposal Co. for an Adjusted Standard from <u>Subpart D</u> <u>of</u> 35 Ill. Adm. Code 721. Subpart D, February 6 and March 11, 1993. (treated <u>Treated F006</u> waste)
AS93-7	Petition of Keystone Steel & Wire Co. for an Adjusted Standard from Subpart D of 35 Ill. Adm. Code 721. Subpart D, February 17, 1994, as modified March 17, 1994. (treated Treated K062 waste)
AS94-10	Petition of Envirite Corporation for an Adjusted Standard from Subpart D of 35 Ill. Adm. Code 721. Subpart D, December 14, 1994, as modified on February 16, 1995. (treated Treated F006, F007, F008, F009, F011, F012, F019, K002, K003, K004, K005, K006, K007, K008, and K062 wastes)
(Source: Amended a	t 27 Ill. Reg, effective)

		1		1	
				Concentra-	Minimum
				tion limit	required
		Composite	Heating	(mg/kg at	detection
		value	value	10,000	limit
Chemical name	CAS No	(mg/kg)	(BTU/lb)	Btu/lb)	(mg/kg)
Total Nitrogen as N	NA	9000	18400	4900	
Total Halogens as Cl	NA	1000	18400	540	
Total Organic Halogens as	NA			(Note 1)	
Cl					
Polychlorinated biphenyls,	1336-36-3	ND		ND	1.4
total <u>{(</u> Arocolors, total <u>})</u>					
Cyanide, total	57-12-5	ND		ND	1.0
Metals:					
Antimony, total	7440-36-0	ND		12	
Arsenic, total	7440-38-2	ND		0.23	
Barium, total	7440-39-3	ND		23	
Beryllium, total	7440-41-7	ND		1.2	
Cadmium, total	7440-43-9		ND		1.2
Chromium, total	7440-47-3	ND		2.3	
Cobalt	7440-48-4	ND		4.6	
Lead, total	7439-92-1	57	18100	31	
Manganese	7439-96-5	ND		1.2	
Mercury, total	7439-97-6	ND		0.25	
Nickel, total	7440-02-0	106	18400	58	
Selenium, total	7782-49-2	ND		0.23	
Silver, total	7440-22-4	ND		2.3	
Thallium, total	7440-28-0	ND		23	
Hydrocarbons:	7110 20 0	1,2			
Benzof(a-)anthracene	56-55-3	ND		2400	
Benzene	71-43-2	8000	19600	4100	
Benzo <del>[(b])</del> fluoranthene	205-99-2	ND		2400	
Benzo <del>[(k])</del> fluoranthene	207-08-9	ND		2400	
Benzo <del>[(a])</del> pyrene	50-32-8	ND		2400	
Chrysene	218-01-9	ND ND		2400	
Dibenzof(a,h)anthrace	53-70-3	ND ND		2400	
ne	55-10 <b>-</b> 5	IND	_ <b>_</b>	2700	
7,12-Dimethylbenz-	57-97-6	ND		2400	
f(a-1)anthracene	31-71 <del>-</del> 0	140		2700	
Fluoranthene	206-44-0	ND		2400	
Indeno(1,2,3-cd)pyrene	193-39-5	ND ND		2400	
mucho(1,2,3-cu)pyrene	173-37-3	עויו	<b></b>	Z400	

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3-Methylcholanthrene	56-49-5	ND		2400	
Naphthalene	91-20-3	6200	19400	3200	
Toluene	108-88-3	69000	19400	36000	
Oxygenates:					
Acetophenone	98-86-2	ND		2400	
Acrolein	107-02-8	ND		39	
Allyl alcohol	107-18-6	ND		30	
Bis(2-ethylhexyl)-	117-81-7	ND		2400	
phthalate [(Di-2-ethyl-					
hexyl phthalate])					
Butyl benzyl phthalate	85-68-7	ND		2400	
o-Cresol <u>{(</u> 2-Methyl	95-48-7	ND		2400	
phenol <u>})</u>					
m-Cresol <u>{(</u> 3-M ethyl	108-39-4	ND		2400	
phenol <u>})</u>					
p-Cresol <del>[(</del> 4-Methyl	106-44-5	ND		2400	
phenol <u>})</u>					
Di-n-butyl phthalate	84-74-2	ND		2400	
Diethyl phthalate	84-66-2	ND		2400	
2,4-Dimethylphenol	105-67-9	ND		2400	
Dimethyl phthalate	131-11-3	ND		2400	
Di-n-octyl phthalate	117-84-0	ND		2400	
Endothall	145-73-3	ND		100	
Ethyl methacrylate	97-63-2	ND		39	
2-Ethoxyethanol	110-80-5	ND		100	
{(Ethylene glycol					
monoethyl ether-].)					
Isobutyl alcohol	78-83-1	ND		39	
Isosafrole	120-58-1	ND		2400	
Methyl ethyl ketone	78-93-3	ND		39	
<u>{(</u> 2-Butanone <u>})</u>					
Methyl methacrylate	80-62-6	ND		39	
1,4-Naphthoquinone	130-15-4	ND		2400	
Phenol	108-95-2	ND		2400	
Propargyl alcohol <u>{(</u> 2-	107-19-7	ND		30.	
Propyn-l-ol <del>]</del> )					
Safrole	94-59-7	ND		2400	
Sulfonated Organics:					
Carbon disulfide	75-15-0	ND		ND	39
Disulfoton	298-04-4	ND		ND	2400
Ethyl methanesulfonate	62-50-0	ND		ND	2400

Methyl methane- sulfonate	66-27-3	ND	 ND	2400
Phorate	298-02-2	ND	 ND	2400
1,3-Propane sultone	1120-71-4	ND	 ND	100
Tetraethyldithiopyro-	3689-24-5	ND	 ND	2400
phosphate [(Sulfotepp])	2009 2 . 0	1 (2	1,2	
Thiophenol <u>{(Benzene-</u>	108-98-5	ND	 ND	30
thiol <u>])</u>	126 69 1	ND	NID	2400
O,O,O-Triethyl	126-68-1	ND	 ND	2400
phosphorothioate				
Nitrogenated Organics:	75.05.0	ND	NID	20
Acetonitrile [(Methyl cyanide])	75-05-8	ND	 ND	39
2-Acetylaminofluorene	53-96-3	ND	 ND	2400
<u>{(</u> 2-AAF <u>})</u>				
Acrylonitrile	107-13-1	ND	 ND	39
4-Aminobiphenyl	92-67-1	ND	 ND	2400
4-Aminopyridine	504-24-5	ND	 ND	100
Aniline	62-53-3	ND	 ND	2400
Benzidine	92-87-5	ND	 ND	2400
Dibenz{(a,j})acridine	224-42-0	ND	 ND	2400
O,O-Diethyl O-	297-97-2	ND	 ND	2400
pyrazinyl phophoro-				
thioate [(Thionazin].)				
Dimethoate	60-51-5	ND	 ND	2400
p-(Dimethylamino)azo- benzene <u>{</u> (4-Dimethyl-	60-11-7	ND	 ND	2400
aminoazobenzene <del>].</del> )				
3,3'-Dimethylbenzidine	119-93-7	ND	 ND	2400
a,a-Dimethylphenethyl-	122-09-8	ND	 ND	2400
amine <del>.</del>				
3,3'-Dimethoxy-	119-90-4	ND	 ND	100
benzidine				
1,3-Dinitrobenzene	99-65-0	ND	 ND	2400
{(m-Dinitrobenzene})				
4,6-Dinitro-o-cresol	534-52-1	ND	 ND	2400
2,4-Dinitrophenol	51-28-5	ND	 ND	2400
2,4-Dinitrotoluene	121-14-2	ND	 ND	2400
2,6-Dinitrotoluene	606-20-2	ND	 ND	2400
Dinoseb [(2-sec-Butyl-	88-85-7	ND	 ND	2400
4,6-dinitrophenol <del>]</del> )				
Diphenylamine	122-39-4	ND	 ND	2400

Ethyl carbamate	51-79-6	ND	 ND	100
<del>[(</del> Urethane <del>]</del> )				
Ethylenethiourea (2- Imidazolidinethione)	96-45-7	ND	 ND	110
Famphur	52-85-7	ND	 ND	2400
Methacrylonitrile	126-98-7	ND	 ND	39
Methapyrilene	91-80-5	ND	 ND	2400
Methomyl	16752-77-5	ND	 ND	57
2-Methyllactonitrile	75-86-5	ND	 ND	100
<del>[</del> (Acetone				
cyanohydrin <del>].</del> )				
Methyl parathion	298-00-0	ND	 ND	2400
MNNG (N-Metyl-N-	70-25-7	ND	 ND	110
nitroso-N'-nitro-				
guanidine)				
1-Naphthylamine <del>, [(α-</del>	134-32-7	ND	 ND	2400
Naphthylamine]				
2-Naphthylamine <del>, [(β</del> -	91-59-8	ND	 ND	2400
Naphthylamine])				
Nicotine	54-11-5	ND	 ND	100
4-Nitroaniline <del>, [(p-</del>	100-01-6	ND	 ND	2400
Nitroaniline]				
Nitrobenzene	98-95-3	ND	 ND	2400
p-Nitrophenol <del>, [(p-</del>	100-02-7	ND	 ND	2400
Nitrophenol <del>])</del>				
5-Nitro-o-toluidine	99-55-8	ND	 ND	2400
N-Nitrosodi-n-butyl-	924-16-3	ND	 ND	2400
amine				
N-Nitrosodiethylamine	55-18-5	ND	 ND	2400
N-Nitrosodiphenyl-	86-30-6	ND	 ND	2400
amine <del>, [(</del> Diphenyl-				
nitrosamine <del>]</del> )				
N-Nitroso-N-methyl-	10595-95-6	ND	 ND	2400
ethylamine				
N-Nitrosomorpholine	59-89-2	ND	 ND	2400
N-Nitrosopiperidine	100-75-4	ND	 ND	2400
N-Nitrosopyrrolidine	930-55-2	ND	 ND	2400
2-Nitropropane	79-46-9	ND	 ND	30
Parathion	56-38-2	ND	 ND	2400
Phenacetin	62-44-2	ND	 ND	2400
1,4-Phenylene diamine,	106-50-3	ND	 ND	2400
{(p-Phenylenediamine})				

N-Phenylthiourea	103-85-5	ND		ND	57
2-Picoline <del>[(</del> alpha-	109-06-8	ND		ND	2400
Picoline])					
Propythioracil <del>[(6-</del>	51-52-5	ND		ND	100
Propyl-2-thiouracil <del>]</del> )					
Pyridine	110-86-1	ND		ND	2400
Strychnine	57-24-9	ND		ND	100
Thioacetamide	62-55-5	ND		ND	57
Thiofanox	39196-18-4	ND		ND	100
Thiourea	62-56-6	ND		ND	57
Toluene-2,4-diamine	95-80-7	ND		ND	57
<u>{(2,4-Diaminotoluene})</u>					
Toluene-2,6-diamine	823-40-5	ND		ND	57
<u>{(</u> 2,6-Diaminotoluene <u>})</u>					
o-Toluidine	95-53-4	ND		ND	2400
p-Toluidine	106-49-0	ND		ND	100
1,3,5-Trinitrobenzne,	99-35-4	ND		ND	2400
[sym-Trinitobenzene]					
(sym-Trinitrobenzene)					
Halogenated Organics:					
Allyl chloride	107-05-1	ND		ND	39
Aramite	140-57-8	ND		ND	2400
Benzal chloride <u>{(</u> Di-	98-87-3	ND		ND	100
chloromethyl benzene])					
Benzyl chloride	100-44-77	ND		ND	100
Bis(2-chloroethyl)ether	111-44-4	ND		ND	2400
[(Dichloroethyl ether])					
Bromoform	75-25-2	ND		ND	39
[(Tribromomethane])					
Bromomethane	74-83-9	ND		ND	39
[(Methyl bromide])					
4-Bromophenyl phenyl	101-55-3	ND		ND	2400
ether [(p-Bromodi-					
phenyl ether])	76.00.7			7.75	2.0
Carbon tetrachloride	56-23-5	ND		ND	39
Chlordane	57-74-9	ND		ND	14
p-Chloroaniline	106-47-8	ND		ND	2400
Chlorobenzene	108-90-7	ND		ND	39
Chlorobenzilate	510-15-6	ND		ND	2400
p-Chloro-m-cresol	59-50-7	ND		ND	2400
2-Chloroethyl vinyl	110-75-8	ND		ND	39
ether			<u> </u>		

Chloroform	67-66-3	ND	 ND	39
Chloromethane	74-87-3	ND	 ND	39
{(Methyl chloride})				
2-Chloronaphthalene	91-58-7	ND	 ND	2400
<del>[(beta-</del> β-Chloro-				
phthalene <del>]</del> )				
2-Chlorophenol <del>[(</del> o-	95-57-8	ND	 ND	2400
Chlorophenol <u>})</u>				
Chloroprene <u>{(</u> 2-	1126-99-8	ND	 ND	39
Chloro-1,3-butadiene])				
2,4-D <u>{(</u> 2,4-Dichloro-	94-75-7	ND	 ND	7.0
phenoxyacetic acid})				
Diallate	2303-16-4	ND	 ND	2400
1,2-Dibromo-3-chloro-	96-12-8	ND	 ND	39
propane				
1,2-Dichlorobenzene	95-50-1	ND	 ND	2400
<u>{(</u> o-Dichlorobenzene <u>})</u>				
1,3-Dichlorobenzene	541-73-1	ND	 ND	2400
<u>{(</u> m-Dichlorobenzene <u>})</u>				
1,4-Dichlorobenzene	106-46-7	ND	 ND	2400
{(p-Dichlorobenzene})				
3,3'-Dichlorobenzidine	91-94-1	ND	 ND	2400
Dichlorodifluoro-	75-71-8	ND	 ND	39
methane <u>{(</u> CFC-12 <u>})</u>				
1,2-Dichloroethane	107-06-2	ND	 ND	39
{(Ethylene dichloride})				
1,1-Dichloroethylene	75-35-4	ND	 ND	39
{(Vinylidene chloride})				
Dichloromethoxy	111-91-1	ND	 ND	2400
ethane <u>{(Bis(2-chloro-</u>				
ethoxy)methane <u>])</u>				
2,4-Dichlorophenol	120-83-2	ND	 ND	2400
2,6-Dichlorophenol	87-65-0	ND	 ND	2400
1,2-Dichloropropane	78-87-5	ND	 ND	39
<u>{(</u> Propylene				
dichloride <u>})</u>				
cis-1,3-Dichloro-	10061-01-5	ND	 ND	39
propylene				
trans-1,3-Dichloro-	10061-02-6	ND	 ND	39
propylene				
1,3-Dichloro-2-	96-23-1	ND	 ND	30
propanol				
Endosulfan I	959-98-8	ND	 ND	1.4

Endosulfan II	33213-65-9	ND	 ND	1.4
Endrin	72-20-8	ND	 ND	1.4
Endrin aldehyde	7421-93-4	ND	 ND	1.4
Endrin Ketone	53494-70-5	ND	 ND	1.4
Epichlorohydrin <del>[(</del> 1-	106-89-8	ND	 ND	30
Chloro-2,3-epoxy				
propane])				
Ethylidene dichloride	75-34-3	ND	 ND	39
[(1,1-Dichloroethane])				
2-Fluoroacetamide	640-19-7	ND	 ND	100
Heptachlor	76-44-8	ND	 ND	1.4
Heptachlor epoxide	1024-57-3	ND	 ND	2.8
Hexachlorobenzene	118-74-1	ND	 ND	2400
Hexachloro-1,3-buta-	87-68-3	ND	 ND	2400
diene f(Hexachloro-				
butadiene])				
Hexachlorocyclopenta-	77-47-4	ND	 ND	2400
diene				
Hexachloroethane	67-72-1	ND	 ND	2400
Hexachlorophene	70-30-4	ND	 ND	59000
Hexachloropropene	1888-71-7	ND	 ND	2400
<del>[(</del> Hexachloro-				
propylene})				
Isodrin	465-73-6	ND	 ND	2400
Kepone	143-50-0	ND	 ND	4700
{(Chlordecone})				
Lindane <u>{(gamma-</u>	58-89-9	ND	 ND	1.4
Hexachlorocyclo-				
hexane <del>]</del> ) <del>[gamma-(</del> γ-				
BHC <u>})</u>				
Methylene chloride	75-09-2	ND	 ND	39
<u>{(Dichloromethane})</u>				
4,4'-methylene-bis(2-	101-14-4	ND	 ND	100
chloroaniline)				
Methyl iodide <u>{</u> (Iodo-	74-88-4	ND	 ND	39
methane <del>]</del> )				
Pentachlorobenzene	608-93-5	ND	 ND	2400
Pentachloroethane	76-01-7	ND	 ND	39
Pentachloronitro-	82-68-8	ND	 ND	2400
benzene <u>{(</u> PCNB <u>})</u>				
{(Quintobenzene})				
[(Quintozene])				
Pentachlorophenol	87-86-5	ND	 ND	2400

Pronamide	23950-58-5	ND	 ND	2400
Silvex <u>{(</u> 2,4,5-Tri-	93-72-1	ND	 ND	7.0
chlorophenoxy-				
propionic acid <u>})</u>				
2,3,7,8-Tetrachloro-	1746-01-6	ND	 ND	30
dibenzo-p-dioxin				
<u>{(2,3,7,8-TCDD})</u>				
1,2,4,5-Tetrachloro-	95-94-3	ND	 ND	2400
benzene				
1,1,2,2-Tetrachloro-	79-34-5	ND	 ND	39
ethane	1.5 - 1.0 1			
Tetrachloroethylene	127-18-4	ND	 ND	39
[(Perchloroethylene])				
2,3,4,6-Tetrachloro-	58-90-2	ND	 ND	2400
phenol				
1,2,4-Trichlorobenzene	120-82-1	ND	 ND	2400
1,1,1-Trichloroethane	71-55-6	ND	 ND	39
{(Methyl chloroform})				
1,1,2-Trichloroethane	79-00-5	ND	 ND	39
{(Vinyl trichloride})				
Trichloroethylene	79-01-6	ND	 ND	39
Trichlorofluoro-	75-69-4	ND	 ND	39
methane <u>{(</u> Trichloro-				
monofluoromethane])				
2,4,5-Trichlorophenol	95-95-4	ND	 ND	2400
2,4,6-Trichlorophenol	88-06-2	ND	 ND	2400
1,2,3-Trichloropropane	96-18-4	ND	 ND	39
Vinyl Chloride	75-01-4	ND	 ND	39

NA means not applicable.

ND means nondetect.

Note 1: 25 (mg/kg at 10,000 Btu/lb) as organic halogen or as the individual halogenated organics listed in the table at the levels indicated.

(Source: Amended at 27 II	1. Reg, effective	)
Section 721.Appendix Z	Table to Section 721.102	
	Table	

	Use constituting disposal	Burning for energy recovery or use to produce a fuel	Reclamation (except as provided in Section 721.104- (a)(17) for mineral processing secondary materials)	Speculative accumulation
Applicable Subsection of Section 721.102:	(c)(1)	(c)(2)	(c)(3)	(c)(4)
Spent materials	Yes	Yes	Yes	Yes
Sludges (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes
Sludges exhibiting a characteristic of hazardous waste	Yes	Yes		Yes
By-products (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes
By-products exhibiting a characteristic of hazardous waste	Yes	Yes		Yes
Commercial chemical products listed in Section 721.133	Yes	Yes		
Scrap metal other than excluded scrap metal (see Section 721.101-(c)(9))	Yes	Yes	Yes	Yes

Yes - Defined as a solid waste No - Not defined as a solid waste BOARD NOTE: Derived from Table 1 to 40 CFR 261.2-(1997) (2002), as amended at 63 Fed. Reg. 28636 (May 26, 1998). The terms "spent materials,"; "sludges,"; "by-products,"; "scrap metal,"; and "processed scrap metal" are defined in Section 721.101.

(	(Source:	Amended at 27	III Reg	. effective	,

### TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE G: WASTE DISPOSAL CHAPTER I: POLLUTION CONTROL BOARD

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

### **PART 726**

# STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTE AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

## SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section	
726.120	Applicability
726.121	Standards applicable Applicable to generators Generators and transporters
	<u>Transporters</u> of materials used Materials Used in a manner Manner that
	constitutes disposal Constitutes Disposal
726.122	Standards applicable to storers Storers, who are not Who Are Not the
	ultimate users <u>Ultimate Users</u> , of materials <u>Materials</u> that are to be used <u>Are To</u>
	Be Used in a manner manner that constitutes disposal Constitutes Disposal
726.123	Standards Applicable to Users of Materials that are Are Used in a Manner that
	Constitutes Disposal

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## SUBPART N: CONDITIONAL EXEMPTION FOR LOW-LEVEL MIXED WASTE STORAGE, TREATMENT, TRANSPORTATION AND DISPOSAL

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Action					
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726. Appendix L Nickel or Chromium-Bearing Materials that may be May Be Processed in

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726. Appendix M Mercury-Bearing Wastes That that May Be Processed in Exempt Mercury

Recovery Units

726. Table A Exempt Quantities for Small Quantity Burner Exemption

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

SOURCE: Adopted in R85-22 at 10 III. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 III. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 III. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 III. Reg. 18606, effective November 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 III. Reg. 9858, effective June 9, 1992; amended in R92-10 at 17 III. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 III. Reg. 20904, effective November 22, 1993; amended in R94-7 at 18 III. 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 III. Reg. 754, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 III. Reg. 18042, effective September 28, 1998; amended in R99-15 at 23 III. 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 III. Reg. 6667, effective April 22, 2002; amended in R03-7 at 27 III. Reg. 4200, effective February 14, 2003; amended in R03-18 at 27 III. Reg. effective

### SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section 726.120 Applicability

- a) The regulations of this Subpart <u>C</u> apply to recyclable materials that are applied to or placed on the land <u>in either of the following ways</u>:
  - 1) Without mixing with any other substance(s) substances; or
  - 2) After mixing or combination with any other <u>substance(s)</u> <u>substances</u>. These materials will be referred to throughout this Subpart <u>C</u> as "materials used in a manner that constitutes disposal."
- b) Products A product produced for the general public's use that are is used in a manner that constitutes disposal and that contain which contains recyclable materials are material is not presently subject to regulation under this Subpart C if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the

applicable treatment standards in <u>Subpart D of 35 III</u>. Adm. Code 728. Subpart D (or applicable prohibition levels in 35 III. Adm. Code 728.132 or 728.139, where no treatment standards have been established) for each recycable material (i.e., hazardous waste) that they contain it contains. Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation, provided they meet the same treatment standards or prohibitions levels for each recyclable material they contain. However, zinc-containing fertilizers using hazardous waste K061 that are produced for the general public's use are not presently subject to regulation under this Subpart.

- c) Anti-skid and deicing uses in a manner constituting disposal-of slags that are generated from high temperature metals recovery (HTMR) processing of hazardous wastes K061, K062, and F006 in a manner constituting disposal are not covered by the exemption in subsection (b) above of this Section, and such uses of these materials remain subject to regulation.
- d) Fertilizers that contain recyclable materials are not subject to regulation provided that the following conditions are fulfilled:
  - 1) They are zinc fertilizers excluded from the definition of solid waste according to 35 Ill. Adm. Code 721.104(a)(21); or
  - 2) They meet the applicable treatment standards in Subpart D of 35 Ill. Adm. Code 728 for each hazardous waste that they contain.

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Section 726.121	Standards applicable Applicable to generators Generators and transporters Transporters of materials used Materials Used in a manner Manner that constitutes disposal Constitutes Disposal

effective

Generators and transporters A generator or transporter of materials a material that are is used in a manner that constitutes disposal are is subject to the applicable requirements of 35 III. Adm. Code 722 and 723 and the notification requirement under Section 3010 of the Resource Conservation and Recovery Act (42 U.S.C. USC 6901 et seq.).

(Source: A	Amended at 27	Ill. Reg.	, effective	
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(Source: Amended at 27 Ill. Reg.

Section 726.122 Standards applicable Applicable to storers Storers, who are not Who Are

Not the ultimate users Ultimate Users, of materials Materials that are to be

used Are To Be Used in a manner manner that constitutes disposal

Constitutes Disposal

Owners or operators An owner or operator of facilities a facility that store stores a recyclable materials material that are is to be used in a manner that constitutes disposal, but who are which is not the ultimate users user of the materials material, are is regulated under all applicable provisions of Subparts A through L of 35 Ill. Adm. Code 724 and 725. Subparts A through L, and 35 Ill. Adm. Code 702, 703, and 705, and the notification requirement under Section 3010 of the Resource Conservation and Recovery Act.

	3		
(Source: An	nended at 27 Ill. Reg	, effective	)
Section 726.	123 Standards Appli that Constitutes		als that <del>are <u>Are</u> Used in a Manner</del>
a)	recyclable materials ma under all applicable pro through N of 35 Ill. Ad of 35 Ill. Adm. Code 72 notification requiremen Recovery Act. (These re	terial in a manner that covisions of 35 Ill. Adm. Com. Code 724. Subparts A 25. Subparts A through Not under Section 3010 of the requirements do not apply	ceilities a facility that use uses a constitutes disposal are is regulated code 702, 703, and 705; Subparts A through N; Subparts A through N; Subparts A through N; 35 Ill. Adm. Code 728; and the he Resource Conservation and y to products a product that contain le material under the provisions of
b)	other hazardous waste (		at is contaminated with dioxin or any fied solely on the basis of ent is prohibited.
(Source: An	nended at 27 Ill. Reg	, effective	)
S	UBPART F: RECYCLAF	BLE MATERIALS UTII	LIZED FOR PRECIOUS

Section 726.170 Applicability and requirements Requirements

- a) The regulations of this subpart Subpart F apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals.
- b) Persons A person that generate generates, transport transports, or store stores recyclable materials that are regulated under this Subpart F are is subject to the following requirements:
  - 1) Notification requirements under Section 3010 of the Resource Conservation and Recovery Act;

- 2) <u>Subpart B of 35 Ill. Adm. Code 722. Subpart B (for generators a generator)</u>, 35 Ill. Adm. Code 723.120 and 121-723.121 (for transporters a transporter), and 35 Ill. Adm. Code 725.171 and 725.172 (for persons a person that store stores); and
- For precious metals exported to or imported from designated OECD member countries for recovery, <u>Subpart H of 35 Ill.</u> Adm. Code 722. Subpart H and 725.112(a)(2). For precious metals exported to or imported from non-OECD countries for recovery, <u>Subparts E and F of 35 Ill.</u> Adm. Code 722. Subparts E and F.
- c) <u>Persons A person</u> that <u>store stores</u> recycled materials that are regulated under this Subpart <u>F-shall must</u> keep the following records to document that <u>they are it is</u> not accumulating these materials speculatively (as defined in 35 III. Adm. Code 721.101(c));
  - 1) Records showing the volume of these materials stored at the beginning of the calendar year;
  - 2) The amount of these materials generated or received during the calendar year; and
  - 3) The amount of materials remaining at the end of the calendar year.
- d) Recyclable materials that are regulated under this Subpart <u>F</u> that are accumulated speculatively (as defined in 35 Ill. Adm. Code 721.101(c)) are subject to all applicable provisions of 35 Ill. Adm. Code <u>702</u>, <u>703</u>, and <u>722</u> through 725<del>, and 35</del> <del>Ill. Adm. Code <u>702</u>, <u>703</u> and <u>705</u>.</del>

SUBPART G. SPENT LEAD-ACID BATTERIES BEING RECLAIMED

(Source:	Amended at 27 Ill. Reg.	, effective	)

Section 726.180 Applicability and requirements Requirements

a) Are Extent of exemption for spent lead-acid batteries exempt 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. Use the following table to determine 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.
- 2) 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.
- 5) 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.

he batteries	And if an owner	Then an owner or	And an owner or
	or operator	<del>operator</del>	<del>operator</del>

1	I	T	
(1) Will be reclaimed through regeneration (such as by electrolyte replacement)		is exempt from 35 Ill. Adm. Code 702, 703, 705, 722 (except for 35 Ill. Adm. Code 722.111), 723, 724, 725, 726, 728, and the notification requirements at section 3010 of RCRA	is subject to 35 III. Adm. Code 721 and 722.111
(2) Will be reclaimed other than through regeneration	generates, collects, or transports these batteries	is exempt from 35 Ill. Adm. Code 702, 703, 705, 722 (except for 35 Ill. Adm. Code 722.111), 723, 724, 725, 726, and the notification requirements at section 3010 of RCRA	is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions under 35 Ill. Adm. Code 728
(3) Will be reclaimed other than through regeneration	stores these batteries but the owner or operator is not the reclaimer	is exempt from 35 III. Adm. Code 702, 703, 705, 722 (except for 35 III. Adm. Code 722.111), 723, 724, 725, 726, and the notification requirements at section 3010 of RCRA	is subject to 35 III. Adm. Code 721 and 722.111 and applicable provisions under 35 III. Adm. Code 728
(4) Will be reclaimed other than through regeneration	stores these batteries before the owner or operator reclaims them	shall comply with 35 Ill. Adm. Code 726.180(b) and, as appropriate, other regulatory provisions described in 35 Ill. Adm. Code 726.180(b)	is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions under 35 Ill. Adm. Code 728

(5) Will be	does not store	is exempt from 35	is subject to 35 Ill.
reclaimed other	these batteries	Ill. Adm. Code	Adm. Code 721
than through	before the owner	702, 703, 705, 722	and 722.111 and
regeneration	<del>or operator</del>	(except for 35 Ill.	<del>applicable</del>
	reclaims them	Adm. Code	provisions under
		<del>722.111), 723,</del>	35 Ill. Adm. Code
		724, 725, 726, and	728
		the notification	
		requirements at	
		section 3010 of	
		RCRA	

- b) If an owner or operator stores Exemption for spent lead-acid batteries stored before it reclaims them but not reclamation other than through regeneration, which requirements apply? The requirements of this subsection (b) of this Section apply to an owner or operator if the owner or operator that stores spent lead-acid batteries before it reclaims them, but 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-shall 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 <u>Subpart A of 35 Ill. Adm. Code</u> 725. Subpart A.;
    - C) All applicable provisions in <u>Subpart B of 35 Ill. Adm. Code</u> 725. Subpart B, except 35 Ill. Adm. Code 725.113 (waste analysis):
    - D) All applicable provisions in <u>Subparts C and D of 35 Ill. Adm. Code</u> 725. Subparts C and D.:
    - E) All applicable provisions in <u>Subpart E of 35 III</u>. Adm. Code 725. Subpart E, except 35 III. Adm. Code 725.171 and 725.172 (dealing with the use of the manifest and manifest discrepancies).
    - F) All applicable provisions in <u>Subparts F through L of 35 Ill. Adm.</u> Code 725<del>.Subparts F through L.</del>; and
    - G) All applicable provisions in 35 Ill. Adm. Code 702, and 703, and 705.

- 2) For a permitted facility, the following requirements:
  - A) The notification requirements under section 3010 of RCRA-;
  - B) All applicable provisions in <u>Subpart A of 35 Ill. Adm. Code</u> 724. Subpart A.;
  - C) All applicable provisions in <u>Subpart B of 35 Ill. Adm. Code</u> 724.Subpart B, except (but not-35 Ill. Adm. Code 724.113 (waste analysis)).;
  - D) All applicable provisions in <u>Subparts C and D of 35 III.</u> Adm. Code 724. Subparts C and D.;
  - E) All applicable provisions in <u>Subpart E of 35 Ill.</u> Adm. Code 724.<del>Subpart E, except (but not 35 Ill.</del> Adm. Code 724.171 or 724.172 (dealing with the use of the manifest and manifest discrepancies)).;
  - F) All applicable provisions in <u>Subparts F through L of 35 Ill.</u> Adm. Code 724. Subparts F through L.; and
  - G) All applicable provisions in 35 Ill. Adm. Code 702<del>, and 703, and 705</del>.

Source:	Amended at 27 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.

- Except as provided by subsection (b)(2) of this Section, the standards of this Part no longer apply when an affected source demonstrates compliance with the maximum achievable control technology (MACT) requirements of 40 CFR 63, subpart EEE, incorporated by reference in 35 Ill. Adm. Code 720.111, by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, under 40 CFR 63.1207(j) and 63.1210(b), documenting compliance with the requirements of 40 CFR 63, subpart EEE. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of this Part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.
- 2) The following standards continue to apply:
  - A) If an owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Section 726.202(e)(1), requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Section 726.202(e)(2)(C), requiring compliance with the emission standards and operating requirements, during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;
  - B) The closure requirements of Sections 726.202(e)(11) and 726.203(l);
  - C) The standards for direct transfer of Section 726.211;
  - D) The standards for regulation of residues of Section 726.312; and
  - E) The applicable requirements of Subparts A through H, BB, and CC of 35 Ill. Adm. Code 724 and 725.

BOARD NOTE: Sections 9.1 and 39.5 of the Environmental Protection Act [415 ILCS 5/9.1 and 39.5] make the federal MACT standards directly applicable to entities in Illinois and authorize the Agency to issue permits based on the federal standards. In adopting this subsection (b), USEPA stated as follows (at 64 Fed Reg. 52828, 52975 (September 30,1999)):

Under [the approach adopted by USEPA as a] final rule, MACT air emissions and related operating requirements are to be included

in title V permits; RCRA permits will continue to be required for all other aspects of the combustion unit and the facility that are governed by RCRA (e.g., corrective action, general facility standards, other combustor-specific concerns such as materials handling, risk-based emissions limits and operating requirements, as appropriate, and other hazardous waste management units).

- c) The following hazardous wastes and facilities are not subject to regulation under this Subpart H:
  - Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Such used oil is subject to regulation under 35 Ill. Adm. Code 739, rather than this Subpart;
  - 2) Gas recovered from hazardous or solid waste landfills, when such gas is burned for energy recovery;
  - Hazardous wastes that are exempt from regulation under 35 Ill. Adm. Code 721.104 and 721.106(a)(3)(C) and (a)(3)(D) and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators under 35 Ill. Adm. Code 721.105; and
  - 4) Coke ovens, if the only hazardous waste burned is USEPA hazardous waste no. K087 decanter tank tar sludge from coking operations.
- d) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices, such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation under this Subpart H, except for Sections 726.201 and 726.212.
  - 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 40 CFR 63, subpart X must comply with the requirements of subsection (h) of this Section:

- A) Provide a one-time written notice to the Agency indicating the following:
  - i) The owner or operator claims exemption under this subsection;
  - ii) The hazardous waste is burned solely for metal recovery consistent with the provisions of subsection (d)(2) of this Section;
  - iii) The hazardous waste contains recoverable levels of metals; and
  - iv) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this subsection (d);
- B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection (d) under procedures specified by "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator must use the best available method; 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.
- To be exempt from Sections 726.202 through 726.211, an owner or operator of a lead, nickel-chromium, or mercury recovery furnace, except for an owner or operator of a lead recovery furnace that is subject to regulation under the Secondary Lead Smelting NESHAP of 40 CFR 63, subpart X, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must provide a one-time written notice to the Agency identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste under this subsection (d)(3) or subsection (d)(1) of this Section. The owner or operator must comply with the requirements of subsection (d)(1) of this Section for those wastes claimed to be exempt under that subsection and must comply with the following requirements for those wastes claimed to be exempt under this subsection (d)(3):
  - A) The hazardous wastes listed in Appendices K, L, and M of this Part and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (d)(1) of this Section, provided the following are true:
    - i) A waste listed in Appendix K of this Part must contain recoverable levels of lead, a waste listed in Appendix L of this Part must contain recoverable levels of nickel or chromium, a waste listed in Appendix M of this Part must contain recoverable levels of mercury and contain less than 500 ppm of Appendix H to 35 Ill. Adm. Code 721 organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;
    - ii) The waste does not exhibit the toxicity characteristic of 35 Ill. Adm. Code 721.124 for an organic constituent;
    - iii) The waste is not a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721 because it is listed for an organic

- constituent, as identified in Appendix G of 35 Ill. Adm. Code 721; and
- iv) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of subsection (d)(3) of this Section and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis must be conducted according to subsection (d)(1)(B) of this Section, and records to document compliance with subsection (d)(3) of this Section must be kept for at least three years.
- B) The Agency may decide, on a case-by-case basis, that the toxic organic constituents in a material listed in Appendix K, Appendix L, or Appendix M of this Part that contains a total concentration of more than 500 ppm toxic organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart H. Under these circumstances, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart H when burning that material. In making the hazard determination, the Agency must consider the following factors:
  - i) The concentration and toxicity of organic constituents in the material;
  - ii) The level of destruction of toxic organic constituents provided by the furnace; and
  - iii) Whether the acceptable ambient levels established in Appendix D or E of this Part will be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.
- e) The standards for direct transfer operations under Section 726.211 apply only to facilities subject to the permit standards of Section 726.202 or the interim status standards of Section 726.203.
- f) The management standards for residues under Section 726.212 apply to any BIF burning hazardous waste.

- g) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals are conditionally exempt from regulation under this Subpart H, except for Section 726.212. To be exempt from Sections 726.202 through 726.211, an owner or operator must do the following:
  - 1) Provide a one-time written notice to the Agency indicating the following:
    - A) The owner or operator claims exemption under this Section,
    - B) The hazardous waste is burned for legitimate recovery of precious metal, and
    - C) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this Section;
  - Sample and analyze the hazardous waste, as necessary, to document that the waste is burned for recovery of economically significant amounts of precious metal, using procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator must use the best available method; and
  - 3) Maintain, at the facility for at least three years, records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.
- h) An owner or operator of a lead recovery furnace that processes hazardous waste for recovery of lead and which is subject to regulation under the Secondary Lead Smelting NESHAP of 40 CFR 63, subpart X, is conditionally exempt from regulation under this Subpart, except for Section 726.201. To become exempt, an owner or operator must provide a one-time notice to the Agency identifying each hazardous waste burned and specifying that the owner or operator claims an exemption under this subsection (h). The notice also must state that the waste burned has a total concentration of non-metal compounds listed in Appendix H to 35 Ill. Adm. Code 721 of less than 500 ppm by weight, as fired and as provided in subsection (d)(2)(A) of this Section, or is listed in Appendix K to this Part.
- i) Abbreviations and definitions. The following definitions and abbreviations are used in this Subpart H:

"APCS" means air pollution control system.

"BIF" means boiler or industrial furnace.

"Carcinogenic metals" means arsenic, beryllium, cadmium, and chromium.

"CO" means carbon monoxide.

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

"DRE" means destruction or removal efficiency.

"cu m" or "m<sup>3</sup>" 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 40 CFR 51.100(ii), incorporated by reference in 35 Ill. Adm. Code 720.111.

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"Hourly rolling average" means the arithmetic mean of the 60 most recent one-minute average values recorded by the continuous monitoring system.

"K" means Kelvin.

"kVA" means kilovolt amperes.

"MEI" means maximum exposed individual.

"MEI location" means the point with the maximum annual average off-site (unless on-site is required) ground level concentration.

"Noncarcinogenic metals" means antimony, barium, lead, mercury, thallium, and silver.

- "One hour block average" means the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of the preceding clock hour.
- "PIC" means product of incomplete combustion.
- "PM" means particulate matter.
- "POHC" means principal organic hazardous constituent.
- "ppmv" means parts per million by volume.
- "QA/QC" means quality assurance and quality control.
- "Rolling average for the selected averaging period" means the arithmetic mean of one hour block averages for the averaging period.
- "RAC" means reference air concentration, the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart. RACs are specified in Appendix D of this Part.
- "RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E of this Part.
- "SSU" means "Saybolt Seconds Universal," a unit of viscosity measured by ASTM D 88-87 or D 2161-87, incorporated by reference in 35 Ill. Adm. Code 720.111.
- "TCLP test" means the toxicity characteristic leaching procedure 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 "Procedures for Estimating the Toxicity Equivalence of Chlorinated

Dibenzo-p-Dioxin and Dibenzofuran Congeners," incorporated by reference in Appendix I of this Part.

		"mg" means microgram.
(Source: Amer	nded at	27 Ill. Reg)
Section 726.201		Management prior Prior to Burning
		tors. Generators A generator of hazardous waste that is burned in a BIF are is to 35 Ill. Adm. Code 722.
	-	orters. Transporters A transporter of hazardous waste that is burned in a BIF abject to 35 Ill. Adm. Code 723.
c)	Storage	and treatment facilities.
		An owner or operator of a facility that stores or treats hazardous waste that is burned in a BIF is subject to the applicable provisions of 35 Ill. Adm. Code 702, 703, 724, and 725 and 35 Ill. Adm. Code 702 and 703, except as provided by subsection (c)(2) of this Section. These standards apply to storage and treatment by the burner, as well as to any storage or treatment facility operated by an intermediary (a processor, blender, distributor, etc.) between the generator and the burner.
		An owner or operator of a facility that burns, in an on-site BIF exempt from regulation under the small quantity burner provisions of Section 726.208, hazardous waste that it generates is exempt from regulation under 35 Ill. Adm. Code 702, 703, 724, and 725 and 35 Ill. Adm. Code 702 and 703 applicable to storage units for those storage units that store mixtures of hazardous waste and the primary fuel to the BIF in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation, as prescribed in subsection (c)(1) of this Section.
(Source: Amer	nded at	27 Ill. Reg, effective)
Section 726.202	2	Permit standards Standards for Burners

- a) Applicability.
  - 1) General. Owners and operators An owner or operator of BIFs burning a BIF that burns hazardous waste and which does not operating operate under interim status shall must comply with the requirements of this Section and 35

- Ill. Adm. Code 703.208 and 703.232, unless exempt under the small quantity burner exemption of Section 726.208.
- 2) Applicability of 35 Ill. Adm. Code 724 standards. Owners and operators An owner or operator of BIFs a BIF that burn burns hazardous waste are 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), <u>35 Ill. Adm. Code</u> 724.104;
  - B) In Subpart B (General facility standards), 35 Ill. Adm. Code 724.111 through 724.118;
  - C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 724.131 through 724.137;
  - D) In Subpart D (Contingency plan and emergency procedures), 35 Ill. Adm. Code 724.151 through 724.156;
  - E) In Subpart E (Manifest system, recordkeeping and reporting), the applicable provisions of 35 Ill. Adm. Code 724.171 through 724.177;
  - F) In Subpart F (Corrective Action), 35 Ill. Adm. Code 724.190 and 724.201;
  - G) In Subpart G (Closure and post-closure), 35 Ill. Adm. Code 724.211 through 724.215;
  - H) In Subpart H (Financial requirements), 35 Ill. Adm. Code 724.241, 724.242, 724.243, and 724.247 through 724.251, except that the State of Illinois and the Federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 724.Subpart H; 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 shall 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. Appendix H that is reasonably be expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by analytical procedures prescribed by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (incorporated by

reference, see 35 Ill. Adm. Code 720.111). Alternative methods that meet or exceed the method performance capabilities of SW-846 methods may be used. If SW-846 does not prescribe a method for a particular determination, the owner or operator-shall must use the best available method. The Appendix H of 35 Ill. Adm. Code 721. Appendix H constituents excluded from this analysis must be identified and the basis for their exclusion explained. This analysis must provide all information required by this Subpart H and 35 Ill. Adm. Code 703.208 and 703.232 and must enable the Agency to prescribe such permit conditions as are necessary to protect human health and the environment. Such analysis must be included as a portion of the Part B permit application, or, for facilities operating under the interim status standards of this Subpart, as a portion of the trial burn plan that may be submitted before the Part B application under provisions of 35 Ill. Adm. Code 703.232(g), as well as any other analysis required by the Agency. Owners and operators of BIFs not operating under the interim status standards shall must provide the information required by 35 III. Adm. Code 703.208 and 703.232 in the Part B application to the greatest extent possible.

- 2) Throughout normal operation, the owner or operator-shall must conduct sampling and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the BIF are within the physical and chemical composition limits specified in the permit.
- c) Emissions standards. Owners and operators-shall <u>must</u> comply with emissions standards provided by Sections 726.204 through 726.207.
- d) Permits.
  - 1) The owner or operator-shall <u>must</u> burn only hazardous wastes specified in the facility permit and only under the operating conditions specified under subsection (e), <u>below of this Section</u>, except in approved trial burns under the conditions specified in 35 Ill. Adm. Code 703.232.
  - 2) Hazardous wastes not specified in the permit must not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes must be based on either trial burn results or alternative data included with Part B of a permit application under 35 Ill. Adm. Code 703.208.
  - 3) BIFs operating under the interim status standards of Section 726.203 are permitted under procedures provided by 35 Ill. Adm. Code 703.232(g).
  - 4) A permit for a new BIF (those BIFs not operating under the interim status standards) must establish appropriate conditions for each of the applicable

requirements of this Section, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of subsection (e), below 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-shall 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.

- 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.
  - DRE (destruction or removal efficiency) standard. Operating A) conditions must be specified in either of the following ways: on a case-by-case basis for each hazardous waste burned, which conditions must be demonstrated (in a trial burn or by alternative data, as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a). or, as special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived under Section 726.204(a)(4), each set of operating requirements must specify the composition of the hazardous waste (including acceptable variations in the physical and chemical properties of the hazardous waste-which 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), below 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), below 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), below of this Section;
    - vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6),

- below of this Section, unless documentation is provided under 35 Ill. Adm. Code 703.232 demonstrating adequate combustion gas residence time; and
- vii) Such other operating requirements as are necessary to ensure that the DRE performance standard of Section 726.204(a) is met.
- B) CO and hydrocarbon (HC) standards. The permit must incorporate a CO limit and, as appropriate, a HC limit as provided by Section 726.204(b), (c), (d), (e), and (f). The permit limits must be specified as follows:
  - i) When complying with the CO standard of Section 726.204(b)(1), the permit limit is 100 ppmv;
  - ii) When complying with the alternative CO standard under Section 726.204(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run; and, the permit limit for HC is 20 ppmv (as defined in Section 726.204(c)(1)), except as provided in Section 726.204(f)-; or
  - iii) When complying with the alternative HC limit for industrial furnaces under Section 726.204(f), the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by that subsection.
- C) Start-up and shut-down. During start-up and shut-down of the BIF, hazardous waste <code>f(except</code> waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements under Sections 726.204(a)(5), 726.205, 726.206, and 726.207]) must not be fed into the device, unless the device is operating within the conditions of operation specified in the permit.
- 3) Requirements to ensure conformance with the particulate matter (PM) standard.
  - A) Except as provided in subsections (e)(3)(B) and (e)(3)(C), below 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), below 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), below of this Section;
- iii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system (APCS);
- iv) Allowable variation in BIF system design including any APCS or operating procedures; and
- v) Such other operating requirements as are necessary to ensure that the PM standard in Section 726.211(b) is met.
- B) Permit conditions to ensure conformance with the PM standard must not be provided for facilities exempt from the PM standard under Section 726.205(b);
- C) For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the PM standard must not limit the ash content of hazardous waste or other feed materials.
- 4) Requirements to ensure conformance with the metals emissions standard.
  - A) For conformance with the Tier I (or adjusted Tier I) metals feed rate screening limits of Section 726.206(b) or (e), the permit must specify the following operating requirements:
    - i) Total feed rate of each metal in hazardous waste, other fuels and industrial furnace feedstocks measured and specified under provisions of subsection (e)(6), below of this Section;
    - ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6), below of this Section; and
    - iii) A sampling and metals analysis program for the hazardous waste, other fuels and industrial furnace feedstocks;

- B) For conformance with the Tier II metals emission rate screening limits under Section 726.206(c) and the Tier III metals controls under Section 726.206(d), the permit must specify the following operating requirements:
  - i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;
  - ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A), below of this Section;
  - iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6), below 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), below 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), below of this Section;
  - vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6), below 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), below of this Section;
  - viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;
  - ix) Allowable variation in BIF system design including any APCS or operating procedures; and
  - x) Such other operating requirements as are necessary to ensure that the metals standards under Sections 726.206(c) or (d) are met.

- C) For conformance with an alternative implementation approach approved by the Agency under Section 726.206(f), the permit must specify the following operating requirements:
  - i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;
  - ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A), below of this Section;
  - iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsection (e)(6), below 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), below 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), below of this Section;
  - vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6), below 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), below of this Section;
  - viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;
  - ix) Allowable variation in BIF system design including any APCS or operating procedures; and
  - x) Such other operating requirements as are necessary to ensure that the metals standards under Sections 726.206(c) or (d) are met.

- 5) Requirements to ensure conformance with the HCl and chlorine gas standards.
  - A) For conformance with the Tier I total chlorine and chloride feed rate screening limits of Section 726.207(b)(1), the permit must specify the following operating requirements:
    - i) Feed rate of total chlorine and chloride in hazardous waste, other fuels and industrial furnace feedstocks measured and specified as prescribed in subsection (e)(6), below of this Section;
    - ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6), below of this Section; and
    - iii) A sampling and analysis program for total chlorine and chloride for the hazardous waste, other fuels and industrial furnace feedstocks;
  - B) For conformance with the Tier II HCl and chlorine gas emission rate screening limits under Section 726.207(b)(2) and the Tier III HCl and chlorine gas controls under Section 726.207(c), the permit must specify the following operating requirements:
    - i) Maximum emission rate for HCl and for chlorine gas specified as the average emission rate during the trial burn;
    - ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6), below of this Section;
    - iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6), below 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), below of this Section;
    - v) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

- vi) Allowable variation in BIF system design including any APCS or operating procedures; and
- vii) Such other operating requirements as are necessary to ensure that the HCl and chlorine gas standards under Section 726.207(b)(2) or (c) are met.
- 6) Measuring parameters and establishing limits based on trial burn data.
  - A) General requirements. As specified in subsections (e)(2) through (e)(5), above 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(g) 726.200(i). The permit limit for the parameter must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.
  - B) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (as defined in Section—726.200(g) 726.200(i)) and lead must be established either on an hourly rolling average basis, as prescribed by subsection (e)(6)(A), above 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 as defined in Section  $\frac{726.200(g)}{726.200(i)}$ ; and
    - iii) The permit limit for the feed rate of each metal must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run

- C) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (e)(6)(A) and (e)(6)(B), above of this Section.
- D) Conduct of trial burn testing.
  - i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.
  - ii) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters under this Section, the unit must operate under trial burn conditions for a sufficient period to reach steady-state operations. However, industrial furnaces that recycle collected PM back into the furnace and that comply with an alternative implementation approach for metals under Section 726.206(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.
  - iii) Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutant(s) 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 by in one of the following ways:

- i) Keeping By keeping the combustion zone totally sealed against fugitive emissions; or
- ii) Maintaining By maintaining the combustion zone pressure lower than atmospheric pressure; or
- iii) An alternate By an alternative means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.
- B) Automatic waste feed cutoff. A BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established under this Section. In addition, the following requirements apply:
  - The permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber,
  - ii) Exhaust gases must be ducted to the APCS operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and
  - iii) Operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the permit limits. For parameters that are monitored on an instantaneous basis, the Agency-shall 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-shall must monitor and record the following, at a minimum, while burning hazardous waste:
  - i) If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks, and feed rates of ash, metals, and total chlorine and chloride;
  - ii) If specified by the permit, CO, HCs, and oxygen on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in subsection (e)(2)(B), above of this Section. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I-("eye") of this Part.
  - iii) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate), residues, and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.
- B) All monitors must record data in units corresponding to the permit limit unless otherwise specified in the permit.
- C) The BIF and associated equipment (pumps, values, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.
- D) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every 7-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-shall must comply with Section 726.211.
- 10) Recordkeeping. The owner or operator-shall <u>must</u> keep in the operating record of the facility all information and data required by this Section until closure of the facility.
- Closure. At closure, the owner or operator-shall must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the BIF.

(Source: Amended at	27 Ill. Reg.	, effective	
Section 726.203	Interim Statu	ıs Standards for Burr	ners

- a) Purpose, scope, <u>and applicability</u>.
  - 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 40 CFR 266.103(b), incorporated by reference in subsection (b) below of this Section; provided, however, that USEPA has not determined that the certification is invalid.
    - C) If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator-shall 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 <u>Section 726.200(b)</u> 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. Owners and operators An owner or operator of BIFs a BIF that burn burns hazardous waste and are which is operating under interim status are is subject to the following provisions of 35 Ill. Adm. Code 725, except as provided otherwise by this Section:
  - A) In Subpart A of this Part 35 Ill. Adm. Code 725 (General), 35 Ill. Adm. Code 725.104;
  - B) In Subpart B of this Part 35 Ill. Adm. Code 725 (General facility standards), 35 Ill. Adm. Code 725.111 through 725.117;
  - C) In Subpart C of this Part 35 Ill. Adm. Code 725 (Preparedness and prevention), 35 Ill. Adm. Code 725.131 through 725.137;
  - D) In Subpart D of this Part 35 Ill. Adm. Code 725 (Contingency plan and emergency procedures), 35 Ill. Adm. Code 725.151 through 725.156;
  - E) In Subpart E of this Part 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 this Part 35 Ill. Adm. Code 725 (Closure and post-closure), 35 Ill. Adm. Code 725.211 through 725.215;
  - G) In Subpart H of this Part 35 Ill. Adm. Code 725 (Financial requirements), 35 Ill. Adm. Code 725.241, 725.242, 725.243, and 725.247 through 725.251, except that the State of Illinois and the Federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 725.Subpart H; and
  - H) In Subpart BB of this Part 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) above 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 temperatures are temperature is at least 1800° F;
- ii) The owner or operator-shall 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) below of this Section apply upon certification of compliance under subsection (c) below 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 these the following criteria:
  - i) The hazardous waste has a total concentration of nonmetal compounds listed in Appendix H of 35 Ill. Adm. Code 721. Appendix H, exceeding 500 ppm by weight, as fired and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste asgenerated 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) below of this Section, owners and operators shall an owner or operator must not feed hazardous waste that has a heating value less than 5000 Btu/lb, as generated, (except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a BIF, except that the following may occur:
  - A) Hazardous waste may be burned solely as an ingredient; or
  - B) Hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours; or
  - C) Such waste may be burned if the Agency has documentation to show that, the following was true prior to August 21, 1991:
    - The BIF was operating under the interim status standards for incinerators or thermal treatment units, <u>Subparts O or P of 35</u>
       Ill. Adm. Code 725. <u>Subparts O or P</u>; and
    - ii) The BIF met the interim status eligibility requirements under 35 Ill. Adm. Code 703.153 for <u>Subparts O or P of 35 Ill.</u> Adm. Code 725. Subparts O or P; and
    - iii) Hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or
  - D) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under 35 Ill. Adm. Code 721.102(e) prior to February 21, 1991, and documentation is kept on file supporting this claim.
- 7) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner or operator-shall 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.
  - 1) The Board incorporates by reference 40 CFR 266.103(b)(1992); amended at 57 Fed. Reg. 38564, August 25, 1992. This Section incorporates no later editions or amendments.
  - 2) Certain owners and operators were required to file a certification of precompliance with USEPA by August 21, 1991, pursuant to 40 CFR 266.103(b). No separate filing is required with the Agency.
- c) Certification of compliance. The owner or operator-shall 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) above of this Section under the procedures prescribed by this subsection (c), except under extensions of time provided by subsection (c)(7) below of this Section. Based on the compliance test, the owner or operator-shall must submit to the Agency, on or before August 21, 1992, a complete and accurate "certification of compliance" (under subsection (c)(4) below of this Section) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1) below of this Section.
  - Limits on operating conditions. The owner or operator shall must establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in subsection (c)(4)(D)-below 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 Section Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) above 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 that which must comply with the alternative metals implementation approach under subsection (c)(3)(B) below 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 the above 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 <u>subsection-Section-726.206-(b)</u> 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 subsection 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 subsection Section 726.207(b)(1) or (e) and for all metals under subsection Section 726.207(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under subsection-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) below of this Section, the owner or operator-shall 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 <u>following</u>:
    - 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)-below 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) above 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) above of this Section and under conditions established in the notification of compliance testing required by subsection (c)(2) above 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-shall 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 shall 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-shall 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 Section 726. Appendix I to this Part; or
- ii) Stack emissions testing for a minimum of 6-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) above of this Section) must be established during compliance testing under this subsection (c)(3) only on the following parameters: Feed feed rate of total hazardous waste; Total total feed rate of total chlorine and chloride in total feed streams; Total total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; CO concentration, and where required, HC concentration in stack gas; Maximum 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)-above 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 subsections subsection (c)(3)(B)(i) or (c)(3)(B)(ii) above 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 pollutant(s) pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (c)(1) above of this Section.
- 4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator-shall 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) above 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) Date(s) 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) above 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) above 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) Purpose(s) Purposes of test (e.g., demonstrate conformance with the emissions limits for PM, metals, HCl, chlorine gas, and CO);
  - Summary of test results for each run and for each test ii) including the following information: Date date of run; Duration duration of run; Time-weighted time-weighted average and highest hourly rolling average CO level for each run and for the test; Highest highest hourly rolling average HC level, if HC monitoring is required for each run and for the test; H-if dioxin and furan testing is required under Section 726.204(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor (defined in Section-726.200(g) 726.200(i)); Time-Weighted time-weighted average PM emissions for each run and for the test; Time-Weighted time-weighted average HCl and chlorine gas emissions for each run and for the test; Time-Weighted 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) above 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)-above 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 timeweighted 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(g) 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
  - Rolling average limits for carcinogenic metals (as defined in iii) 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) above 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 2-two to 24 hours the following must occur: The 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 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 is and the rolling average for the selected averaging period are as defined in Section 726.200(g) 726.200(i). And the operating limit for the feed rate of each metal must be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run.

- iv) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (c)(4)(D)(i) through (c)(4)(D)(iii) above 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 Sections Section 726.204(c) or subsection (a)(5)(A)(iv) above of this Section, a conditioned gas monitoring system may be used in conformance with specifications provided in Section 726. 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) below 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) above of this Section, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in Section 726. Appendix I to this Part; and
  - B) When complying with the requirements of subsection (c)(3)(B)(ii) above 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 shall must do the following:
    - i) Stop burning hazardous waste and begin closure activities under subsection (l) below of this Section for the hazardous waste portion of the facility; or
    - ii) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Agency by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or
    - iii) Obtain a case-by-case extension of time under subsection (c)(7)(B)-below 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 shall 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-shall must submit the applicable information required under subsection (b)(2)-above 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-shall must include a schedule of pre-testing and compliance testing. If the owner or operator revises the scheduled date for the compliance test, the owner or operator-shall 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) above of this Section.

- d) Periodic Recertifications. The owner or operator-shall must conduct compliance testing and submit to the Agency a recertification of compliance under provisions of subsection (c)-above of this Section within three years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, the owner or operator-shall must comply with the requirements of subsection (c)(8)-above 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)-above of this Section, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l)-below 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)-below 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.
- Automatic waste feed cutoff. During the compliance test required by subsection (c)(3) above of this Section and upon certification of compliance under subsection (c) above 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) above 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 a hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

- B) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and
- 2) Operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.
- h) Fugitive emissions. Fugitive emissions must be controlled by as follows:
  - 1) <u>Keeping By keeping</u> the combustion zone totally sealed against fugitive emissions; or
  - 2) <u>Maintaining By maintaining</u> the combustion zone pressure lower than atmospheric pressure; or
  - 3) An alternate 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-shall 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 Section 726. 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.
- 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 7-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-shall must keep in the operating record of the facility all information and data required by this Section until closure of the BIF unit.
- l) Closure. At closure, the owner or operator-shall must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF and-shall must comply with 35 Ill. Adm. Code 725.211 through 725.215.

(Source: Amended at	27 Ill. Reg, effective	)
Section 726.204	Standards to Control Organic Emissions	

- a) DRE standard.
  - 1) General. Except as provided in subsection (a)(3) of this Section, a BIF burning hazardous waste must achieve a DRE of 99.99 percent for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99 percent DRE must be

demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated (under subsection (a)(2) of this Section) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

$$DRE = 100 \frac{(I - O)}{I}$$

#### where Where:

- I = Mass feed rate of one POHC in the hazardous waste fired to the BIF; and
- O = Mass emission rate of the same POHC present in stack gas prior to release to the atmosphere.
- 2) Designation of POHCs. POHCs are those compounds for which compliance with the DRE requirements of this Section must be demonstrated in a trial burn in conformance with procedures prescribed in 35 Ill. Adm. Code 703.232. One or more POHCs must be designated by the Agency for each waste feed to be burned. POHCs must be designated based on the degree of difficulty of destruction of the organic constituents in the waste and on their concentrations or mass in the waste feed considering the results of waste analyses submitted with Part B of the permit application. POHCs are most likely to be selected from among those compounds listed in Appendix H to 35 Ill. Adm. Code 721. Appendix H that are also present in the normal waste feed. However, if the applicant demonstrates to the Agency that a compound not listed in Appendix H to 35 Ill. Adm. Code 721. Appendix H or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this Section, that compound must be designated as a POHC. Such POHCs need not be toxic or organic compounds.
- Dioxin-listed waste. A BIF burning hazardous waste containing (or derived from) USEPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each POHC designated (under subsection (a)(2) of this Section) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1) of this Section. In addition, the owner or operator of the BIF-shall must notify the Agency of intent to burn USEPA Hazardous Waste Nos. hazardous waste numbers F020, F021, F022, F023, F026, or F027.

- 4) Automatic waiver of DRE trial burn. Owners and operators of boilers operated under the special operating requirements provided by Section 726.210 are considered to be in compliance with the DRE standard of subsection (a)(1) of this Section and are exempt from the DRE trial burn.
- 5) Low risk waste. Owners and operators of BIFs that burn hazardous waste in compliance with the requirements of Section 726.209(a) are considered to be in compliance with the DRE standard of subsection (a)(1) of this Section and are exempt from the DRE trial burn.

# b) CO standard.

- 1) Except as provided in subsection (c) of this Section, the stack gas concentration of CO from a BIF burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis (i.e., over any 60 minute period), continuously corrected to 7-seven percent oxygen, dry gas basis.
- 2) CO and oxygen must be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in Section 726. Appendix I to this Part.
- Compliance with the 100 ppmv CO limit must be demonstrated during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test must not exceed 100 ppmv.

# c) Alternative CO standard.

- 1) The stack gas concentration of CO from a BIF burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of HCs do not exceed 20 ppmv, except as provided by subsection (f) of this Section for certain industrial furnaces.
- 2) HC limits must be established under this Section on an hourly rolling average basis (i.e., over any 60 minute period), reported as propane, and continuously corrected to 7-seven percent oxygen, dry gas basis.
- 3) HC must be continuously monitored in conformance with "Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste" in

- Section 726. Appendix I to this Part. CO and oxygen must be continuously monitored in conformance with subsection (b)(2) of this Section.
- 4) The alternative CO standard is established based on CO data during the trial burn (for a new facility) and the compliance test (for an interim status facility). The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to 7-seven percent oxygen, dry gas basis.
- d) Special requirements for furnaces. Owners and operators of industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see Section 726.203(a)(5)(B)) at any location other than the end where products are normally discharged and where fuels are normally fired must comply with the HC limits provided by subsection (c) or (f) of this Section irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of subsection (b) of this Section.
- e) Controls for dioxins and furans. Owners and operators of BIFs that are equipped with a dry PM control device that operates within the temperature range of 450° through 750° F, and industrial furnaces operating under an alternative HC limit established under subsection (f) of this Section-shall must conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-p-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1×10<sup>-5</sup> (1 in 100,000):
  - During the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 0023A, "Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans Emissions from Stationary Sources," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111;
  - 2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners using "Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners" in Section 726. Appendix I to this Part. Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;
  - 3) Conduct dispersion modeling using methods recommended in 40 CFR 51, Appendix W, as incorporated by reference at 35 Ill. Adm. Code 720.111

("Guideline on Air Quality Models (Revised)" (1986) and its supplements), the "Hazardous Waste Combustion Air Quality Screening Procedure,", provided in Appendix I, or in "Screening Procedures for Estimating Air Quality Impact of Stationary Sources, Revised" (incorporated by reference in 35 Ill. Adm. Code 720.111) to predict the maximum annual average offsite ground level concentration of 2,3,7,8-TCDD equivalents determined under subsection (e)(2) of this Section. The maximum annual average onsite concentration must be used when a person resides on-site; and

- The ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose (RSD) for 2,3,7,8-TCDD provided in Section 726. Appendix E to this Part (2.2'10<sup>-7</sup>) (2.2×10<sup>-7</sup>) must not exceed 1.0.
- f) Monitoring CO and HC in the by-pass duct of a cement kiln. Cement kilns may comply with the CO and HC limits provided by subsections (b), (c), and (d) of this Section by monitoring in the by-pass duct provided that the following conditions are fulfilled:
  - 1) Hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and
  - 2) The by-pass duct diverts a minimum of 10 percent of kiln off-gas into the duct.
- g) Use of emissions test data to demonstrate compliance and establish operating limits. Compliance with the requirements of this Section must be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of this Section or to establish alternative CO or HC limits under this Section must be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under subsection (e) of this Section and comprehensive organic emissions testing under subsection (f) of this Section is conducted.
- h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and reissuance of a permit under 35 Ill. Adm. Code 703.270 et seq.

Source: Amended at 27 Ill. Reg.	_, effective)
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## Section 726.205 Standards to control PM

- a) A BIF burning hazardous waste must not emit PM in excess of 180 mg/dry standard eu m-m³ (0.08 grains/dry standard cubic foot) after correction to a stack gas concentration of <del>7%</del>-seven percent oxygen, using procedures prescribed in 40 CFR 60, Appendix A, methods 1 through 5, incorporated by reference in 35 Ill. Adm. Code 720.111, and incorporated by reference in Appendix I of this Part.
- b) An owner or operator meeting the requirements of Section 726.209(b) for the low risk waste exemption is exempt from the PM standard.
- c) Oxygen correction.
  - 1) Measured pollutant levels must be corrected for the amount of oxygen in the stack gas according to the following formula:

$$P_c = P_m \times 14/(E - Y)$$

Where:

- P<sub>c</sub> is the corrected concentration of the pollutant in the stack gas,
- $P_{m}$  is the measured concentration of the pollutant in the stack gas,
- E is the oxygen concentration on a dry basis in the combustion air fed to the device, and
- Y is the measured oxygen concentration on a dry basis in the stack.
- 2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion (that is, air with an oxygen concentration exceeding 21 percent), the value of E will be the concentration of oxygen in the enriched air.
- 3) Compliance with all emission standards provided by this Subpart <u>H</u> 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 et seq through 703.273.

(Source: Amended a	t 27 Ill. Reg	, effective	)
Section 726.206	Standards to	Control Metals Emissions	

- a) General. The owner or operator-shall 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 analytical procedures specified in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.
- b) Tier I feed rate screening limits. Feed rate screening limits for metals are specified in Section 726. 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.
  - 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 Section 726. 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 Section 726. 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 Section 726. 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 Where:

- $\Sigma$  A<sub>i</sub>/F<sub>i</sub> means the sum of the values of A/F for each metal "i,", from i = 1 to n.
- n = number of carcinogenic metals.
- $A_i =$  the actual feed rate to the device for metal "i."-
- F<sub>i</sub> = the feed rate screening limit provided by Section 726. 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 2-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 Where:

H = Actual physical stack height (m).

P = Plume rise (in m) as determined from Section 726. 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(g) 726.200(i).
- C) If the TESH calculated pursuant to subsection (b)(3)(A) of this Section is not listed in Sections 726. Appendix A through 726. 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 Section 726. Appendix I or Section 726. Appendix J to this Part shall must be used.
- Multiple stacks. Owers and operators An owners or operator of facilities a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA permit or interim status controls shall 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/see m³/sec (cubic meters per second); and

T =exhaust temperature (degrees K).

- 7) Criteria for facilities not eligible for screening limits. If any criteria below are met, the Tier I (and Tier II) screening limits do not apply. Owners and operators of such facilities shall 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 Section 726. 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 Section 726. 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 Section 726. 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 Section 726. 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 Where:

 $\Sigma$  A<sub>i</sub>/E<sub>i</sub> means the sum of the values of A/E for each metal "i¸", from i = 1 to n.

n = number of carcinogenic metals.

 $A_i$  = the actual emission rate to the device for metal "i\_".

E<sub>i</sub> = the emission rate screening limit provided by Section 726. 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) Owners and operators An owner or operator of facilities 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—shall 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.
  - Acceptable ambient levels. Sections 726. Appendix D and 726. 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<sup>-5</sup> RSDs are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD, as described in subsection (d)(3) of this Section.
  - 3) Carcinogenic metals. For the carcinogenic metals the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a

person resides on site) to the RSD for all carcinogenic metals emitted must not exceed 1.0 as determined by the following equation:

$$\sum_{i=1}^{n} \frac{P_i}{R_i} \le 1.0$$

# where Where:

 $\Sigma$  P<sub>i</sub>/R<sub>i</sub> means the sum of the values of P/R for each metal "i," from i = 1 to n.

n = number of carcinogenic metals.

 $P_i$  = the predicted ambient concentration for metal i.

 $R_i$  = the RSD for metal i.

- 4) Noncarcinogenic metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal must not exceed the RAC.
- Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls-shall 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 exceedance exceedence 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 Section 726. 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 Sections 726. Appendix D and 726. 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-shall 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 Section 726. 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) Back-calculating By back-calculating from the RSD provided in Section 726. 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, <u>by</u> 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," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.
- 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," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.
- h) Dispersion modeling. Dispersion modeling required under this Section must be conducted according to methods recommended in 40 CFR 51, appendix W ("Guideline on Air Quality Models (Revised)" (1986) and its supplements), the "Hazardous Waste Combustion Air Quality Screening Procedure" described in Section 726. Appendix I to this Part, or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised" (incorporated by reference in 35 Ill. Adm. Code 720.111) to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.
- i) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270-et seq through 703.273.

(Source: Amended a	t 27 Ill. Reg.	, effective	)
Section 726.207	Standards to	Control HCl and Chlorine Gas Emissions	

- a) General. The owner or operator-shall <u>must</u> comply with the HCl and chlorine gas controls provided by <del>subsections</del> subsection (b), (c), or (e), <del>below</del> of this Section.
- b) Screening limits.
  - Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in Section 726. 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 Section 726. 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.
- Definitions and limitations. The definitions and limitations provided by Section-Sections 726.200(g) 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—shall 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. Section 726. Appendix D to this Part lists the RACs for HCl (7 ug/eu mm<sup>3</sup>) and chlorine gas (0.4 ug/eu mm<sup>3</sup>).
  - 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-shall <u>must</u> conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an <u>exceedance exceedence</u> 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 Section Sections 726.200(g) 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 Section 726. 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 Section 726. Appendix D to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.
- f) Emissions testing. Emissions testing for HCl and chlorine gas (Cl<sub>2</sub>) must be conducted using the procedures described in Method 0050 or 0051, USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111.
- g) Dispersion modeling. Dispersion modeling must be conducted according to the provisions of Section 726.206(h).
- h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270-et seq through 703.273.

(Source: Amended at	t 27 III. Reg		effective		)
Section 726.208	Small quantity	-Quantity	On-site On	-Site Burner	Exemption

- a) Exempt quantities. Owners and operators An owner or operator of facilities a facility that burn burns hazardous waste in an on-site BIF are is exempt from the requirements of this Subpart H provided that the following conditions are fulfilled:
  - The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the Table A based on the TESH, as defined in Section Sections 726.200(g) 726.200(i) and 726.206(b)(3).
  - 2) The maximum hazardous waste firing rate does not exceed at any time 1-one percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste;
  - 3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and
  - 4) The hazardous waste fuel does not contain (and is not derived from) USEPA Hazardous Waste Nos. hazardous waste numbers F020, F021, F022, F023, F026, or F027.
- b) Mixing with nonhazardous fuels. If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with subsection (a), above of this Section.
- c) Multiple stacks. If an owner or operator burns hazardous waste in more than one onsite BIF exempt under this Section, the quantity limits provided by subsection (a)(1), above of this Section, are implemented according to the following equation:

#### $\frac{\text{SUM}(\text{Ci/Li}) < 1.0}{\text{Ci/Li}}$

$$\sum_{i=1}^{n} \frac{C_i}{L_i} \le 1.0$$

## where Where:

SUM(Xi)  $\Sigma$  ( $C_i/L_i$ ) means = \_the sum of the values of X for each stack i, from i = 1 to n.

n means the number of stacks;

Ci <u>Ci</u> = Actual Quantity Burned means the waste quantity burned per month in device "i":

 $\underline{\text{Li}}\underline{\text{L}}_{\underline{i}}$  = Allowable Quantity Burned means the maximum allowable exempt quantity for stack "i" from Table A.

BOARD NOTE: Hazardous wastes that are subject to the special requirements for small quantity generators under 35 Ill. Adm. Code 721.105 may be burned in an off-site device under the exemption provided by Section 726.208, but must be included in the quantity determination for the exemption.

- d) Notification requirements. The owner or operator of facilities qualifying for the small quantity burner exemption under this Section-shall <u>must</u> provide a one-time signed, written notice to the Agency indicating the following:
  - 1) The combustion unit is operating as a small quantity burner of hazardous waste;
  - 2) The owner and operator are in compliance with the requirements of this Section; and
  - 3) The maximum quantity of hazardous waste that the facility is allowed to burn per month as provided by Section 726.208(a)(1).
- e) Recordkeeping requirements. The owner or operator-shall must maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate and heating value limits of this Section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month and the heating value of the hazardous waste.

(Source: Amended a	t 27 Ill. Reg	, effective		_)
Section 726.209	Low risk waste R	<u>isk Waste</u> Exempt	ion	

- 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), below of this Section, and the owner or operator demonstrates by procedures prescribed in subsection (a)(2), below 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 <u>Appendix H to 35 Ill.</u> Adm. Code 721. Appendix H, that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained;
  - B) Calculate reasonable, worst case emission rates for each constituent identified in subsection (a)(2)(A), above 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), above 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) Owners and operators An owner or operator of facilities a facility with more than one on-site stack from a BIF that is exempt under this Section-shall 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), above 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(Ai/Li) £ 1.0

$$\sum_{i=1}^{n} \frac{A_i}{L_i} \le 1.0$$

where Where:

 $\frac{SUM(Xi) \cdot \Sigma (A_i/L_i)}{\text{for each carcinogen i, from i}} = 1 \text{ to n.}$ 

n means the number of carcinogenic compounds;

Ai-A<sub>i</sub> = Actual ground level concentration of carcinogen "i<sub>.</sub>":

<u>Li-L</u><sub>i</sub> = Level established in Appendix E for carcinogen "i"; and

- iii) For constituents not listed in Appendix D or E, 0.1  $\frac{\text{ug/eu}}{\text{m}\mu\text{g/m}^3}$ .
- b) Waiver of particular 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), above 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 27 Ill. Reg.	effective	)
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# Section 726.210 Waiver of DRE trial burn Trial Burn for Boilers

Boilers that operate under the special requirements of this Section, and that do not burn hazardous waste containing (or derived from) USEPA Hazardous Waste Nos. hazardous waste numbers F020, F021, F022, F023, F026, or F027, are considered to be in conformance with the DRE standard of Section 726.204(a), and a trial burn to demonstrate DRE is waived. When burning hazardous waste:

- a) A minimum of 50 percent of fuel fired to the devices must be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Agency on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate must be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;
- b) Boiler load must not be less than 40 percent. Boiler load is the ratio at any time of the total heat input to the maximum design heat input;
- c) Primary fuels and hazardous waste fuels must have a minimum as-fired heating value of 8,000 Btu/lb, and each material fired in a burner where hazardous waste is fired must have a heating value of at least 8,000 Btu/lb, as-fired as fired;
- d) The device must operate in conformance with the CO standard provided by Section 726.204(b)(1). Boilers subject to the waiver of the DRE trial burn provided by this Section are not eligible for the alternative CO standard provided by Section 726.204(c);
- e) The boiler must be a water tube type boiler that does not feed fuel using a stoker or stoker type mechanism; and
- f) The hazardous waste must be fired directly into the primary fuel flame zone of the combustion chamber with an air or steam atomization firing system, mechanical atomization system or a rotary cup atomization system under the following conditions:
  - 1) Viscosity. The viscosity of the hazardous waste fuel as fired as fired must not exceed 300 SSU;
  - 2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer or mechanical atomizer is used, 70%-70 percent of the hazardous waste fuel must pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70%-70 percent of the hazardous waste must pass through a 100 mesh (150 micron) screen;

- 3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate must be maintained within the design range taking into account the viscosity and volatility of the fuel;
- 4) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.

(Source: Amended at	t 27 Ill. Reg	, effective	)
Section 726.211	Standards for	direct Direct Transf	er

- a) Applicability. The regulations in this Section apply to owners and operators of BIFs subject to <u>Sections Section 726.202</u> or 726.203 if hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit.
- b) Definitions.
  - 1) When used in this Section, the following terms have the following meanings given below:

"Direct transfer equipment" means any device (including but not limited to, such devices as piping, fittings, flanges, valves and pumps) that is used to distribute, meter or control the flow of hazardous waste between a container (i.e., transport vehicle) and a BIF.

"Container" means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars) and containers placed on or in a transport vehicle.

- This Section references several requirements provided in <u>Subparts I and J of</u> 35 Ill. Adm. Code 724 and <u>Subparts I and J of 35 Ill. Adm. Code</u> 725. Subparts I and J. For purposes of this Section, the term "tank systems" in those referenced requirements means direct transfer equipment, as defined in subsection (b)(1), above of this Section.
- c) General operating requirements.
  - 1) No direct transfer of a pumpable hazardous waste must be conducted from an open-top container to a BIF.

- 2) Direct transfer equipment used for pumpable hazardous waste must always be closed, except when necessary to add or remove the waste, and must not be opened, handled, or stored in a manner that could cause any rupture or leak.
- 3) The direct transfer of hazardous waste to a BIF must be conducted so that it does not do any of the following:
  - A) Generate extreme heat or pressure, fire, explosion, or violent reaction;
  - B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
  - C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
  - D) Damage the structural integrity of the container or direct transfer equipment containing the waste;
  - E) Adversely affect the capability of the BIF to meet the standards provided by Sections 726.204 through 726.207; or
  - F) Threaten human health or the environment.
- 4) Hazardous waste must not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.
- 5) The owner or operator of the facility shall must use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include the following at a minimum:
  - A) Spill prevention controls (e.g., check valves, dry discount couplings, etc.); and
  - B) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.
- d) Areas where direct transfer vehicles (containers) are located. Applying the definition of container under this Section, owners and operators shall must comply with the following requirements:

- 1) The containment requirements of 35 Ill. Adm. Code 724.275;
- The use and management requirements of <u>Subpart I of 35 Ill.</u> Adm. Code 725. Subpart I, except for Sections 725.270 and 725.274, and except that in lieu of the special requirements of 35 Ill. Adm. Code 725.276 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon, as required in Tables 2-1 through 2-6 of NFPA 30 (incorporated by reference in 35 Ill. Adm. Code 720.111). The owner or operator-shall must obtain and keep on file at the facility a written certification by the local Fire Marshal that the installation meets the subject NFPA Codes; and
- 3) The closure requirements of 35 Ill. Adm. Code 724.278.
- e) Direct transfer equipment. Direct transfer equipment must meet the following requirements:
  - 1) Secondary containment. Owners and operators shall <u>must</u> comply with the secondary containment requirements of 35 Ill. Adm. Code 725.293-, except for Sections 725.293(a), (d), (e), and (i), as follows:
    - A) For all new direct transfer equipment, prior to their being put into service; and
    - B) For existing direct transfer equipment, by August 21, 1993.
  - 2) Requirements prior to meeting secondary containment requirements.
    - A) For existing direct transfer equipment that does not have secondary containment, the owner or operator-shall must determine whether the equipment is leaking or is unfit for use. The owner or operator-shall must obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 703.126(d) that attests to the equipment's integrity by August 21, 1992.
    - B) This assessment must determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the <a href="waste(s)-wastes">wastes</a> to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

- i) Design-standard(s) standards, if available, according to which the direct transfer equipment was constructed;
- ii) Hazardous characteristics of the waste(s) wastes that have been or will be handled;
- iii) Existing corrosion protection measures;
- iv) Documented age of the equipment, if available, (otherwise, an estimate of the age); and
- v) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion and erosion are accounted for.
- C) If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator-shall must comply with the requirements of 35 Ill. Adm. Code 725.296(a) and (b).
- 3) Inspections and recordkeeping.
  - A) The owner or operator-shall must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the BIF:
    - i) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;
    - ii) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation, etc.); and
    - iii) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to its design.
  - B) The owner or operator-shall must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by 35 Ill. Adm. Code 725.295(b):

- C) Records of inspections made under this subsection must be maintained in the operating record at the facility, and available for inspection for at least 3-three years from the date of the inspection.
- 4) Design and installation of new ancillary equipment. Owners and operators shall must comply with the requirements of 35 Ill. Adm. Code 725.292.
- 5) Response to leaks or spills. Owners and operators shall must comply with the requirements of 35 Ill. Adm. Code 725.296.
- 6) Closure. Owners and operators-shall must comply with the requirements of 35 Ill. Adm. Code 725.297, except for 35 Ill. Adm. Code 725.297(c)(2) through (c)(4).

(Source:	Amended at 27 Ill. Reg.	, effective	)

### Section 726.212 Regulation of Residues

A residue derived from the burning or processing of hazardous waste in a BIF is not excluded from the definition of a hazardous waste under 35 Ill. Adm. Code 721.104(b)(4), (b)(7), or (b)(8), unless the device and the owner or operator meet the following requirements:

- a) The device meets the following criteria:
  - Boilers. Boilers must burn at least 50%-50 percent coal on a total heat input or mass basis, whichever results in the greater mass feed rate of coal;
  - 2) Ore or mineral furnaces. Industrial furnaces subject to 35 Ill. Adm. Code 721.104(b)(7) must process at least 50%-50 percent by weight of normal, nonhazardous raw materials;
  - 3) Cement kilns. Cement kilns must process at least 50% 50 percent by weight of normal cement-production raw materials;
- b) The owner or operator demonstrates that the hazardous waste does not significantly affect the residue by demonstrating conformance with either of the following criteria:
  - 1) Comparison of waste-derived residue with normal residue. The waste-derived residue must not contain <u>Appendix H to 35 Ill.</u> Adm. Code 721. Appendix H constituents (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of

concern) include toxic constituents in the hazardous waste, and the organic compounds listed in <u>Appendix H to</u> 35 Ill. Adm. Code 721<del>.Appendix H that may be PICs. Sampling and analyses must be in conformance with procedures prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). For polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (D/F), analyses must be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in section 4.0 of the documents referenced in Appendix I of this Part</del>

- A) Normal residue. Concentrations of toxic constituents of concern in normal residue must be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95%-95 percent confidence with a 95%-95 percent proportion of the sample distribution) of the concentration in the normal residue-shall must be considered the statistically-derived concentration in the normal residue. If changes in raw materials or fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner or operator shall must use statistical procedures prescribed in "Statistical Methodology for Bevill Residue Determinations," incorporated by reference in Appendix I of this Part.
- B) Waste-derived residue. Waste derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under subsection (b)(1)(A) of this Section. If so, hazardous waste burning has significantly affected the residue and the residue is not excluded from the definition of "hazardous waste."-Concentrations of toxic constituents in waste-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues

generated over a 24-hour period, the concentration of each toxic constituent must be the arithmetic mean of the concentrations in the samples. No results can be disregarded; or

- 2) Comparison of waste-derived residue concentrations with health-based limits
  - A) Nonmetal constituents. The concentration of each nonmetal toxic constituent of concern (specified in subsection (b)(1) of this Section) in the waste-derived residue must not exceed the health-based level specified in Appendix G of this Part, or the level of detection (using analytical procedures prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111), whichever is higher. If a health-based limit for a constituent of concern is not listed in Appendix G of this Part, then a limit of 0.002 mg/kg or the level of detection (using analytical procedures prescribed in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 III. Adm. Code 720.111), whichever is higher, must be used. The levels specified in Appendix G of this Part (and the default level of 0.002 mg/kg or the level of detection for constituents, as identified in Note 1 of Appendix G of this Part) are administratively stayed under the condition, for those constituents specified in subsection (b)(1) of this Section, that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 and Table B to 35 III. Adm. Code 728. Table B for F039 nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of the best good-faith efforts, as defined by applicable USEPA guidance and standards, the owner or operator is deemed to be in compliance for that constituent. Until USEPA develops new guidance or standards, the owner or operator may demonstrate such good-faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above (ten times) the level provided by 35 Ill. Adm. Code 728.143 and Table B to 35 Ill. Adm. Code 728. Table B for F039 nonwastewater levels for polychlorinated dibenzo-pdioxins and polychlorinated dibenzo-furans (D/F), analyses must be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins, and total tetrachlorodibenzofurans;

BOARD NOTE: In a note to corresponding 40 CFR 266.112(b)(2)(i) (1999) (2002), as amended at 64 Fed. Reg. 53076 (Sept. 30, 1999), USEPA stated as follows:

The administrative stay, under the condition that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 for F039 nonwastewaters, remains in effect until further administrative action is taken and notice is published in the Federal Register and the Code of Federal Regulations.

Under Section 3006(b) and (g) of RCRA, 42 USC 6926(b) and (g), federal amendments do not go into effect in Illinois until the State of Illinois incorporates them into the State program. This applies unless the authority under which USEPA adopted the amendments is the Hazardous and Solid Waste Amendments of 1984 (HSWA), in which case the federal amendments become effective in Illinois on their federal effective date

- B) Metal constituents. The concentration of metals in an extract obtained using the TCLP test must not exceed the levels specified in Appendix G of this Part;
- C) Sampling and analysis. Wastewater-derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels.

  Concentrations of concern in the wastewater-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent is the arithmetic mean of the concentrations of the samples. No results can be disregarded; and
- c) Records sufficient to document compliance with the provisions of this Section must be retained until closure of the BIF unit. At a minimum, the following must be recorded:

- 1) Levels of constituents in <u>Appendix H to 35 Ill. Adm. Code 721-Appendix H</u> that are present in waste-derived residues;
- 2) If the waste-derived residue is compared with normal residue under subsection (b)(1) of this Section:
  - A) The levels of constituents in <u>Appendix H to 35 Ill.</u> Adm. Code 721. Appendix H that are present in normal residues; and
  - B) Data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

(Source: Amended at	t 27 Ill. Reg	_, effective _	)
Section 726.219	Extensions of Time		

The owner or operator may request a case-by-case extension of time to extend any time limit provided by Section 726.203(c). The operator-shall must file a petition for a RCRA variance pursuant to 35 Ill. Adm. Code 104. The Board will grant the variance if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.

- a) In granting an extension, the Board will apply conditions as the facts warrant to ensure timely compliance with the requirements of Section 726.203 and that the facility operates in a manner that does not pose a hazard to human health and the environment;
- b) When an owner and operator requests an extension of time to enable the facility to comply with the alternative hydrocarbon provisions of Section 726.204(f) and obtain a RCRA permit because the facility cannot meet the HC limit of Section 726.204(c):
  - 1) The Board will <u>do the following</u>, in considering whether to grant the extension:
    - A) Determine whether the owner and operator have submitted in a timely manner a complete Part B permit application that includes information required under 35 Ill. Adm. Code 703.208(b); and
    - B) Consider whether the owner and operator have made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of Section 726.204(e) and the controls on PM, metals and HCl/chlorine gas.

2) If an extension is granted, the Board will, as a condition of the extension, require the facility to operate under flue gas concentration limits on CO and HC that, based on available information, including information in the Part B permit application, are baseline CO and HC levels as defined by Section 726.204(f)(1).

	TE: Derived from 40 CFR 266.103(c)(7)(ii), adopted at 56 Fed. Reg. 7206, February Fed. Reg. 32688, July 17, 1991; and 57 Fed. Reg. 38566, August 25, 1992 (2002).
(Source: Ame	ended at 27 Ill. Reg, effective)
	SUBPART M: MILITARY MUNITIONS
Section 726.3	00 Applicability
a)	The regulations in this Subpart $\underline{M}$ identify when military munitions become a solid waste, and, if these wastes are also hazardous under this Subpart M or 35 Ill Adm. Code 721, the management standards that apply to these wastes.
b)	Unless otherwise specified in this Subpart M, all applicable requirements in 35 III Adm. Code 702, 703, 705, 720 through 726, and 728 apply to waste military munitions.
(Source: Ame	ended at 27 Ill. Reg, effective)
Section 726.3	01 Definitions
In addition to this Subpart N	the definitions in 35 Ill. Adm. Code 720.110, the following definitions apply to $\Lambda$ :

"Active range" means a military range that is currently in service and is being regularly used for range activities.

"Chemical agents" and "chemical munitions" are defined as in the Department of Defense Authorization Act of 1986, 50 <u>U.S.C. USC</u> 1521(j)(1)-(1997), incorporated by reference in 35 Ill. Adm. Code 720.111.

"Director" is as defined in 35 Ill. Adm. Code 702.110.

"Explosives or munitions emergency response specialist" is as defined in 35 Ill. Adm. Code 720.110.

"Explosives or munitions emergency" is as defined in 35 Ill. Adm. Code 720.110.

"Explosives or munitions emergency response" is as defined in 35 III. Adm. Code 720.110.

"Inactive range" means a military range that is not currently being used but which is still under military control and considered by the military to be a potential range area and which has not been put to a new use that is incompatible with range activities.

"Military" means the United States (U.S.) Department of Defense (DOD), the Armed Services, Coast Guard, National Guard, Department of Energy (DOE) or other parties under contract or acting as an agent for the foregoing who handle military munitions.

"Military munitions" is as defined in 35 Ill. Adm. Code 720.110.

"Military range" means designated land and water areas that are set aside; managed; and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance, or weapon systems or areas that are set aside, managed, and used to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas.

"Unexploded ordnance" or "UXO" means military munitions that have been primed, fused, armed, or otherwise prepared for action and that have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material and remain unexploded either by malfunction, design, or any other cause.

(Source: Amended at	t 27 Ill. Reg.	,	effective _	 )
Section 726.302	Definition o	f Solid Wa	iste	

- a) A military munition is not a solid waste when any of the following situations describes the munition:
  - 1) It is used for its intended purpose, including any of the following uses:
    - A) Use in training military personnel or explosives and munitions emergency response specialists (including training in proper destruction of unused propellant or other munitions);
    - B) Use in research, development, testing, and evaluation of military munitions, weapons, or weapon systems; or

- C) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, "use for intended purpose" does not include the on-range disposal or burial of unexploded ordnance and contaminants when the burial is not a result of product use.
- 2) It is an unused munition, or component thereof, it is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal, as defined in 35 III. Adm. Code 721.102(c)(1), or it is burned for energy recovery, as defined in 35 III. Adm. Code 721.102(c)(2).
- b) An unused military munition is a solid waste when any of the following occurs:
  - 1) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in subsection (a) of this Section), incinerated, or treated prior to disposal;
  - 2) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, incinerated, or treated prior to disposal;
  - The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or
  - 4) The munition has been declared a solid waste by an authorized military official.
- c) A used or fired military munition is a solid waste when either of the following activites occurs with regard to the munition:
  - 1) The munition is transported off-range or from the site of use (where the site of use is not a range) for the purpose of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
  - 2) The munition is recovered, collected, and then disposed of by burial or landfilling either on or off a range.

d) For purposes of RCRA section 1004(27) (42 U.S.C. USC 6903(27) (1996)), a used or fired military munition is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under sections 3004(u) and (v) (42 U.S.C. USC 6924(u) and (v) (1996)), and 3008(h) (42 U.S.C. USC 6928(h) (1996)) or to imminent and substantial endangerment authorities under section 7003 (42 U.S.C. USC 6963 (1996)) if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range-shall must maintain a record of the event for as long as any threat remains. The record-shall must include the type of munition and its location (to the extent the location is known).

Source: Amended at	27 Ill. Reg	effective		)
Section 726.303	Standards Applicable Munitions	to the Transportation	n of Solid Waste	Military

- a) Criteria for hazardous waste regulation of waste non-chemical military munitions in transportation.
  - Waste military munitions that are being transported and which exhibit a hazardous waste characteristic or which are listed as hazardous waste under 35 Ill. Adm. Code 721 are subject to regulation under 35 Ill. Adm. Code 702, 703, 705, 720 through 726, and 728, unless the munitions meet all the following conditions:
    - A) The waste military munitions are not chemical agents or chemical munitions;
    - B) The waste military munitions are transported in accordance with the Department of Defense shipping controls applicable to the transport of military munitions;
    - C) The waste military munitions are transported from a militaryowned or -operated installation to a military-owned or -operated treatment, storage, or disposal facility; and
    - D) The transporter of the waste-shall must provide oral notice to the Agency within 24 hours from the time when either the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) of this Section occurs that may endanger human health or the environment. In addition, a written submission describing the circumstances-shall must be provided within five days from the

time when the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) of this Section occurs.

- 2) If any waste military munitions shipped under subsection (a)(1) of this Section are not received by the receiving facility within 45 days of after the day the waste was shipped, the owner or operator of the receiving facility-shall must report this non-receipt to the Agency within five days.
- 3) The conditional exemption from regulation as hazardous waste in subsection (a)(1) of this Section-shall must apply only to the transportation of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to storage, treatment, or disposal.
- 4) The conditional exemption in subsection (a)(1) of this Section applies only so long as all of the conditions in subsection (a)(1) of this Section are met.
- b) Reinstatement of conditional exemption.
  - 1) If any waste military munition loses its conditional exemption under subsection (a)(1) of this Section, the transporter may file with the Agency an application for reinstatement of the conditional exemption from hazardous waste transportation regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of subsection (a)(1) of this Section.
  - 2) If the Agency finds that reinstatement of the conditional exemption is appropriate, it shall must reinstate the conditional exemption of subsection (a)(1) of this Section in writing. The Agency's decision to reinstate or not to reinstate the conditional exemption-shall must be based on the nature of the risks to human health and the environment posed by the waste and either the transporter's provision of a satisfactory explanation of the circumstances of the violation or any demonstration that the violations are not likely to recur. If the Agency denies an application, it-shall must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. In reinstating the conditional exemption under subsection (a)(1) of this Section, the Agency may specify additional conditions as are necessary to ensure and document proper transportation to protect human health and the environment. If the Agency does not take action on the reinstatement application within 60 days after receipt of the application, then reinstatement-shall must be deemed granted, retroactive to the date of the application.

- The Agency may terminate a conditional exemption reinstated by default under the preceding sentence in writing if it finds that reinstatement is inappropriate based on its consideration of the factors set forth in subsection (b)(2) of this Section. If the Agency terminates a reinstated exemption, it shall must transmit to the applicant specific, detailed statements in writing as to the reasons it terminated the reinstated exemption.
- 4) The applicant under this subsection (b) may appeal the Ageny's Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].
- c) Amendments to DOD shipping controls. The Department of Defense shipping controls applicable to the transport of military munitions referenced in subsection (a)(1)(B) of this Section are Government Bill of Lading (GBL) (GSA Standard Form 1109), Requisition Tracking Form (DD Form 1348), the Signature and Talley Record (DD Form 1907), Special Instructions for Motor Vehicle Drivers (DD Form 836), and the Motor Vehicle Inspection Report (DD Form 626) in effect on November 8, 1995, incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: Corresponding federal provision 40 CFR 266.203(c), as added at 62 Fed. Reg. 6655 (Feb. 12, 1997), further provides as follows: "Any amendments to the Department of Defense shipping controls-shall must become effective for purposes of paragraph (a)(1) of this section on the date the Department of Defense publishes notice in the Federal Register that the shipping controls referenced in paragraph (a)(1)(ii) of this section have been amended." (40 CFR 266.203(a)(1)(ii) corresponds with 35 Ill. Adm. Code 726.303(a)(1)(B).) Section 5-75 of the Illinois Administrative Procedure Act [5 ILCS 100/5-75] prohibits the incorporation of later amendments and editions by reference. For this reason, interested members of the regulated community will need to notify the Board of any amendments of these references before those amendments can become effective under Illinois law.

(Source: Amended at	27 Ill. Reg	, effective		)
Section 726.304	Standards Applicab	le to Emergency I	Responses	
Explosives and munit 35 Ill. Adm. Code 722 alternatively, to 35 Ill	2.110(i), 723.110(e),	724.101(g)(8), 72		•
(Source: Amended at	27 Ill. Reg	, effective		)

Section 726.305 Standards Applicable to the Storage of Solid Waste Military Munitions

- a) Criteria for hazardous waste regulation of waste non-chemical military munitions in storage.
  - Waste military munitions in storage that exhibit a hazardous waste characteristic or are listed as hazardous waste under 35 Ill. Adm. Code 721 are listed or identified as a hazardous waste (and thus are subject to regulation under 35 Ill. Adm. Code 702, 703, 705, 720 through 726, 728, 733, and 739), unless all the following conditions are met:
    - A) The waste military munitions are not chemical agents or chemical munitions;
    - B) The waste military munitions must be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB);
    - C) The waste military munitions must be stored in accordance with the DDESB storage standards applicable to waste military munitions;
    - D) Within 90 days of when a storage unit is first used to store waste military munitions, the owner or operator-shall must notify the Agency of the location of any waste storage unit used to store waste military munitions for which the conditional exemption in subsection (a)(1) of this Section is claimed;
    - E) The owner or operator-shall must provide oral notice to the Agency within 24 hours from the time the owner or operator becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of subsection (a)(1) of this Section that may endanger health or the environment. In addition, a written submission describing the circumstances shall must be provided within five days from the time the owner or operator becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of subsection (a)(1) of this Section;
    - F) The owner or operator-shall must inventory the waste military munitions at least annually, shall must inspect the waste military munitions at least quarterly for compliance with the conditions of subsection (a)(1) of this Section, and shall must maintain records of the findings of these inventories and inspections for at least three years; and

- G) Access to the stored waste military munitions must be limited to appropriately trained and authorized personnel.
- The conditional exemption in subsection (a)(1) of this Section from regulation as hazardous waste-shall must apply only to the storage of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to transportation, treatment or disposal.
- 3) The conditional exemption in subsection (a)(1) of this Section applies only so long as all of the conditions in subsection (a)(1) of this Section are met.
- b) Notice of termination of waste storage. The owner or operator-shall must notify the Agency when a storage unit identified in subsection (a)(1)(D) of this Section will no longer be used to store waste military munitions.
- c) Reinstatement of conditional exemption.
  - 1) If any waste military munition loses its conditional exemption under subsection (a)(1) of this Section, an application may be filed with the Agency for reinstatement of the conditional exemption from hazardous waste storage regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of subsection (a)(1) of this Section.
  - If the Agency finds that reinstatement of the conditional exemption is appropriate, it—shall must reinstate the conditional exemption of subsection (a)(1) of this Section in writing. The Agency's decision to reinstate or not to reinstate the conditional exemption—shall must be based on the nature of the risks to human health and the environment posed by the waste and either the owner's or operator's provision of a satisfactory explanation of the circumstances of the violation or any demonstration that the violations are not likely to recur. If the Agency denies an application, it—shall must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. In reinstating the conditional exemption under subsection (a)(1) of this Section, the Agency may specify additional conditions as are necessary to ensure and document proper storage to protect human health and the environment.
  - The Agency may terminate a conditional exemption reinstated by default under the preceding sentence in writing if it finds that reinstatement is inappropriate based on its consideration of the factors set forth in subsection (c)(2) of this Section. If the Agency terminates a reinstated

- exemption, it-shall <u>must</u> transmit to the applicant specific, detailed statements in writing as to the reasons it terminated the reinstated exemption.
- 4) The applicant under this subsection (c) may appeal the Ageny's 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].
- d) Waste chemical munitions.
  - Waste military munitions that are chemical agents or chemical munitions and that which exhibit a hazardous waste characteristic or which are listed as hazardous waste under 35 Ill. Adm. Code 721, are listed or identified as a hazardous waste and shall be are subject to the applicable regulatory requirements of RCRA subtitle C.
  - Waste military munitions that are chemical agents or chemical munitions and that exhibit a hazardous waste characteristic or are listed as hazardous waste under 35 Ill. Adm. Code 721, are not subject to the storage prohibition in RCRA section 3004(j), codified at 35 Ill. Adm. Code 728.150.
- e) Amendments to DDESB storage standards. The DDESB storage standards applicable to waste military munitions, referenced in subsection (a)(1)(C) of this Section, are DOD 6055.9-STD ("DOD Ammunition and Explosive Safety Standards"), in effect on November 8, 1995, incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: Corresponding federal provision 40 CFR 266.205(e), as added at 62 Fed. Reg. 6656 (Feb. 12, 1997), further provides as follows: "Any amendments to the DDESB storage standards-shall must become effective for purposes of paragraph (a)(1) of this section on the date the Department of Defense publishes notice in the Federal Register that the DDESB standards referenced in paragraph (a)(1) of this section have been amended." Section 5-75 of the Illinois Administrative Procedure Act [5 ILCS 100/5-75] prohibits the incorporation of later amendments and editions by reference. For this reason, interested members of the regulated community will need to notify the Board of any amendments of these references before those amendments can become effective under Illinois law.

(Source:	Amended at 27 Ill. Reg.	, effective	,
(Dource.	innenaca at 27 in. iteg.	, 011000110	

## SUBPART N: CONDITIONAL EXEMPTION FOR LOW-LEVEL MIXED WASTE STORAGE, TREATMENT, TRANSPORTATION AND DISPOSAL

Section 726.310 Definitions

Terms are defined as follows for the purposes of this Subpart N:

"CERCLA reportable quantity" means that quantity of a particular substance designated by USEPA in 40 CFR 302.4 pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 USC 9601 et seq.) for which notification is required upon a release to the environment.

"Certified delivery" means certified mail with return receipt requested, equivalent courier service, or other means that provides the sender with a receipt confirming delivery.

"Director" is as defined in 35 Ill. Adm. Code 702.110.

"DNS" means the Department of Nuclear Safety, the State of Illinois agency charged with regulating source, by-product, and special nuclear material in Illinois in accordance with an agreement between the State and the federal Nuclear Regulatory Commission (NRC) under section 274(b) of the federal Atomic Energy Act of 1954, as amended (42 USC 2021(b)).

BOARD NOTE: In addition to the materials regulated under this Part, the DNS regulates radioactive materials under the Radiation Protection Act of 1990 [420 ILCS 40] that are not licensed by the federal NRC. For the purposes of notices to the DNS required under this Subpart N, the address is as follows:

Illinois Department of Nuclear Safety 1035 Outer Park Drive Springfield, Illinois 62704

"Eligible naturally occurring or accelerator-produced radioactive material" means naturally occurring or accelerator-produced radioactive material (NARM) that is eligible for a transportation and disposal conditional exemption. It is a NARM waste that contains RCRA hazardous waste, meets the waste acceptance criteria of, and is allowed by State NARM regulations to be disposed of at a low-level radioactive waste disposal facility (LLRWDF) licensed in accordance with 10 CFR 61, DNS regulations, or the equivalent regulations of a licensing agency in another state.

BOARD NOTE: The Illinois DNS regulations are codified at 32 Ill. Adm. Code: Chapter II, Subchapter Subchapters b and d.

"Exempted waste" means a waste that meets the eligibility criteria in Section 726.325 and all of the conditions in Section 726.330 or a waste that meets the eligibility criteria in Section 726.410 and which complies with all the conditions in Section 726.415. Such waste is conditionally exempted from the regulatory definition of hazardous waste in 35 Ill. Adm. Code 721.103.

"Hazardous waste" means hazardous waste as defined in 35 III. Adm. Code 721 103

"Land disposal restriction treatment standards" or "LDR treatment standards" means treatment standards, under 35 Ill. Adm. Code 728, that a RCRA hazardous waste must meet before it can be disposed of in a RCRA hazardous waste land disposal unit.

"License" means a license issued by the federal NRC or the Illinois DNS to a user that manages radionuclides regulated by the federal NRC or the Illinois DNS under authority of the Atomic Energy Act of 1954, as amended (42 USC 2014 et seq.) or the Radiation Protection Act of 1990 [420 ILCS 40].

"Low-level mixed waste" or "LLMW" is a waste that contains both low-level radioactive waste and RCRA hazardous waste.

"Low-level radioactive waste" or "LLRW" is a radioactive waste that contains source, by-product, or special nuclear material and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material, as defined in section 11(e)(2) of the Atomic Energy Act of 1954 (42 USC 2014(e)(2)). (See also the NRC definition of waste at 10 CFR 61.2.)

BOARD NOTE: This definition differs from the similar definitions of low-level radioactive waste in the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(k)], the Central Midwest Interstate Low-Level Radioactive Waste Compact Act [45 ILCS 140/1, Article II(k)], and 32 Ill. Adm. Code 606.20(g) of the DNS regulations. Those basically define low-level radioactive waste as radioactive waste that is not (1) high-level radioactive waste, (2) transuranic waste, (3) spent nuclear fuel, or (4) by-product material, as such are defined in section 11 of the federal Atomic Energy Act of 1954 (42 USC 2014).

"Mixed waste" means a waste that contains both RCRA hazardous waste and source, by-product, or special nuclear material subject to the Atomic Energy Act of 1954, as amended (42 USC 2014 et seq.).

BOARD NOTE: This definition differs from the similar definitions of mixed waste in the Illinois Low-Level Radioactive Waste Management Act [420 ILCS

20/3(1)] and 32 III. Adm. Code 606.20(h) of the DNS regulations. Those basically define mixed waste as containing both RCRA hazardous waste and low-level radioactive waste, as such is defined under Section 3(k) of the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(k)].

"Naturally occurring or accelerator-produced radioactive material" or "NARM" means a radioactive material that fulfills one of the following conditions:

It is naturally occurring and it is not a source, by-product, or special nuclear material, as defined by the federal Atomic Energy Act (42 USC 2014 et seq.), or

It is produced by an accelerator.

BOARD NOTE: NARM is regulated by the State, under the Radiation Protection Act of 1990 [420 ILCS 40] and 32 Ill. Adm. Code: Chapter II, Subchapter Subchapters b and d, or by the federal Department of Energy (DOE), as authorized by the federal Atomic Energy Act (42 USC 2014 et seq.), under DOE regulations and orders.

"NRC" means the United States Nuclear Regulatory Commission.

BOARD NOTE: For the purposes of notices to the NRC required under this Subpart N, the address is as follows:

U.S. Nuclear Regulatory Commission, Region III 801 Warrenville Road Lisle, Illinois 60532-4351

(Source: Amended a	t 27 Ill. Reg	_, effective			)
Section 726.340	Loss of a Storage and Action	l Treatment	Conditional l	Exemption an	d Required

- a) A generator's LLMW will automatically lose the storage and treatment conditional exemption if the generator fails to meet any of the conditions specified in Section 726.330. When a generator's LLMW loses the exemption, the generator must immediately manage that waste which failed the condition as RCRA hazardous waste, and the storage unit storing the LLMW immediately becomes subject to RCRA hazardous waste container or tank storage requirements.
  - 1) If a generator fails to meet any of the conditions specified in Section 726.330, the generator must report to the Agency, the Illinois DNS, and

the NRC in writing by certified delivery within 30 days after learning of the failure. The generator's report must be signed by the generator's authorized representative certifying that the information provided is true, accurate, and complete. This report must include the following:

- A) The specific conditions that the generator failed to meet;
- B) A description of the LLMW (including the waste name, hazardous waste codes and quantity) and storage location at the facility; and
- C) The dates on which the generator failed to meet the conditions.
- If the failure to meet any of the conditions may endanger human health or the environment, the generator must also immediately notify the Agency orally within 24 hours and follow up with a written notification within five days. A failure that may endanger human health or the environment may include, but is not limited to, discharge of a CERCLA reportable quantity or other leaking or exploding tanks or containers, or detection of radionuclides above background or hazardous constituents in the leachate collection system of a storage area. If the failure may endanger human health or the environment, the generator must follow the provisions of its emergency plan.
- b) The Board may, by an order issued in an enforcement proceeding against the generator, terminate the generator's conditional exemption for its LLMW, or require the generator to meet additional conditions to claim a conditional exemption, for serious or repeated noncompliance with any requirements of this Subpart N.

(Source: Amended	at 27 Ill. Reg	, effective	)
Section 726.345	Reclaiming a Lo	ost Storage and Treatment Co	nditional Exemption

- a) A generator may reclaim a lost storage and treatment conditional exemption for its LLMW if the following conditions are fulfilled:
  - 1) The generator again meets the conditions specified in Section 726.330; and
  - The generator sends the Agency a notice by certified delivery that the generator is reclaiming the exemption for its LLMW. The generator's notice must be signed by its authorized representative certifying that the information contained in the generator's notice is true, complete, and accurate. In its notice, the generator must do the following:

- A) Explain the circumstances of each failure.
- B) Certify that the generator has corrected each failure that caused it to lose the exemption for its LLMW and that the generator again meets all the conditions as of the date that the generator specifies.
- C) Describe plans that the generator has implemented, listing specific steps that it has taken, to ensure that the conditions will be met in the future.
- D) Include any other information that the generator wants the Agency to consider when it reviews the generator's notice reclaiming the exemption.
- b) The Agency may terminate a reclaimed conditional exemption if it determines, in writing, pursuant to Section 39 of the Act [415 ILCS 5/39], that the generator's claim is inappropriate based on factors including, but not limited to, the following: the generator has failed to correct the problem; the generator explained the circumstances of the failure unsatisfactorily; or the generator failed to implement a plan with steps to prevent another failure to meet the conditions of Section 726.330. In reviewing a reclaimed conditional exemption under this Section, the Agency may add conditions to the exemption to ensure that waste management during storage and treatment of the LLMW will protect human health and the environment. Any Agency determination made pursuant to this subsection (b) is subject to review by the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

(Source: Amended at 27 Ill. Reg,	effective	)
(Source: Amended at 27 Ill. Reg,	effective	)
Section 726.360 Applicability of Closur	e Requirements to Storage Units	
An interim status and permitted storage unit the April 22, 2002 and which, after that date, storage unit (Subpart Subpart N, is not subject to the closur A storage unit (or portions of units) that has be hazardous waste prior to April 22, 2002 or who subject to closure requirements with respect to	es only LLMW that becomes exempt e requirements of 35 Ill. Adm. Code een used to store both LLMW and no tich is used to store both after that da	under this 724 and 725. on-mixed
(Source: Amended at 27 Ill. Reg.	effective	)

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Section 726.42	20	Treatm	nent Standar	ds for Eligible	Waste		
_		_		waste must me . Adm. Code 72	1 1		atment
(Source: Ame	ended at	27 III.	Reg	, effective _			)
Section 726.4.	55		f a Transpor ed Action	tation and Disp	osal Conditio	onal Exempti	on and
a)	genera		to manage	ally lose the transit in accordance	-	-	xemption if the specified in
	1)	726.41 the Illi learnin authori	5 for any of nois DNS, in g of the fail ized represent	r fails to meet a its wastes, the n writing by cen ure. The gener ntative certifying blete. This repo	generator mustified deliversator's report rate that the infe	st report to the strain of the strain of the strain of the signs of the strain of the	days after ed by its ovided is true,
		A)	The specifi waste;	e conditions the	at the generate	or failed to n	neet for the
		B)	-	on of the waste s and quantity)	•		
		C)	The dates of the waste.	on which the ge	nerator failed	to meet the	conditions for
	2)	the env	vironment, tl within 24 ho	et any of the co ne generator mu ours and follow	ıst also imme	diately notify	y the Agency
b)	genera its was conditi	tor, terr te, or re ional ex	ninate the go equire the ge	er issued in an enerator's abilit enerator to meet a serious or repeated.	y to claim a c additional co	conditional ex onditions to c	xemption for claim a

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 726.460 Reclaiming a Lost Transportation and Disposal Conditional Exemption

- a) A generator may reclaim a lost transportation and disposal conditional exemption for a waste after the generator has received a return receipt confirming that the Agency and the Illinois DNS have received the generator's notification of the loss of the exemption specified in Section 726.455(a) and if the following conditions are fulfilled:
  - 1) The generator again meets the conditions specified in Section 726.415 for the waste; and
  - 2) The generator sends a notice, by certified delivery, to the Agency that the generator is reclaiming the exemption for the waste. A generator's notice must be signed by the generator's authorized representative certifying that the information provided is true, accurate, and complete. The notice must include all of the following:
    - A) An explanation of the circumstances of each failure;
    - B) A certification that each failure that caused the generator to lose the exemption for the waste has been corrected and that the generator again meets all conditions for the waste as of the date the generator specifies;
    - C) A description of plans that the generator has implemented, listing the specific steps that the generator has taken, to ensure that conditions will be met in the future; and
    - D) Any other information that the generator wants the Agency to consider when the Agency reviews the generator's notice reclaiming the exemption.
- b) The Agency may terminate a reclaimed conditional exemption if it determines, in writing, pursuant to Section 39 of the Act [415 ILCS 5/39], that the generator's claim is inappropriate based on factors including, but not limited to, the following: the generator has failed to correct the problem; the generator explained the circumstances of the failure unsatisfactorily; or the generator has failed to implement a plan with steps to prevent another failure to meet the conditions of Section 726.415. In reviewing a reclaimed conditional exemption under this Section, the Agency may add conditions to the exemption to ensure that transportation and disposal activities will protect human health and the environment. Any Agency determination made pursuant to this subsection (b) is subject to review by the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

(Source:	Amended at 27 Ill. Reg.	. effective	`
(Dource.	I IIIIciiaca at 2/ III. Itcs.	, 011001110	

Section 726.Appendix A Tier I and Tier II Feed Rate and Emissions Screening Limits for Metals

I-A
Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic
Metals for Facilities in Noncomplex Terrain [Values for urban areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	60.	10000.	18.	60.	600.	60.
6	68.	11000.	20.	68.	680.	68.
8	76.	13000.	23.	76.	760.	76.
10	86.	14000.	26.	86.	860.	86.
12	96.	17000.	30.	96.	960.	96.
14	110.	18000.	34.	110.	1100.	110.
16	130.	21000.	36.	130.	1300.	130.
18	140.	24000.	43.	140.	1400.	140.
20	160.	27000.	46.	160.	1600.	160.
22	180.	30000.	54.	180.	1800.	180.
24	200.	34000.	60.	200.	2000.	200.
26	230.	39000.	68.	230.	2300.	230.
28	260.	43000.	78.	260.	2600.	260.
30	300.	50000.	90.	300.	3000.	300.
35	400.	66000.	110.	400.	4000.	400.
40	460.	78000.	140.	460.	4600.	460.
45	600.	100000.	180.	600.	6000.	600.
50	780.	130000.	230.	780.	7800.	780.
55	960.	170000.	300.	960.	9600.	960.
60	1200.	200000.	360.	1200.	12000.	1200.
65	1500.	250000.	430.	1500.	15000.	1500.
70	1700.	280000.	500.	1700.	17000.	1700.
75	1900.	320000.	580.	1900.	19000.	1900.
80	2200.	360000.	640.	2200.	22000.	2200.
85	2500.	400000.	760.	2500.	25000.	2500.
90	2800.	460000.	820.	2800.	28000.	2800.
95	3200.	540000.	960.	3200.	32000.	3200.
100	3600.	600000.	1100.	3600.	36000.	3600.
105	4000.	680000.	1200.	4000.	40000.	4000.
110	4600.	780000.	1400.	4600.	46000.	4600.
115	5400.	860000.	1600.	5400.	54000.	5400.
120	6000.	1000000.	1800.	6000.	60000.	6000.

I-B
Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic
Metals for Facilities in Noncomplex Terrain [Values for rural areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	31.	5200.	9.4	31.	310.	31.
6	36.	6000.	11.	36.	360.	36.
8	40.	6800.	12.	40.	400.	40.
10	46.	7800.	14.	46.	460.	46.
12	58.	9600.	17.	58.	580.	58.
14	68.	11000.	21.	68.	680.	68.
16	86.	14000.	26.	86.	860.	86.
18	110.	18000.	32.	110.	1100.	110.
20	130.	22000.	40.	130.	1300.	130.
22	170.	28000.	50.	170.	1700.	170.
24	220.	36000.	64.	220.	2200.	220.
26	280.	46000.	82.	280.	2800.	280.
28	350.	58000.	100.	350.	3500.	350.
30	430.	76000.	130.	430.	4300.	430.
35	720.	120000.	210.	720.	7200.	720.
40	1100.	180000.	320.	1100.	11000.	1100.
45	1500.	250000.	460.	1500.	15000.	1500.
50	2000.	330000.	600.	2000.	20000.	2000.
55	2600.	440000.	780.	2600.	26000.	2600.
60	3400.	580000.	1000.	3400.	34000.	3400.
65	4600.	760000.	1400.	4600.	46000.	4600.
70	5400.	900000.	1600.	5400.	54000.	5400.
75	6400.	1100000.	1900.	6400.	64000.	6400.
80	7600.	1300000.	2300.	7600.	76000.	7600.
85	9400.	1500000.	2800.	9400.	94000.	9400.
90	11000.	1800000.	3300.	11000.	110000.	11000.
95	13000.	2200000.	3900.	13000.	130000.	13000.
100	15000.	2600000.	4600.	15000.	150000.	15000.
105	18000.	3000000.	5400.	18000.	180000.	18000.
110	22000.	3600000.	6600.	22000.	220000.	22000.
115	26000.	4400000.	7800.	26000.	260000.	26000.
120	31000.	5000000.	9200.	31000.	310000.	31000.

I-C

Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic Metals for Facilities in Complex Terrain

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### Values for urban and rural areas

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	14.	2400.	4.3	14.	140.	14.
6	21.	3500.	6.2	21.	210.	21.
8	30.	5000.	9.2	30.	300.	30.
10	43.	7600.	13.	43.	430.	43.
12	54.	9000.	17.	54.	540.	54.
14	68.	11000.	20.	68.	680.	68.
16	78.	13000.	24.	78.	780.	78.
18	86.	14000.	26.	86.	860.	86.
20	96.	16000.	29.	96.	960.	96.
22	100.	18000.	32.	100.	1000.	100.
24	120.	19000.	35.	120.	1200.	120.
26	130.	22000.	36.	130.	1300.	130.
28	140.	24000.	43.	140.	1400.	140.
30	160.	27000.	46.	160.	1600.	160.
35	200.	33000.	58.	200.	2000.	200.
40	240.	40000.	72.	240.	2400.	240.
45	300.	50000.	90.	300.	3000.	300.
50	360.	60000.	110.	360.	3600.	360.
55	460.	76000.	140.	460.	4600.	460.
60	580.	94000.	170.	580.	5800.	580.
65	680.	110000.	210.	680.	6800.	680.
70	780.	130000.	240.	780.	7800.	780.
75	860.	140000.	260.	860.	8600.	860.
80	960.	160000.	290.	960.	9600.	960.
85	1100.	180000.	330.	1100.	11000.	1100.
90	1200.	200000.	360.	1200.	12000.	1200.
95	1400.	230000.	400.	1400.	14000.	1400.
100	1500.	260000.	460.	1500.	15000.	1500.
105	1700.	280000.	500.	1700.	17000.	1700.
110	1900.	320000.	580.	1900.	19000.	1900.
115	2100.	360000.	640.	2100.	21000.	2100.
120	2400.	400000.	720.	2400.	24000.	2400.

I-D

Tier I and Tier II Feed Rate and Emissions Screening Limits for Carcinogenic Metals for Facilities in Noncomplex Terrain

Values for use in urban areas Values for use in rural areas

	Values for use in urban areas			Values for use in rural areas				
TESH	Arsenic	Cadmium	Chromium	Beryllium	Arsenic	Cadmium	Chromium	Beryllium
(m)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)	(g/hr)
4	0.46	1.1	0.17	0.82	0.24	0.58	0.086	0.43
6	0.54	1.3	0.17	0.82	0.24	0.66	0.10	0.50
8	0.60	1.4	0.13	1.1	0.28	0.76	0.10	0.56
10	0.68	1.6	0.24	1.2	0.36	0.86	0.11	0.64
12	0.76	1.8	0.27	1.4	0.43	1.1	0.16	0.78
14	0.86	2.1	0.31	1.5	0.54	1.3	0.20	0.96
16	0.96	2.3	0.35	1.7	0.68	1.6	0.24	1.2
18	1.1	2.6	0.40	2.0	0.82	2.0	0.30	1.5
20	1.2	3.0	0.44	2.2	1.0	2.5	0.37	1.9
22	1.4	3.4	0.50	2.5	1.3	3.2	0.48	2.4
24	1.6	3.9	0.58	2.8	1.7	4.0	0.60	3.0
26	1.8	4.3	0.64	3.2	2.1	5.0	0.76	3.9
28	2.0	4.8	0.72	3.6	2.7	6.4	0.98	5.0
30	2.3	5.4	0.82	4.0	3.5	8.2	1.2	6.2
35	3.0	6.8	1.0	5.4	5.4	13.	1.9	9.6
40	3.6	9.0	1.3	6.8	8.2	20.	3.0	15.
45	4.6	11.	1.7	8.6	11.	28.	4.2	21.
50	6.0	14.	2.2	11.	15.	37.	5.4	28.
55	7.6	18.	2.7	14.	20.	50.	7.2	36.
60	9.4	22.	3.4	17.	27.	64.	9.6	48.
65	11.	28.	4.2	21.	36.	86.	13.	64.
70	13.	31.	4.6	24.	43.	100.	15.	76.
75	15.	36.	5.4	27.	50.	120.	18.	90.
80	17.	40.	6.0	30.	60.	140.	22.	110.
85	19.	46.	6.8	34.	72.	170.	26.	130.
90	22.	50.	7.8	39.	86.	200.	30.	150.
95	25.	58.	9.0	44.	100.	240.	36.	180.
100	28.	68.	10.	50.	120.	290.	43.	220.
105	32.	76.	11.	56.	140.	340.	50.	260.
110	36.	86.	13.	64.	170.	400.	60.	300.
115	40.	96.	15.	72.	200.	480.	72.	360.
120	46.	110.	17.	82.	240.	580.	86.	430.

I-E

Tier I and Tier II Feed Rate and Emissions Screening Limits for Carcinogenic Metals for Facilities in Complex Terrain

Values for use in urban and rural areas

TESH (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	0.11	0.26	0.040	0.20
6	0.16	0.39	0.058	0.29
8	0.24	0.58	0.086	0.43
10	0.35	0.82	0.13	0.62
12	0.43	1.0	0.15	0.76
14	0.50	1.3	0.19	0.94
16	0.60	1.4	0.22	1.1
18	0.68	1.6	0.24	1.2
20	0.76	1.8	0.27	1.3
22	0.82	1.9	0.30	1.5
24	0.90	2.1	0.33	1.6
26	1.0	2.4	0.36	1.8
28	1.1	2.7	0.40	2.0
30	1.2	3.0	0.44	2.2
35	1.5	3.7	0.54	2.7
40	1.9	4.6	0.68	3.4
45	2.4	5.4	0.84	4.2
50	2.9	6.8	1.0	5.0
55	3.5	8.4	1.3	6.4
60	4.3	10.	1.5	7.8
65	5.4	13.	1.9	9.6
70	6.0	14.	2.2	11.
75	6.8	16.	2.4	12.
80	7.6	18.	2.7	13.
85	8.2	20.	3.0	15.
90	9.4	23.	3.4	17.
95	10.	25.	4.0	19.
100	12.	28.	4.3	21.
105	13.	32.	4.8	24.
110	15.	35.	5.4	27.
115	17.	40.	6.0	30.
120	19.	44.	6.4	33.

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_

Section 726.Appendix D Reference Air Concentrations

BOARD NOTE: The RAC for other <u>Appendix H to 35 III.</u> Adm. Code 721<del>.Appendix H constituents not listed below or in Appendix E is 0.1 ug/eu mm<sup>3</sup>.</del>

Constituent CAS No. RAC (ug/eu mm³)

Acetaldehyde	75-07-0	10
Acetonitrile	75-05-8	10
Acetophenone	98-86-2	100
Acrolein	107-02-8	20
Aldicarb	116-06-3	1
Aluminum Phosphide	20859-73-8	0.3
Allyl Alcohol	107-18-6	5
Antimony	7440-36-0	0.3
Barium	7440-39-3	50
Barium Cyanide	542-62-1	50
Bromomethane	74-83-9	0.8
Calcium Cyanide	592-01-8	30
Carbon Disulfide	75-15-0	200
Chloral	75-87-6	2
Chlorine (free)		0.4
2-Chloro-1,3-butadiene	126-99-8	3
Chromium III	16065-83-1	1000
Copper Cyanide	544-92-3	5
Cresols	1319-77-3	50
Cumene	98-82-8	1
Cyanide (free)	57-12-15	20
Cyanogen	460-19-5	30
Cyanogen Bromide	506-68-3	80
Di-n-butyl Phthalate	84-74-2	100
o-Dichlorobenzene	95-50-1	10
p-Dichlorobenzene	106-46-7	10
Dichlorodifluoromethane	75-71-8	200
2,4-Dichlorophenol	120-83-2	3
Diethyl Phthalate	84-66-2	800
Dimethoate	60-51-5	0.8
2,4-Dinitrophenol	51-28-5	2
Dinoseb	88-85-7	0.9
Diphenylamine	122-39-4	20
Endosulfan	115-29-1	0.05
Endrin	72-20-8	0.3
Fluorine	7782-41-4	50
Formic Acid	64-18-6	2000
Glycidylaldehyde	765-34-4	0.3
Hexachlorocyclopentadiene	77-47-4	5
Hexachlorophene	70-30-4	0.3
Hydrocyanic Acid	74-90-8	20
Hydrogen Chloride	7647-01-1	7
Hydrogen Sulfide	7783-06-4	3

Isobutyl Alcohol	78-83-1	300
Lead	7439-92-1	0.09
Maleic Anhydride	108-31-6	100
Mercury	7439-97-6	0.3
Methacrylonitrile	126-98-7	0.1
Methomyl	16752-77-5	20
Methoxychlor	72-43-5	50
Methyl Chlorocarbonate	79-22-1	1000
Methyl Ethyl Ketone	78-93-3	80
Methyl Parathion	298-00-0	0.3
Nickel Cyanide	557-19-7	20
Nitric Oxide	10102-43-9	100
Nitrobenzene	98-95-3	0.8
Pentachlorobenzene	608-93-5	0.8
Pentachlorophenol	87-86-5	30
Phenol	108-95-2	30
M-Phenylenediamine	108-45-2	5
Phenylmercuric Acetate	62-38-4	0.075
Phosphine	7803-51-2	0.3
Phthalic Anhydride	85-44-9	2000
Potassium Cyanide	151-50-8	50
Potassium Silver Cyanide	506-61-6	200
Pyridine	110-86-1	1
Selenious Acid	7783-60-8	3
Selenourea	630-10-4	5
Silver	7440-22-4	3
Silver Cyanide	506-64-9	100
Sodium Cyanide	143-33-9	30
Strychnine	57-24-9	0.3
1,2,4,5-Tetrachlorobenzene	95-94-3	0.3
2,3,4,6-Tetrachlorophenol	58-90-2	30
Tetraethyl Lead	78-00-2	0.0001
Tetrahydrofuran	109-99-9	10
Thallic Oxide	1314-32-5	0.3
Thallium	7440-28-0	0.5
Thallium (I) Acetate	563-68-8	0.5
Thallium (I) Carbonate	6533-73-9	0.3
Thallium (I) Chloride	7791-12-0	0.3
Thallium (I) Nitrate	10102-45-1	0.5
Thallium Selenite	12039-52-0	0.5
Thallium (I) Sulfate	7446-18-6	0.075
Thiram	137-26-8	5
Toluene	108-88-3	300
1,2,4-Trichlorobenzene	120-82-1	20

Trichloromonofluoromethane	75-69-4	300
2.4.5-Trichlorophenol	95-95-4	100
Vanadium Pentoxide	1314-62-1	20
Warfarin	81-81-2	0.3
Xylenes	1330-20-7	80
Zinc Cyanide	557-21-1	50
Zinc Phosphide	1314-84-7	0.3

(Source: Amended at 27 Ill. 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<sup>-5</sup>).

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	0.000029
Diethylstilbestrol	56-53-1	0.0040	0.0022
•	62-75-9	0.014	0.000071
Dimethylnitrosamine			
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			
Hexachlorocyclo-		0.00051	0.020
hexane, Technical			
Hexachlorodibenzo-p-		1.3	0.0000077
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-	101-14-4	0.000047	0.21
chloroaniline		0.000017	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	0.00024	0.042
2-Nitropropane	79-46-9	0.027	0.00037
N-Nitroso-n-butyl-	924-16-3	0.0016	0.0063
amine	724-10-3	0.0010	0.0003
	694 02 5	0.006	0.00012
N-Nitroso-n-methyl-	684-93-5	0.086	0.00012
urea N Nitragadiathylamina	55-18-5	0.043	0.00023
N-Nitrosodiethylamine			/ 4
N-Nitrosopyrrolidine	930-55-2	0.00061	0.00023

Pentachloronitro-	82-68-8	0.000073	0.14
benzene			
PCBs	1336-36-3	0.0012	0.0083
Pronamide	23950-58-5	0.0000046	2.2
Reserpine	50-55-5	0.0030	0.0033
2,3,7,8-Tetrachloro-	1746-01-6	45.	0.00000022
dibenzo-p-dioxin			
1,1,2,2-Tetrachloro-	79-34-5	0.000058	0.17
ethane			
Tetrachloroethylene	127-18-4	0.00000048	21.
Thiourea	62-56-6	0.00055	0.018
1,1,2-Trichloroethane	79-00-5	0.000016	0.63
Trichloroethylene	79-01-6	0.0000013	7.7
2,4,6-Trichlorophenol	88-06-2	0.0000057	1.8
Toxaphene	8001-35-2	0.00032	0.031
Vinyl Chloride	75-01-4	0.0000071	1.4

(Source: Amended at 27 III. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 726.Appendix F Stack Plume Rise

# Estimated Plume Rise (in Meters) Based on Stack Exit Flow Rate and Gas Temperature

Exhaust	t Tempei	rature (F	(°)								
Flow rate	< 325	325-	350-	400-	450-	500-	600-	700-	800-	1000-	>1499
(eu mm <sup>3</sup> /sec)		349	399	449	499	599	699	799	999	1499	
< 0.5	0	0	0	0	0	0	0	0	0	0	0
0.5-0.9	0	0	0	0	0	0	0	0	1	1	1
1.0-1.9	0	0	0	0	1	1	2	3	3	3	4
2.0-2.9	0	0	1	3	4	4	6	6	7	8	9
3.0-3.9	0	1	2	5	6	7	9	10	11	12	13
4.0-4.9	1	2	4	6	8	10	12	13	14	15	17
5.0-7.4	2	3	5	8	10	12	14	16	17	19	21
7.5-9.9	3	5	8	12	15	17	20	22	22	23	24
10.0-12.4	4	6	10	15	19	21	23	24	25	26	27
12.5-14.9	4	7	12	18	22	23	25	26	27	28	29
15.0-19.9	5	8	13	20	23	24	26	27	28	29	31
20.0-24.9	6	10	17	23	25	27	29	30	31	32	34
25.0-29.9	7	12	20	25	27	29	31	32	33	35	36
30.0-34.9	8	14	22	26	29	31	33	35	36	37	39
35.0-39.9	9	16	23	28	30	32	35	36	37	39	41

40.0-49.9	10	17	24	29	32	34	36	38	39	41	42
50.0-59.9	12	21	26	31	34	36	39	41	42	44	46
60.0-69.9	14	22	27	33	36	39	42	43	45	47	49
70.0-79.9	16	23	29	35	38	41	44	46	47	49	51
80.0-89.9	17	25	30	36	40	42	46	48	49	51	54
90.0-99.9	19	26	31	38	42	44	48	50	51	53	56
100.0-119.9	21	26	32	39	43	46	49	52	53	55	58
120.0-139.9	22	28	35	42	46	49	52	55	56	59	61
140.0-159.9	23	30	36	44	48	51	55	58	59	62	65
160.0-179.9	25	31	38	46	50	54	58	60	62	65	67
180.0-199.9	26	32	40	48	52	56	60	63	65	67	70
>199.9	26	33	41	49	54	58	62	65	67	69	73

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 726.Appendix G Health-Based Limits for Exclusion of Waste-Derived Residues

NOTE 1: Under Section 726.212(b)(2)(A), the health-based concentration limits for <u>Appendix H</u> to 35 Ill. Adm. Code 721. Appendix H constituents for which a health-based concentration is not provided below is  $\frac{0.002}{2 \times 10^{-6}}$  mg/kg (0.000002 mg/kg or 0.002 µg/kg).

NOTE 2: The levels specified in this Section and the default level of  $0.002~\mu g/kg$  (0.000002~mg/kg) or the level of detection for constituents, as identified in Note 1, are administratively stayed under the condition, for those constituents specified in Section 726.212(b)(1), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 and Table B to 35 Ill. Adm. Code 728.Table B for F039 nonwastewaters. See Section 726.212(b)(2)(A).

#### Metals-TCLP Extract Concentration Limits

Constituent	CAS No.	Concentration limits (mg/L)
Antimony	7440-36-0	1.
Arsenic	7440-38-2	5.
Barium	7440-39-3	100.
Beryllium	7440-41-7	0.007
Cadmium	7440-43-9	1.
Chromium	7440-47-3	5.
Lead	7439-92-1	5.
Mercury	7439-97-6	0.2
Nickel	7440-02-0	70.
Selenium	7782-49-2	1.
Silver	7440-22-4	5.

Thallium 7440-28-0 7.

## Nonmetals-Residue Concentration Limits

Constituent	CAS No.	Concentration limits for residues (mg/kg)
Acetonitrile	75-05-8	0.2
Acetophenone	98-86-2	4.
Acrolein	107-02-8	0.5
Acrylamide	79-06-1	0.0002
Acrylonitrile	107-13-1	0.0007
Aldrin	309-00-2	0.00002
Allyl alcohol	107-18-6	0.2
Aluminum phosphide	20859-73-8	0.01
Aniline	62-53-3	0.06
Barium cyanide	542-62-1	1.
Benz(a)anthracene	56-55-3	0.0001
Benzene	71-43-2	0.005
Benzidine	92-87-5	0.000001
Bis(2-chloroethyl) ether	111-44-4	0.0003
Bis(chloromethyl) ether	542-88-1	0.000002
Bis(2-ethylhexyl) phthalate	117-81-7	30.
Bromoform	75-25-2	0.7
Calcium cyanide	592-01-8	0.000001
Carbon disulfide	75-15-0	4.
Carbon tetrachloride	56-23-5	0.005
Chlordane	57-74-9	0.0003
Chlorobenzene	108-90-7	1.
Chloroform	67-66-3	0.06
Copper cyanide	544-92-3	0.2
Cresols (Cresylic acid)	1319-77-3	2.
Cyanogen	460-19-5	1.
DDT	50-29-3	0.001
Dibenz(a, h)-anthracene	53-70-3	0.000007
1,2-Dibromo-3-chloropropane	96-12-8	0.00002
p-Dichlorobenzene	106-46-7	0.07.5
Dichlorodifluoromethane	75-71-8	7.
1,1-Dichloroethylene	75-35-4	0.005
2,4-Dichlorophenol	120-83-2	0.1
1,3-Dichloropropene	542-75-6	0.001
Dieldrin	60-57-1	0.00002
Diethyl phthalate	84-66-2	30.

Diethylstilbestrol	56-53-1	0.000000
D: 41 4	60.51.5	<u>0.0000001</u>
Dimethoate	60-51-5	0.03
2,4-Dinitrotoluene	121-14-2	0.0005
Diphenylamine	122-39-4	0.9
1,2-Diphenylhydrazine	122-66-7	0.0005
Endosulfan	115-29-7	0.002
Endrin	72-20-8	0.0002
Epichlorohydrin	106-89-8	0.04
Ethylene dibromide	106-93-4	0.00000
		<u>0.0000001</u>
Ethylene oxide	75-21-8	0.0003
Fluorine	7782-41-4	4.
Formic acid	64-18-6	70.
Heptachlor	76-44-8	0.00008
Heptachlor epoxide	1024-57-3	0.00004
Hexachlorobenzene	118-74-1	0.0002
Hexachlorobutadiene	87-68-3	0.005
Hexachlorocyclopentadiene	77-47-4	0.2
Hexachlorodibenzo-p-dioxins	19408-74-3	0.000000
r		0.000001
Hexachloroethane	67-72-1	0.03
Hydrazine	302-01-1	0.0001
Hydrogen cyanide	74-90-8	0.0007
Hydrogen sulfide	7783-06-4	0.00001
Isobutyl alcohol	78-83-1	10.
Methomyl	16752-77-5	1.
Methoxychlor	72-43-5	0.1
3-Methylcholanthrene	56-49-5	0.00004
4,4'-Methylenebis (2-chloroaniline)	101-14-4	0.000
Methylene chloride	75-09-2	0.05
Methyl ethyl ketone (MEK)	78-93-3	2.
Methyl hydrazine	60-34-4	0.0003
Methyl parathion	298-00-0	0.0003
Naphthalene	91-20-3	10.
	557-19-7	0.7
Nickel cyanide Nitric oxide		
	10102-43-9	4.
Nitrobenzene	98-95-3	0.02
N-Nitrosodi-n-butylamine	924-16-3	0.00006
N-Nitrosodiethylamine	55-18-5	0.000002
N-Nitroso-N-methylurea	684-93-5	0.000000
2127.	020.55.2	<u>0.0000001</u>
N-Nitrosopyrrolidine	930-55-2	0.0002
Pentachlorobenzene	608-93-5	0.03

n (n.cn.m)	0.00	0.4
Pentachloronitrobenzene (PCNB)	82-68-8	0.1
Pentachlorophenol	87-86-5	1.
Phenol	108-95-2	1.
Phenylmercury acetate	62-38-4	0.003
Phosphine	7803-51-2	0.01
Polychlorinated biphenyls, N.O.S	1336-36-3	0.00005
Potassium cyanide	151-50-8	2.
Potassium silver cyanide	506-61-6	7.
Pronamide	23950-58-5	3.
Pyridine	110-86-1	0.04
Reserpine	50-55-5	0.00003
Selenourea	630-10-4	0.2
Silver cyanide	506-64-9	4.
Sodium cyanide	143-33-9	1.
Strychnine	57-24-9	0.01
1,2,4,5-Tetrachlorobenzene	95-94-3	0.01
1,1,2,2-tetrachloroethane	79-34-5	0.002
Tetrachloroethylene	127-18-4	0.7
2,3,4,6-Tetrachlorophenol	58-90-2	0.01
Tetraethyl lead	78-00-2	0.000004
Thiourea	62-56-6	0.0002
Toluene	108-88-3	10.
Toxaphene	8001-35-2	0.005
1,1,2-Trichloroethane	79-00-5	0.006
Trichloroethylene	79-01-6	0.005
Trichloromonofluoromethane	75-69-4	10.
2,4,5-Trichlorophenol	95-95-4	4.
2,4,6-Trichlorophenol	88-06-2	4.
Vanadium pentoxide	1314-62-1	0.7
Vinyl chloride	75-01-4	0.002

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_\_, effective \_\_\_\_\_\_)

Section 726.Appendix I Methods Manual for Compliance with BIF Regulations

See "Methods Manual for Compliance with BIF Regulations." This document is available from two sources. It is available through NTIS, incorporated by reference in 35 Ill. Adm. Code 720.111. It is also available as 40 CFR 266, Appendix IX-(1997), incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Amended at 2	27 Ill. Reg	_, effective	)
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Section 726.Appendix J Guideline on Air Quality Models

See "Guideline on Air Quality Models (Revised)."- This document is available from two sources. It is available through NTIS, incorporated by reference in 35 III. Adm. Code 720.111. It is also available as 40 CFR 266, Appendix X, adopted at 56 Fed. Reg. 32688, July 17, 1991 and amended at 56 Fed. Reg. 42511, August 27, 1991, which is incorporated by reference in 35 III. Adm. Code 720.111. This incorporation includes no future editions or amendments.

(Source: Ame	ended at 27 Ill.	Reg
Section 726.A	ppendix K	Lead-Bearing Materials That that May be Processed in Exempt Lead Smelters
a)	Associated In	Bearing Materials When Generated or Originally Produced By Lead- lustries. lead-bearing materials when generated or originally produced ated industries.

BOARD NOTE: Lead-associated industries are lead smelters, lead-acid battery manufacturing and lead chemical manufacturing (e.g., manufacturing of lead oxide or other lead compounds).

Acid dump/fill solids

Sump mud

Materials from laboratory analyses

Acid filters

Baghouse bags

Clothing (e.g., coveralls, aprons, shoes, hats, gloves)

Sweepings

Air filter bags and cartridges

Respiratory cartridge filters

Shop abrasive

Stacking boards

Waste shipping containers (e.g., cartons, bags, drums, cardboard)

Paper hand towels

Wiping rags and sponges

	Contaminated pallets
	Water treatment sludges, filter cakes, residues, and solids
	Emission control dusts, sludges, filter cakes, residues, and solids from lead associated industries (e.g., K069 and D008 wastes)
	Spent grinds, posts and separators
	Spend batteries
	Lead oxide and lead oxide residues
	Lead plates and groups
	Spent battery cases, covers, and vents
	Pasting belts
	Water filter media
	Cheesecloth from pasting rollers
	Pasting additive bags
	Asphalt paving materials
b)	Exempt Lead-Bearing Materials When Generated or Originally Produced By Any Industry lead-bearing materials when generated or originally produced by any industry.
	Charging jumpers and clips
	Platen abrasive
	Fluff from lead wire and cable casings
	Lead-based pigments and compounding pigment dust
Source: A	amended at 27 Ill. Reg, effective)

Section 726.Appendix L Nickel or Chromium-Bearing Materials that <u>may May</u> be Processed in Exempt Nickel-Chromium Recovery Furnaces

a) Exempt Nickel or chromium Bearing Materials when Generated by Manufacturers or Users of Nickel, Chromium or Iron. nickel or chromium-bearing materials when generated by manufacturers or users of nickel, chromium, or iron.

Baghouse bags

Raney nickel catalyst

Floor sweepings

Air filters

Electroplating bath filters

Wastewater filter media

**Wood Pallets** 

Disposable clothing (coveralls, aprons, hats, and gloves)

Laboratory samples and spent chemicals

Shipping containers and plastic liners from containers or vehicles used to transport nickel or chromium-containing wastes

Respirator cartridge filters

Paper hand towels

b) Exempt-Nickel or Chromium-Bearing Materials when Generated by Any Industry nickel or chromium-bearing materials when generated by any industry.

Electroplating wastewater treatment sludges (F006)

Nickel and/or chromium-containing solutions

Nickel and/or chromium-containing catalysts

Nickel-cadmium and nickel-iron batteries

Filter cake from wet scrubber system water treatment plants in the specialty steel industry

Filter cake from nickel-chromium alloy pickling operations

(Source: Amended at 27 III. Reg. \_\_\_\_\_\_, effective \_\_\_\_\_\_)

Section 726.Appendix M Mercury-Bearing Wastes That that May Be Processed in Exempt Mercury Recovery Units

The following materials are exempt mercury-bearing materials containing less than 500 ppm of <u>Appendix H to 35 Ill.</u> Adm. Code 721. Appendix H organic constituents, when generated by manufacturers or users of mercury or mercury products:

Activated carbon

Decomposer graphite

Wood

Paper

Protective clothing

Sweepings

Respiratory cartridge filters

Cleanup articles

Plastic bags and other contaminated containers

Laboratory and process control samples

K106 and other wastewater treatment plant sludge and filter cake

Mercury cell sump and tank sludge

Mercury cell process solids

Recoverable levels of mercury contained in soil

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

# PART 728 LAND DISPOSAL RESTRICTIONS

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728.103	Dilution Prohibited as a Substitute for Treatment

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728.135	Waste Specific Waste-Specific Prohibitions: — Petroleum Refining Wastes
728.136	Waste Specific Waste-Specific Prohibitions: — Inorganic Chemical Wastes
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728. Appendix	J	Recordkeeping, Notification, and Certification Requirements (Repealed)
728. Appendix	K	Metal Bearing Metal-Bearing Wastes Prohibited From from Dilution in a
		Combustion Unit According to Section 728.103(c)
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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].

Universal Treatment Standards (UTS)

728. Table U

SOURCE: Adopted in R87-5 at 11 III. Reg. 19354, effective November 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 November 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 September 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 November 22, 1993; amended in R93-16 at 18

Ill. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12203, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17563, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9660, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11100, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 783, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7685, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17706, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1964, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9204, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9623, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1296, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9181, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6687, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. \_\_\_\_\_\_\_, effective

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#### SUBPART A: GENERAL

Section 728.101 Purpose, Scope, and Applicability

- a) This Part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.
- b) Except as specifically provided otherwise in this Part or 35 III. Adm. Code 721, the requirements of this Part apply to persons that generate or transport hazardous waste and to owners and operators of hazardous waste treatment, storage, and disposal facilities.
- c) Restricted wastes may continue to be land disposed as follows:
  - 1) Where <u>persons have a person has</u> been granted an extension to the effective date of a prohibition under Subpart C <u>of this Part</u> or pursuant to Section 728.105, with respect to those wastes covered by the extension;
  - 2) Where persons have a person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
  - A waste that is hazardous only because it exhibits a characteristic of hazardous waste and that which is otherwise prohibited under this Part is not prohibited if the following is true of the waste:
    - A) Is The waste is disposed into a nonhazardous or hazardous waste injection well, as defined in 35 Ill. Adm. Code 704.106(a); and

- B) Does The waste does not exhibit any prohibited characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Subpart C at the point of injection.
- A waste that is hazardous only because it exhibits a characteristic of hazardous waste and which is otherwise prohibited under this Part is not prohibited if the waste meets any of the following criteria, unless the waste is subject to a specified method of treatment other than DEACT in Section 728.140 or is D003 reactive cyanide:
  - A) Any of the following is true of either treatment or management of the waste:
    - i) The waste is managed in a treatment system which that subsequently discharges to waters of the United States pursuant to a permit issued under 35 Ill. Adm. Code 309;
    - ii) The waste is treated for purposes of the pretreatment requirements of 35 Ill. Adm. Code 307 and 310; or
    - iii) The waste is managed in a zero discharge system engaged in Clean Water Act (CWA)-equivalent treatment, as defined in Section 728.137(a); and
  - B) The waste no longer exhibits a prohibited characteristic of hazardous waste at the point of land disposal (i.e., placement in a surface impoundment).
- d) This Part does not affect the availability of a waiver under Section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 USC §§ 9601 et seq. 9621(d)(4)).
- e) The following hazardous wastes are not subject to any provision of this Part:
  - 1) Waste generated by small quantity generators of less than 100 kg of non-acute hazardous waste or less than 1 kg of acute hazardous waste per month, as defined in 35 Ill. Adm. Code 721.105;
  - 2) Waste pesticide that a farmer disposes of pursuant to 35 Ill. Adm. Code 722.170;
  - Waste identified or listed as hazardous after November 8, 1984, for which USEPA has not promulgated a land disposal prohibition or treatment standard;

- 4) De minimis losses of waste that exhibits a characteristic of hazardous waste to wastewaters are not considered to be prohibited waste and are defined as losses from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers or leaks from pipes, valves, or other devices used to transfer materials); 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; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory waste that does not exceed one percent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not exceeding one part per million (ppm) in the headworks of the facility's wastewater treatment or pretreatment facility; or
- Land disposal prohibitions for hazardous characteristic wastes do not apply to laboratory wastes displaying the characteristic of ignitability (D001), corrosivity (D002), or organic toxicity (D012 through D043) that are mixed with other plant wastewaters at facilities whose ultimate discharge is subject to regulation under the CWA (including wastewaters at facilities that have eliminated the discharge of wastewater), provided that the annualized flow of laboratory wastewater into the facility's headworks does not exceed one percent or that the laboratory wastes' combined annualized average concentration does not exceed one part per million in the facility's headworks.
- f) A universal waste handler or universal waste transporter (as defined in 35 Ill. Adm. Code 720.110) is exempt from Sections 728.107 and 728.150 for the hazardous wastes listed below. Such a handler or transporter is subject to regulation under 35 Ill. Adm. Code 733.
  - 1) Batteries, as described in 35 Ill. Adm. Code 733.102;
  - 2) Pesticides, as described in 35 III. Adm. Code 733.103;
  - 3) Thermostats, as described in 35 Ill. Adm. Code 733.104; and
  - 4) Lamps, as described in 35 Ill. Adm. Code 733.105.
- g) This Part is cumulative with the land disposal restrictions of 35 Ill. Adm. Code 729. The Environmental Protection Agency (Agency) shall-must not issue a wastestream authorization pursuant to 35 Ill. Adm. Code 709 or Section 22.6 or

39(h) of the Environmental Protection Act [415 ILCS 5/22.6 or 39(h)] unless the waste meets the requirements of this Part as well as 35 Ill. Adm. Code 729.

(Source: Amended	at 27 Ill. Reg	, effective	
G .: 720.102	D & :/:		
Section 728.102	Definitions		

When used in this Part, the following terms have the meanings given below. All other terms have the meanings given under 35 Ill. Adm. Code 702.110, 720.110, or 721.102 through 721.104.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 USC 9601 et seq.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: a manufactured object; plant or animal matter; or natural geologic material. However, the following materials are not debris: any material for which a specific treatment standard is provided in Subpart D of this Part, namely lead acid batteries, cadmium batteries, and radioactive lead solids; process residuals, such as smelter slag and residues from the treatment of waste, wastewater, sludges, or air emission residues; and intact containers of hazardous waste that are not ruptured and that retain at least 75 percent of their original volume. A mixture of debris that has not been treated to the standards provided by Section 728.145 of this Part and other material is subject to regulation as debris if the mixture is comprised primarily of debris, by volume, based on visual inspection.

"End-of-pipe" refers to the point where effluent is discharged to the environment.

"Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond that are listed under Appendix C of this Part.

"Hazardous constituent or constituents" means those constituents listed in <u>Appendix H to 35 III. Adm. Code 721-Appendix H.</u>

"Hazardous debris" means debris that contains a hazardous waste listed in Subpart D of 35 Ill. Adm. Code 721. Subpart D or that exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Subpart C. Any deliberate mixing of prohibited waste with debris that changes its treatment

classification (i.e., from waste to hazardous debris) is not allowed under the dilution prohibition in Section 728.103.

"Inorganic metal-bearing waste" is one for which USEPA has established treatment standards for metal hazardous constituents that does not otherwise contain significant organic or cyanide content, as described in Section 728.103(b)(1), and which is specifically listed in Appendix K of this Part.

"Land disposal" means placement in or on the land, except in a corrective action management unit or staging pile, and "land disposal" includes, but is not limited to, placement in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or placement in a concrete vault or bunker intended for disposal purposes.

"Nonwastewaters" are wastes that do not meet the criteria for "wastewaters" in this Section.

"Polychlorinated biphenyls" or "PCBs" are halogenated organic compounds defined in accordance with 40 CFR 761.3, incorporated by reference in 35 Ill. Adm. Code 720.111.

"ppm" means parts per million.

"RCRA corrective action" means corrective action taken under 35 Ill. Adm. Code 724.200 or 725.193, 40 CFR 264.100 or 265.93 (1996), or similar regulations in other states with RCRA programs authorized by USEPA pursuant to 40 CFR 271 (1996).

"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 <u>1-one</u> percent by weight total organic carbon (TOC) and less than <u>1-one</u> percent by weight total suspended solids (TSS).

(Source: Amended at	27 Ill. Reg	, effective	
Section 728.103	Dilution Prohib	oited as a Substitute	for Treatment

- a) Except as provided in subsection (b) of this Section, no generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility shall must in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with Subpart D of this Part, to circumvent the effective date of a prohibition in Subpart C of this Part, to otherwise avoid a prohibition in Subpart C of this Part, or to circumvent a land disposal restriction imposed by RCRA section 3004 (42 USC 6924).
- b) Dilution of waste that is hazardous only because it exhibits a characteristic of hazardous waste in a treatment system that treats wastes subsequently discharged to a water of the State pursuant to an NPDES permit issued under 35 Ill. Adm. Code 309, that treats wastes in a CWA-equivalent treatment system, or that treats wastes for purposes of pretreatment requirements under 35 Ill. Adm. Code 310 is not impermissible dilution for purposes of this Section, unless a method other than DEACT has been specified in Section 728.140 as the treatment standard or unless the waste is a D003 reactive cyanide wastewater or nonwastewater.
- c) Combustion of waste designated by any of the USEPA hazardous waste codes listed in Section 728. Appendix J to this Part is prohibited, unless the waste can be demonstrated to comply with one or more of the following criteria at the point of generation or after any bona fide treatment, such as cyanide destruction prior to combustion (unless otherwise specifically prohibited from combustion):
  - 1) The waste contains hazardous organic constituents or cyanide at levels exceeding the constituent-specific treatment standard found in Section 728.148;

- 2) The waste consists of organic, debris-like materials (e.g., wood, paper, plastic, or cloth) contaminated with an inorganic metal-bearing hazardous waste;
- The waste has reasonable heating value, such as greater than or equal to 5000 Btu per pound, at the point of generation;
- 4) The waste is co-generated with wastes for which combustion is a required method of treatment;
- 5) The waste is subject to any federal or state requirements necessitating reduction of organics (including biological agents); or
- 6) The waste contains greater than one percent Total Organic Carbon (TOC).
- d) It is a form of impermissible dilution, and therefore prohibited, to add iron filings or other metallic forms of iron to lead-containing hazardous wastes in order to achieve any land disposal restriction treatment standard for lead. Lead-containing wastes include D008 wastes (wastes exhibiting a characteristic due to the presence of lead), all characteristic wastes containing lead as an underlying hazardous constituent, listed wastes containing lead as a regulated-constitutent constituent, and hazardous media containing any of the aforementioned lead-containing wastes.

(Source: Amended a	t 27 Ill. Reg.		, effective _		)
Section 728.104	Treatment S	urface Im	poundment !	Exemption	

- a) Wastes which 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 which that do not meet the treatment standards promulgated under Subpart D of this Part; residues which 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 flow-through 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 <u>Subpart F of 35 Ill.</u> Adm. Code 724. Subpart F or Subpart F of this Part, unless any of the following conditions is fulfilled:
  - A) The impoundment is exempted pursuant to 35 III. Adm. Code 724.321(d) or (e), or to 35 III. 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 <u>Subpart D of 35 Ill.</u> Adm. Code—106\_104, granted an adjusted standard from the requirements of this Part. The justification for such an adjusted standard <u>shall-must</u> 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:

Evaporation of hazardous constituents as the principal means of treatment is not

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.

	considered to be a treatment for purposes of an exemption under this Section.
(Source: Ame	ended at 27 Ill. Reg, effective)
Section 728.10	Procedures for <u>case-by-case Case-by-Case Extensions</u> to an Effective Date
a)	The Board incorporates by reference 40 CFR 268.5 (1989) (2002), as amended at 54 Fed. Reg 36970, September 6, 1989, at 55 Fed. Reg. 23935, June 13, 1990, and 57 Fed. Reg. 37270, August 18, 1992. This Part incorporates no future editions or amendments.
b)	Persons may apply to USEPA for extensions of effective dates pursuant to 40 CFR 268.5. Extensions which that are granted by USEPA will be deemed extensions of dates specified in the derivative Board rule.

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_

b)

## Section 728.106 Petitions to Allow Land Disposal of a Waste Prohibited under Subpart C

- a) Any person seeking an exemption from a prohibition under Subpart C for the disposal of a restricted hazardous waste in a particular unit or units shall-must submit a petition to the Board demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:
  - 1) An identification of the specific waste and the specific unit for which the demonstration will be made;
  - 2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;
  - 3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil, and water quality;
  - 4) A monitoring plan which that detects migration at the earliest practical time;
  - 5) Sufficient information to assure the Agency that the owner or operator of a land disposal unit receiving restricted wastes will comply with other applicable federal, state, and local laws;
  - 6) Whether the facility is in interim status, or, if a RCRA permit has been issued, the term of the permit.
- b) The demonstration referred to in subsection (a) of this Section must meet the following criteria:
  - 1) All waste and environmental sampling, test and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;
  - All sampling, testing and estimation techniques for chemical and physical properties of the waste and all environmental parameters must conform with "Test Methods for Evaluating Solid Waste" and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," incorporated by reference in 35 Ill. Adm. Code 720.111.
  - 3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;

- A quality assurance and quality control plan that addresses all aspects of the demonstration and conforms with "Test Methods for Evaluating Solid Waste" and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," incorporated by reference in 35 Ill. Adm. Code 720.111-; and
- An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts, or other natural phenomena.
- c) Each petition referred to in subsection (a) of this Section must include the following:
  - 1) A monitoring plan that describes the monitoring program installed at or around the unit to verify continued compliance with the conditions of the adjusted standard. This monitoring plan must provide information on the monitoring of the unit or the environment around the unit. The following specific information must be included in the plan:
    - A) The media monitored in the cases where monitoring of the environment around the unit is required;
    - B) The type of monitoring conducted at the unit, in the cases where monitoring of the unit is required;
    - C) The location of the monitoring stations;
    - D) The monitoring interval (frequency of monitoring at each station);
    - E) The specific hazardous constituents to be monitored;
    - F) The implementation schedule for the monitoring program;
    - G) The equipment used at the monitoring stations;
    - H) The sampling and analytical techniques employed; and
    - I) The data recording and reporting procedures.
  - 2) Where applicable, the monitoring program described in subsection (c)(1) of this Section must be in place for a period of time specified by the Board, as part of its approval of the petition, prior to receipt of prohibited waste at the unit.

- The monitoring data collected according to the monitoring plan specified under subsection (c)(1) of this Section must be sent to the Agency according to a format and schedule specified and approved in the monitoring plan, and.
- 4) A copy of the monitoring data collected under the monitoring plan specified under subsection (c)(1) of this Section must be kept on-site at the facility in the operating record.
- 5) The monitoring program specified under subsection (c)(1) of this Section must meet the following criteria:
  - A) All sampling, testing and analytical data must be approved by the Board and must provide data that is accurate and reproducible.
  - B) All estimation and monitoring techniques must be approved by the Board-; and
  - C) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Board.
- d) Each petition must be submitted to the Board as provided in <u>Subpart D of 35 III</u>. Adm. Code <u>106.Subpart G 104</u>.
- e) After a petition has been approved, the owner or operator shall-must report any changes in conditions at the unit or the environment around the unit that significantly depart from the conditions described in the petition and affect the potential for migration of hazardous constituents from the units as follows:
  - 1) If the owner or operator plans to make changes to the unit design, construction, or operation, the owner or operator-shall, must do the following at least 90 days prior to making the change, either:
    - A) File a petition for modification of or a new petition to amend an adjusted standard with the Board reflecting the changes; or,
    - B) Demonstrate to the Agency that the change can be made consistent with the conditions of the existing adjusted standard.
  - 2) If the owner or operator discovers that a condition at the site which that was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Agency within 10 days of after discovering the change. The Agency shall must determine whether the

reported change from the terms of the petition requires further action, which may include termination of waste acceptance, a petition for modification of or a new petition for an adjusted standard.

- f) If there is migration of hazardous constituent(s) constituents from the unit, as determined by the owner or operator, the owner or operator-shall must:
  - 1) Immediately suspend receipt of prohibited waste at the unit, and
  - 2) Notify the Agency, in writing, within 10 days of after the determination that a release has occurred.
  - 3) Following receipt of the notification, the Agency shall, within 60 days of <u>after</u> receiving notification:
    - A) Determine whether the owner or operator can continue to receive prohibited waste in the unit under the conditions of the adjusted standard.
    - B) If modification or vacation of the adjusted standard is necessary, file a motion to modify or vacate the adjusted standard with the Board.
    - C) Determine whether further examination of any migration is required under the applicable provisions of 35 Ill. Adm. Code 724 or 725.
- g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

- h) After receiving a petition, the Board may request any additional information that may be required to evaluate the demonstration.
- i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.

- j) The Board will give public notice and provide an opportunity for public comment, as provided in <u>Subpart D of 35 Ill.</u> Adm. Code <u>106.Subpart G 104</u>. Notice of a final decision on a petition will be published in the Environmental Register.
- k) The term of a petition granted under this Section will be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under subsection (g) of this Section if the unit is operating under interim status. In either case, the term of the granted petition expires upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.
- l) Prior to the Board's decision, the applicant shall-must comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.
- m) The petition granted by the Board does not relieve the petitioner of responsibilities in the management of hazardous waste under 35 Ill. Adm. Code 702, 703, and 720 through 726.
- n) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm are not eligible for an adjusted standard under this Section.

(Source: Amended	at 27 Ill. Reg, effective	)
Section 728.107	Testing, Tracking, and Recordkeepi	ing Requirements for Generators,
	Treaters, and Disposal Facilities	

- a) Requirements for generators:
  - 1) A generator of a hazardous waste shall-must determine if the waste has to be treated before it can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in Section 728.140, 728.145, or 728.149. This determination can be made in either of two ways: testing the waste or using knowledge of the waste. If the generator tests the waste, testing determines the total concentration of hazardous constituents or the concentration of hazardous constituents in an extract of the waste obtained using SW-846 Method 1311 (the Toxicity Characteristic Leaching Procedure), incorporated by reference in 35 Ill. Adm. Code 720.111, depending on whether the treatment standard for the waste is expressed as a total concentration or concentration of hazardous constituent in the waste extract. In addition, some hazardous wastes must be treated by particular treatment methods before they can be land disposed and some soils are contaminated by such hazardous wastes. These treatment standards are also found in Section 728.140 and Table T

of this Part, and are described in detail in Table C of this Part. These wastes and soils contaminated with such wastes do not need to be tested (however, if they are in a waste mixture, other wastes with concentration level treatment standards must be tested). If a generator determines that it is managing a waste or soil contaminated with a waste that displays a hazardous characteristic of ignitability, corrosivity, reactivity, or toxicity, the generator shall-must comply with the special requirements of Section 728.109 in addition to any applicable requirements in this Section.

- If the waste or contaminated soil does not meet the treatment standard, the generator shall-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 shall-must place a copy of the one-time notice in the file. The notice must include the information in column "728.107(a)(2)" of the Generator Paperwork Requirements Table in Table I of this Part. No further notification is necessary until such time that the waste or facility changes, in which case a new notification must be sent and a copy placed in the generator's file.
  - A) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

I certify under penalty of law that I personally have examined this contaminated soil and it (does/does not) contain listed hazardous waste and (does/does not) exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by 35 Ill. Adm. Code 728.149(c).

- B) This subsection (a)(2)(B) corresponds with 40 CFR 268.7(a)(2)(ii), which is marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules.
- 3) If the waste or contaminated soil meets the treatment standard at the original point of generation, the waste generator must do the following:
  - A) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator shall-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 35 III. Adm. Code 728. Subpart Dof 35 III. 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 shall <u>must</u> 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 shall-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 shall-must send a new notice to the receiving facility, and place a copy in its file.
- 5) If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under 35 Ill. Adm. Code 722.134 to meet applicable LDR treatment standards found at Section 728.140, the generator shall-must develop and follow a written waste analysis plan that describes the procedures it will carry out to

comply with the treatment standards. (Generators treating hazardous debris under the alternative treatment standards of Table F of this Part, however, are not subject to these waste analysis requirements.) The plan must be kept on site in the generator's records, and the following requirements must be met:

- A) The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated, and contain all information necessary to treat the wastes in accordance with the requirements of this Part, including the selected testing frequency;
- B) Such plan must be kept in the facility's on-site files and made available to inspectors; and
- C) Wastes shipped off-site pursuant to this subsection (a)(5) of this Section must comply with the notification requirements of subsection (a)(3) of this Section.
- 6) If a generator determines that the waste or contaminated soil is restricted based solely on its knowledge of the waste, all supporting data used to make this determination must be retained on-site in the generator's files. If a generator determines that the waste is restricted based on testing this waste or an extract developed using SW-846 Method 1311 (the Toxicity Characteristic Leaching Procedure), incorporated by reference in 35 Ill. Adm. Code 720.111, all waste analysis data must be retained on-site in the generator's files.
- If a generator determines that it is managing a prohibited waste which 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 shall-must place a one-time notice stating such generation, subsequent exclusion from the definition of hazardous or solid waste or exemption from RCRA Subtitle C regulation, and the disposition of the waste in the generating facility's on-site file.
- 8) A generator <u>shall must</u> 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 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 shall-must fulfill the following conditions:
  - A) With the initial shipment of waste to a treatment facility, the generator shall-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. Appendix D 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 shall 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) shall-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 shall 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 shall 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 shall must test an extract of the treatment residues using SW-846 Method 1311 (the Toxicity Characteristic Leaching Procedure), incorporated by reference in 35 Ill. Adm. Code 720.111, 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 shall-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 <u>following</u> requirements <u>indicated in the following table</u>:

## Required information Section 728.107(b) 1. USEPA hazardous waste number and manifest number of first shipment. 2. 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. 3. 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). ✓ 4. Waste analysis data (when available). ~ 5. 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). $\checkmark$ 6. A certification is needed (see applicable section for exact wording).

- 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);
- y) 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 shall 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 <u>as</u> follows:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in 35 Ill. Adm. Code 728.149 without impermissible dilution of the prohibited wastes. I am

- aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.
- A) A copy of the certification must be placed in the treatment facility's on-site files. If the waste or treatment residue changes, or the receiving facility changes, a new certification must be sent to the receiving facility, and a copy placed in the treatment facility's file.
- B) Debris excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(e) (i.e., debris treated by an extraction or destruction technology listed in Table F of this Part and debris that the Agency has determined does not contain hazardous waste) is subject to the notification and certification requirements of subsection (d) of this Section rather than the certification requirements of this subsection (b)(4).
- C) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in part or in whole on the analytical detection limit alternative specified in Section 728.140(d), the certification must be signed by an authorized representative and must state the following 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 <u>Table C to</u> 35 Ill. Adm. Code 728. Table C. 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 35 Ill. Adm. Code 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 the following 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 the following 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 sending that sends the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under this Section.
- 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 shall-must submit a certification described in subsection (b)(4) of

this Section and a notice that includes the information listed in subsection (b)(3) of this Section (except the manifest number) to the Agency. The recycling facility also shall-must keep records of the name and location of each entity receiving the hazardous waste-derived product.

- c) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to 35 Ill. Adm. Code 726.120(b), the owner or operator of any land disposal facility disposing any waste subject to restrictions under this Part shall 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 SW-846 Method 1311 (the Toxicity Characteristic Leaching Procedure), incorporated by reference in 35 Ill. Adm. Code 720.111, 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 shall-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) (i.e., debris treated by an extraction or destruction technology provided by Table F of this Part, and debris that has been delisted) is subject to the following notification and certification requirements:

- 1) A one-time notification must be submitted to the Agency including the following information:
  - A) The name and address of the RCRA Subtitle D (municipal solid waste landfill) facility receiving the treated debris;
  - B) A description of the hazardous debris as initially generated, including the applicable USEPA hazardous waste numbers; and
  - C) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the technology from Table F of this Part used to treat the debris.
- 2) The notification must be updated if the debris is shipped to a different facility and, for debris excluded under 35 Ill. Adm. Code 721.102(e)(1), if a different type of debris is treated or if a different technology is used to treat the debris.
- 3) For debris excluded under 35 Ill. Adm. Code 721.103(e)(1), the owner or operator of the treatment facility shall-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-the following 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 generators and treaters a generator or treater that first determine determines that a contaminated soil subject to LDRs, as provided in Section 728.149(a), no longer exhibits a characteristic of hazardous waste shall-must do the following:

- 1) Prepare a one-time only documentation of these determinations including all supporting information; and
- 2) Maintain that information in the facility files and other records for a minimum of three years.

(Source: Amended at	t 27 Ill. Reg	, effective	)	)
Section 728.109	Special Rule	s for Characteristic	Wastes	

- a) The initial generator of a solid waste shall-must determine each USEPA hazardous waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under Subpart D of this Part. 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-Subpart D. In addition, the waste must carry one or more of the waste codes under Subpart C of 35 Ill. Adm. Code 721-Subpart C 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 Section 728-Table C to this Part), the generator shall-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 <u>Subpart D of 35 III.</u> Adm. Code 721. Subpart D and exhibits a characteristic <u>of hazardous waste under Subpart C of 35 III.</u> Adm. Code 721. Subpart C, the treatment standard for the waste code listed in <u>Subpart D of 35 III.</u> Adm. Code 721. Subpart D will operate in lieu of the standard for the waste code under <u>Subpart C of 35 III.</u> Adm. Code 721. Subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.
- c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste that exhibits a characteristic under <u>Subpart C of</u> 35 Ill. Adm. Code 721. Subpart C shall <u>must</u> 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 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.
  - 3) 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 Sections Section 728.148 and 728. 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
- e) 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 728. 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 5 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.
- g) 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: Ame	ended at 27 Ill. Reg.	. effective	

# SUBPART B: SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

Section 728.113 Newly Listed Wastes

The Board incorporates by reference 40 CFR 268.13 (1991). This Section incorporates no later editions or amendments.

In corresponding 40 CFR 268.13, USEPA stated that it would make a land disposal prohibition determination for any hazardous waste identified or listed after November 8, 1984 within six months after the date of identification or listing. This statement maintains structural consistency with the corresponding federal regulations.

(Source: Amended at	27 Ill. Reg.	, effective	)
Section 728.114	Surface Impo	oundment <del> exemptions</del> Exempt	ions <del>.</del>

a) This Section defines additional circumstances under which an otherwise prohibited waste may continue to be placed in a surface impoundment.

- b) Wastes which that are newly identified or listed by USEPA persuant to Section 3001 of RCRA (42 U.S.C. USC § 6921) after November 8, 1984, and which are stored in a surface impoundment that is newly subject to subtitle C of RCRA (42 U.S.C. USC § 6921 et seq.) as a result of the additional identification or listing, may continue to be stored in the surface impoundment for 48 months after the promulgation of the additional listing or characteristic, not withstanding notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725.Subpart F within 12 months after promulgation of the new listing or characteristic.
- Wastes which that are newly identified or listed by USEPA under Section 3001 of RCRA (42 U.S.C. § 6921) after November 8, 1984, and which are treated in a surface impoundment that is newly subject to Subtitle C of RCRA (42 U.S.C. § 6921 et seq.) as a result of the additional identification or listing, may continue to be treated in that surface impoundment, notwithstanding the fact that the waste is otherwise prohibited from land disposal, provided that the surface impoundment is in compliance with the requirements of Subpart F of 35 Ill. Adm. Code 725. Subpart F within 12 months after the promulgation of the new listing or characteristic. In addition, if the surface impoundment continues to treat hazardous waste after 48 months from promulgation of the additional listing or characteristic, it must then be in compliance with Section 728.104.

(Source:	Amended at 27 Ill. Reg.	, effective	)

#### SUBPART C: PROHIBITION ON LAND DISPOSAL

Section 728.130 Waste Specific Waste-Specific Prohibitions: — Wood Preserving Wastes

- a) The following wastes are prohibited from land disposal: the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, and F035.
- b) <u>Effective May 12, 1999, the The following wastes are prohibited from land disposal:</u> soil and debris contaminated with the wastes specified in 35 Ill. Adm. Code 721 as F032, F034, F035; and radioactive wastes mixed with USEPA hazardous waste numbers F032, F034, and F035.

- Until May 12, 1999, soil and debris contaminated with the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers F032, F034, F035; and radioactive waste mixed with USEPA hazardous waste numbers F032, F034, and F035 may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 728.105(h)(2). This subsection (c) corresponds with 40 CFR 268.30(c), which expired by its own terms on May 12, 1999. This statement maintains structural consistency with the corresponding federal regulations.
- d) The requirements of subsections (a) and (b) of this Section do not apply if <u>any of</u> the following conditions is fulfilled:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
  - The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or
  - 4) Persons have A person has been granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5 (see Section 728.105), with respect to those wastes covered by the extension.
- e) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Sections-Section 728.140 and 728. Table T to this Part, the initial generator shall-must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable universal treatment standard levels of Sections Section 728.148 and 728. Table U to this Part, the waste is prohibited from land disposal and all requirements of Part 728 are applicable, except as otherwise specified.

(Source: Amended a	nt 27 Ill. Reg	, effective	)
Section 728.131	Waste Specific \	Waste-Specific Prohibitions:	<ul> <li>Dioxin-Containing Wastes</li> </ul>

a) The dioxin-containing wastes specified in 35 Ill. Adm. Code 721.131 as USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, F027, and F028 are prohibited from land disposal, unless the following condition applies: The the

- dioxin-containing waste is contaminated soil and debris resulting from a CERCLA response or a RCRA corrective action.
- b) <u>Effective November 8, 1990, USEPA Hazardous Waste Numbers F020, F021, F022, F023, F026, F027 and F028, and dioxin-containing waste which that is contaminated soil and debris resulting from a CERCLA response or a RCRA corrective action listed in subsection (a) of this Section are prohibited from land disposal.</u>
- c) Until November 8, 1990, wastes included in subsection (b) may be disposed of in a landfill or surface impoundment only if the facility is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105, and all other applicable requirements of 35 Ill. Adm. Code 724 and 725. This subsection (c) corresponds with 40 CFR 268.31(c), which expired by its own terms on November 8, 1990. This statement maintains structural consistency with the corresponding federal regulations.
- d) The requirements of subsections (a) and (b) of this Section do not apply if any of the following conditions is fulfilled:
  - 1) The wastes meet the standards of Subpart D of this Part; or,
  - 2) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition; or
  - 3) Persons have A person has been granted an extension from the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes and units covered by the extension.

(Source: Amended	d at 27 Ill. Reg.	, effective	)
Section 728.132	Waste Specific \( \)	Waste-Specific Prohibitions	s: — Soils Exhibiting the Toxicity
	Characteristic for	or Metals and Containing	PCBs

- a) The following wastes are prohibited from land disposal: any volumes of soil exhibiting the toxicity characteristic solely because of the presence of metals (USEPA hazardous waste numbers D004 through D011) and containing PCBs.
- b) The requirements of subsection (a) of this Section do not apply if any of the following conditions is fulfilled:
  - 1) Low-halogenated organics waste meeting <u>Subpart D the treatment</u> standards of Subpart D of this Part:

- A) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and
- B) The wastes meet the treatment standards specified in Subpart D of this part-Part for USEPA hazardous waste numbers D004 through D011, as applicable; or
- 2) Low-halogenated organics waste meeting alternative treatment standards for contaminated soil:
  - A) The wastes contain halogenated organic compounds in total concentration less than 1,000 mg/kg; and
  - B) The wastes meet the alternative treatment standards specified in Section 728.149 for contaminated soil; or
- 3) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition; or
- 4) The wastes meet applicable alternative treatment standards established pursuant to a petition granted under Section 728.144.

Source: Amended a	at 27 Ill.Reg	, effective		)
Section 728.133	Waste-Specif	ic Prohibitions: —	Chlorinated Aliphatic	Wastes

- a) The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous wastes numbers K174 and K175, soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.
- b) The requirements of subsection (a) of this Section do not apply if any of the following conditions is fulfilled:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

- The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;
- 4) Hazardous debris has met the treatment standards in Section 728.140 or the alternative treatment standards in Section 728.145; or
- 5) Persons have A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.
- To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable levels of Subpart D of this Part, the waste is prohibited from land disposal, and all requirements of this Part 728 are applicable, except as otherwise specified.
- d) Disposal of USEPA hazardous waste number K175 wastes that have 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 one of the following:
  - 1) A RCRA Subtitle C monofill containing only K175 wastes that meet all applicable Section 728.140 treatment standards; or
  - 2) A dedicated RCRA Subtitle C landfill cell in which all other wastes being co-disposed are at pH≤6.0.

(Source: Amended	at 27 Ill. Reg	, effective	)
Section 728.134	Waste-Specific	Prohibitions: — Toxicity Cha	racteristic Metal Wastes

- a) The following wastes are prohibited from land disposal: the wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous waste numbers D004 through D011 that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure), and waste, soil, or debris from mineral processing operations that is identified as hazardous by the specifications at 35 Ill. Adm. Code 721.
- b) The following waste is prohibited from land disposal: slag from secondary lead smelting that exhibits the characteristic of toxicity due to the presence of one or more metals.

- c) The following wastes are prohibited from land disposal: newly identified characteristic wastes from elemental phosphorus processing; radioactive wastes mixed with USEPA hazardous waste numbers D004 through D011 wastes that are newly identified (i.e., wastes, soil, or debris identified as hazardous by the Toxic Characteristic Leaching Procedure but not the Extraction Procedure); or mixed with newly identified characteristic mineral processing wastes, soil, or debris.
- d) This provision subsection (d) corresponds with 40 CFR 269.34(d), which was applicable expired by its own terms only until on May 26, 2000. We have removed this subsection (d), since it no longer applies. This statement maintains structural consistency with the corresponding federal regulations.
- e) The requirements of subsections (a) and (b) of this Section do not apply if any of the following applies to the waste:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) The Board has granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
  - The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144; or
  - 4) USEPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to those wastes covered by the extension.
- f) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Section 728.140 and Table T of this Part, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents (including underlying hazardous constituents in characteristic wastes) in excess of the applicable universal treatment standard levels of Section 728.148 and Table U of this Part, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(Source:	Amended at 27 Ill. Reg.	, effective	)
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Section 728.135 Waste Specific Waste-Specific Prohibitions: — Petroleum Refining Wastes

- a) Effective February 8, 1999, the The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous wastes numbers K169, K170, K171, and K172; soils and debris contaminated with these wastes; radioactive wastes mixed with these hazardous wastes; and soils and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.
- b) The requirements of subsection (a) of this Section do not apply <u>under if</u> any of the following-<u>circumstances</u> <u>applies to the waste</u>:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) The Board has granted an adjusted standard that exempts waste from a prohibition pursuant to Section 728.106, with respect to those wastes and units covered by the adjusted standard;
  - 3) The wastes meet an adjusted standard from an applicable treatment standard granted under Section 728.144;
  - The waste is hazardous debris that has met the treatment standards set forth in Section 728.140 and Table T of this Part or the alternative treatment standards in Section 728.145; or
  - 5) USEPA has granted an extension to the effective date of a prohibition pursuant to 40 CFR 268.5, with respect to these wastes covered by the extension.
- c) To determine whether a hazardous waste identified in this section Section exceeds the applicable treatment standards specified in Section 728.140, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable universal treatment standard levels of Section 728.148 and Table U of this Part, the waste is prohibited from land disposal, and all requirements of this Part are applicable, except as otherwise specified.

(	Source.	Amended at 27 Ill. Reg.	, effective	)
١	(Dource.	Timenaca at 27 mi. 105.	, checuve	,

Section 728.136 Waste Specific Prohibitions: — Inorganic Chemical Wastes

- a) Effective May 20, 2002, the The wastes specified in 35 Ill. Adm. Code 721 as USEPA hazardous wastes numbers K176, K177, and K178, and soil and debris contaminated with these wastes, radioactive wastes mixed with these wastes, and soil and debris contaminated with radioactive wastes mixed with these wastes are prohibited from land disposal.
- b) The requirements of subsection (a) of this Section do not apply if any of the following is true with regard applies to the waste:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
  - The wastes meet the applicable treatment standards established pursuant to a petition granted under Section 728.144;
  - 4) Hazardous debris has met the treatment standards in <u>Sections Section</u> 728.140 and <u>728.</u>Table <u>T to this Part</u> or the alternative treatment standards in Section 728.145; or
  - 5) Persons have A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.
- c) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards specified in Sections Section 728.140 and 728. Table T to this Part, the initial generator must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains regulated constituents in excess of the applicable Subpart D levels of Subpart D of this Part, the waste is prohibited from land disposal, and all requirements of this part are applicable, except as otherwise specified.

(	Source.	Amended at 27 Ill. Reg.	, effective	)
١	(Dource.	Timenaca at 27 mi. 105.	, checuve	,

Section 728.137 <u>Waste Specific Waste-Specific Prohibitions:</u> — Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated

- The wastes specified in 35 Ill. Adm. Code 721.121 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in 35 Ill. Adm. Code 721.122 as D002, that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), or that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or that are zero dischargers that engage in CWA-equivalent treatment before ultimate land disposal, are prohibited from land disposal. CWA-equivalent treatment means biological treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation/sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.
- b) The wastes specified in 35 Ill. Adm. Code 721.121 as D001 (and is not in the High TOC Ignitable Liquids Subcategory), and specified in 35 Ill. Adm. Code 721.122 as D002, that are managed in systems defined in 35 Ill. Adm. Code 704 and 730 as Class V injection wells, that do not engage in CWA-equivalent treatment before injection, are prohibited from land disposal.

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Section 728.138	Waste-Specific Prohibitions: Newly-Identified Organic Toxicity Characteristic Wastes and Newly-Listed Coke By-Product and Chlorotoluene
	Production Wastes

, effective

(Source: Amended at 27 Ill. Reg.

The wastes specified in 35 Ill. Adm. Code 721.132 as U.S. EPA-USEPA hazardous a) waste numbers K141, K142, K143, K144, K145, K147, K148, K149, K150, and K151 are prohibited from land disposal. In addition, debris contaminated with U.S. EPA-USEPA hazardous waste numbers F037, F038, K107 through K112, K117, K118, K123 through K126, K131, K132, K136, U328, U353, U359 and soil and debris contaminated with D012 through D043, K141 through K145, and K147 through K151 are prohibited from land disposal. The following wastes that are specified in the table at 35 Ill. Adm. Code 721.124(b) as U.S. EPA-USEPA hazardous waste numbers D012, D013, D014, D015, D016, D017, D018, D019, D020, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D031, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, and D043 that are not radioactive, that are managed in systems other than those whose discharge is regulated under the federal Clean Water Act (CWA; 33 U.S.C. U.S.C. §§ 1251 et seq.), that are zero dischargers that do not engage in CWA-equivalent treatment before ultimate land disposal, or that are injected in Class I deep wells regulated under the Safe Drinking Water Act (SDWA) are prohibited from land disposal. "CWA-equivalent treatment,", as used in this Section, means biological

treatment for organics, alkaline chlorination or ferrous sulfate precipitation for cyanide, precipitation and sedimentation for metals, reduction for hexavalent chromium, or another treatment technology that can be demonstrated to perform equally to or better than these technologies.

- b) On September 19, 1996, radioactive Radioactive wastes that are mixed with any of U.S. EPA-USEPA hazardous waste number-numbers D018 through D043 waste that are managed in systems other than those whose discharge is regulated under the Clean Water Act (CWA), in systems that inject in Class I deep wells regulated under the Safe Drinking Water Act (SDWA), or in systems that are zero dischargers that engage in CWA-equivalent treatment, as defined in subsection (a) above of this Section, before ultimate land disposal are prohibited from land disposal. Radioactive wastes mixed with any of U.S. EPA-USEPA hazardous waste number numbers K141 through K145 and K147 through K151 are also prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.
- c) Between December 19, 1994 and September 19, 1996, the wastes included in subsection (b) above may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in Section 728.105(h)(2). This subsection (c) corresponds with 40 CFR 268.38(c), which expired by its own terms on September 19, 1996. This statement maintains structural consistency with the corresponding federal regulations.
- d) The requirements of subsections (a), (b), and (c) above of this Section do not apply if any of the following applies to the waste:
  - 1) The wastes meet the applicable treatment standards specified in <del>728.</del>Subpart D of this Part;
  - 2) Persons have A person has been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
  - The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144;
  - 4) Persons have A person has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.
- e) To determine whether a hazardous waste identified in this section Section exceeds the applicable treatment standards specified in Sections Section 728.140 and 728. Table T to this Part, the initial generator must test a sample of the waste extract

or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable 728.Subpart D-levels of Subpart D of this Part, the waste is prohibited from land disposal and all requirements of this Part are applicable, except as otherwise specified.

(Source: Amended at	t 27 Ill. Reg, effective	)
Section 728.139	Waste-Specific Prohibitions: Spent Aluminum Potliners Wastes	and Carbamate

- a) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA Hazardous Waste numbers K156-K159 and K161; and in 35 Ill. Adm. Code 721.133 as USEPA hazardous waste numbers P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U271, U278 through U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 through U411 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.
- b) The wastes identified in 35 Ill. Adm. Code 721.123 as USEPA hazardous waste number D003 are prohibited from land disposal, other than those that are managed in a system whose discharge is regulated under 35 Ill. Adm. Code:Subtitle C, one that injects hazardous waste in Class I waste injection well regulated under 35 Ill. Adm. Code 702, 704, and 730, or one that is a zero discharger that engages in federal Clean Water Act (CWA)-equivalent treatment before ultimate land disposal. This prohibition does not apply to unexploded ordnance and other explosive devices that have been the subject of an emergency response. (Such D003 wastes are prohibited unless they meet the treatment standard of DEACT before land disposal (see Section 728.140)).
- c) The wastes specified in 35 Ill. Adm. Code 721.132 as USEPA hazardous waste number K088 are prohibited from land disposal. In addition, soil and debris contaminated with these wastes are prohibited from land disposal.
- d) Radioactive wastes mixed with waste designated by any of USEPA hazardous waste numbers K088, K156 through K159, K161, P127, P128, P185, P188 through P192, P194, P196 through P199, P201 through P205, U271, U278 through U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, and U409 through U411 are prohibited from land disposal. In addition, soil and debris contaminated with these radioactive mixed wastes are prohibited from land disposal.

- e) This subsection corresponds with 40 CFR 268.39(e), which expired by its own terms after April 8, 1998. This statement maintains structural parity consistency with the corresponding federal regulations.
- f) The requirements of subsections (a), (b), (c), and (d) of this Section do not apply if any of the following applies to the waste:
  - 1) The wastes meet the applicable treatment standards specified in Subpart D of this Part;
  - 2) The person conducting the disposal has been granted an exemption from a prohibition under a petition pursuant to Section 728.106, with respect to those wastes and units covered by the petition;
  - The wastes meet the applicable alternative treatment standards established pursuant to a petition granted under Section 728.144; or
  - 4) The person conducting the disposal has been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.
- g) To determine whether a hazardous waste identified in this Section exceeds the applicable treatment standards set forth in Section 728.140, the initial generator shall-must test a sample of the waste extract or the entire waste, depending on whether the treatment standards are expressed as concentrations in the waste extract or in the waste, or the generator may use knowledge of the waste. If a waste contains constituents in excess of the applicable 728.Subpart D-levels of Subpart D of this Part, the waste is prohibited from land disposal and all requirements of this Part are applicable to the waste, except as otherwise specified.

(Source:	Amended at 27 Ill. Reg.	effective	)
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## SUBPART D: TREATMENT STANDARDS

Section 728.140 Applicability of Treatment Standards

a) A prohibited waste identified in Table T of this Part, "Treatment Standards for Hazardous Wastes,", may be land disposed only if it meets the requirements found in that Table. For each waste, Table T of this Part identifies one of three types of treatment standard requirements:

- 1) All hazardous constituents in the waste or in the treatment residue must be at or below the values found in Table T of this Part for that waste (total waste standards);
- 2) The hazardous constituents in the extract of the waste or in the extract of the treatment residue must be at or below the values found in Table T of this Part (waste extract standards); or
- The waste must be treated using the technology specified in Table T of this Part (technology standard), which is described in detail in Table C of this Part, "Technology Codes and Description of Technology-Based Standards."-
- b) For wastewaters, compliance with concentration level standards is based on maximums for any one day, except for D004 through D011 wastes for which the previously promulgated treatment standards based on grab samples remain in effect. For all nonwastewaters, compliance with concentration level standards is based on grab sampling. For wastes covered by the waste extract standards, the test Method 1311, the Toxicity Characteristic Leaching Procedure, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, must be used to measure compliance. An exception is made for D004 and D008, for which either of two test methods may be used: Method 1311 or Method 1310, the Extraction Procedure Toxicity Test, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 III. Adm. Code 720.111. For wastes covered by a technology standard, the wastes may be land disposed after being treated using that specified technology or an equivalent treatment technology approved by the Agency pursuant to Section 728.142(b).
- c) When wastes with differing treatment standards for a constituent of concern are combined for purposes of treatment, the treatment residue must meet the lowest treatment standard for the constituent of concern.
- d) Notwithstanding the prohibitions specified in subsection (a) of this Section, treatment and disposal facilities may demonstrate (and certify pursuant to 35 III. Adm. Code-Section 728.107(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in Table T of this Part, provided the following conditions are satisfied:
  - 1) The treatment standards for the organic constituents were established based on incineration in units operated in accordance with the technical requirements of Subpart O of 35 Ill. Adm. Code 724. Subpart O, or based

- on combustion in fuel substitution units operating in accordance with applicable technical requirements;
- 2) The treatment or disposal facility has used the methods referenced in subsection (d)(1) of this Section to treat the organic constituents; and
- 3) The treatment or disposal facility may demonstrate compliance with organic constituents if good-faith analytical efforts achieve detection limits for the regulated organic constituents that do not exceed the treatment standards specified in this Section and Table T of this Part by an order of magnitude.
- e) For a characteristic waste (USEPA hazardous waste number D001 through D043) that is subject to treatment standards set forth in Table T of this Part, "Treatment Standards for Hazardous Wastes,", and the waste is not managed in a wastewater treatment system that is either regulated under the Clean Water Act (CWA) or one that is CWA-equivalent or the waste is injected into a Class I non-hazardous deep injection well, all underlying hazardous constituents (as defined in Section 728.102) must meet the universal treatment standards, set forth in Table U of this Part prior to land disposal, as defined in Section 728.102.
- f) The treatment standards for USEPA hazardous waste numbers F001 through F005 nonwastewater constituents carbon disulfide, cyclohexanone, or methanol apply to wastes that contain only one, two, or three of these constituents. Compliance is measured for these constituents in the waste extract from test Method 1311, the Toxicity Characteristic Leaching Procedure found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111. If the waste contains any of these three constituents along with any of the other 25 constituents found in USEPA hazardous waste numbers F001 through F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, or methanol are not required.
- g) This subsection (g) corresponds with 40 CFR 268.40(g), added at 61 Fed. Reg. 43927 (Aug. 26, 1996), which has expired by its own terms on March 4, 1999. This statement maintains structural consistency with the corresponding federal rules.
- h) Prohibited USEPA hazardous waste numbers D004 through D011, mixed radioactive wastes, and mixed radioactive listed wastes containing metal constituents that were previously treated by stabilization to the treatment standards in effect at that time and then put into storage do not have to be retreated to meet treatment standards in this Section prior to land disposal.

i) Zinc micronutrient fertilizers that are produced for the use of the general public and which are produced from or contain recycled characteristic hazardous wastes (D004 through D011) are subject to the applicable treatment standards set forth in 40 CFR 268.41 (1999), incorporated by reference in 35 Ill. Adm. Code 720.111(b). This subsection (i) corresponds with 40 CFR 268.40(i), which USEPA has removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

BOARD NOTE: USEPA added 40 CFR 268.40(i) at 63 Fed. Reg. 46331 (Aug. 31, 1998) to stay the Phase IV land disposal restrictions (LDRs) as they apply to zine-containing fertilizers while it develops a more comprehensive set of regulations applicable to use of hazardous waste in making fertilizers. To effect the stay, USEPA applied the 1990 LDR standards to the affected materials.

j) The treatment standards for the wastes specified in 35 Ill. Adm. Code 721.133 as USEPA hazardous waste numbers P185, P191, P192, P197, U364, U394, and U395 may be satisfied by either meeting the constituent concentrations presented in Table T of this Part, "Treatment Standards for Hazardous Wastes," or by treating the waste by the following technologies: combustion, as defined by the technology code CMBST at Table C, for nonwastewaters; biodegradation, as defined by the technology code CARBN; chemical oxidation, as defined by the technology code CHOXD; or combustion, as defined as technology code CMBST at Table C, for wastewaters.

(Source: Amended a	at 27 Ill. Reg	, effective	)
Section 728.141	Treatment Star	ndards Expressed as Concentrat	ions in Waste Extract
728. Table A to this I	Part, "Table CCV	d in this Section and for treatme WE-Constituent Concentrations his Part, "Treatment Standards	in Waste Extracts,"; refer to
(Source: Amended a	at 27 Ill. Reg	, effective	)
Section 728.142	Treatment Star	ndards Expressed as Specified T	Technologies

- a) The following wastes listed in Table T of this Part, "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, must be treated using the technology or technologies specified in Table C of this Part.
  - 1) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm but less than 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70, incorporated by reference

- in 35 Ill. Adm. Code 720.111, or burned in high efficiency boilers in accordance with the technical requirements of 40 CFR 761.60. Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm must be incinerated in accordance with the technical requirements of 40 CFR 761.70. Thermal treatment in accordance with this Section must be in compliance with applicable regulations in 35 Ill. Adm. Code 724, 725, and 726.
- Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1000 mg/kg and liquid HOC-containing wastes that are prohibited under Section 728.132(e)(1) must be incinerated in accordance with the requirements of Subpart O of 35 Ill. Adm. Code 724.Subpart O or Subpart O of 35 Ill. Adm. Code 725.Subpart O. These treatment standards do not apply where the waste is subject to a treatment standard codified in Subpart C of this Part for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under Section 728.141(a)).
- A mixture consisting of wastewater, the discharge of which is subject to regulation under 35 Ill. Adm. Code 309 or 310, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process that meet the criteria of the D001 ignitable liquids containing greater than 10 percent total organic constituents (TOC) subcategory are subject to the DEACT treatment standard described in Table C of this Part. For purposes of this subsection (a)(3), "de minimis losses" include the following:
  - A) Those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, or leaks from pipes, valves, or other devices used to transfer materials);
  - B) Minor leaks from process equipment, storage tanks, or containers;
  - C) Leaks from well-maintained pump packings and seals;
  - D) Sample purgings; and
  - E) Relief device discharges.
- b) Any person may submit an application to the Agency demonstrating that an alternative treatment method can achieve a level of performance equivalent to that achievable by methods specified in subsections (a), (c), and (d) of this Section for wastes or specified in Table F of this Part for hazardous debris. The applicant shall must submit information demonstrating that the applicant's treatment method is in

compliance with federal and state requirements, including this Part; 35 Ill. Adm. Code 709, 724, 725, 726, and 729; and Sections 22.6 and 39(h) of the Environmental Protection Act [415 ILCS 5/22.6 and 39(h)] and that the treatment method is protective of human health and the environment. On the basis of such information and any other available information, the Agency shall-must approve the use of the alternative treatment method if the Agency finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subsections (a), of this Section and (c), and (d) of this Section and in Table F of this Part, for hazardous debris. Any approval must be stated in writing and may contain such provisions and conditions as the Agency determines to be appropriate. The person to whom such approval is issued shall-must comply with all limitations contained in such determination.

- c) As an alternative to the otherwise applicable treatment standards of Subpart D of this Part, lab packs are eligible for land disposal provided the following requirements are met:
  - 1) The lab packs comply with the applicable provisions of 35 Ill. Adm. Code 724.416 and 725.416;
    - BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional restrictions on the use of lab packs.
  - 2) The lab pack does not contain any of the wastes listed in Appendix D of this Part;
  - 3) The lab packs are incinerated in accordance with the requirements of <u>Subpart O of 35 III</u>. Adm. Code 724. Subpart O or <u>Subpart O of 35 III</u>. Adm. Code 725. Subpart O; and
  - 4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in Subpart D of this Part.
- Radioactive hazardous mixed wastes are subject to the treatment standards in Section 728.140 and Table T of this Part. Where treatment standards are specified for radioactive mixed wastes in Table T of this Part, "Table of Treatment Standards,", those treatment standards will govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by <u>USEPA hazardous</u> waste code) applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in Section 728.145.

(Source:	Amended at 27	Ill. Reg	, effective	)
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# Section 728.143 Treatment Standards Expressed as Waste Concentrations

For the requirements previously found in this Section and for treatment standards in Section
728. Table A to this Part, "CCW-Constituent Concentrations in Wastes,", refer to Section 728.140
and <del>728.</del> Table T to this Part, "Treatment Standards for Hazardous Wastes."

(Source: Amended a	t 27 Ill. Reg	, effective	)
Section 728.144	Adjustment of	Treatment Standard	

- a) Based on a petition filed by a generator or treater of hazardous waste, the Board will grant an adjusted standard from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the waste:
  - It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or
  - It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:
    - A) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media); or
    - B) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.

BOARD NOTE: 40 CFR 268.44 refers to these as "treatability variances." The Board has not used this term in its rules to avoid confusion with the Board variances under Title IX of the Environmental Protection Act. The equivalent Board procedures are an "adjusted standard from a treatment standard" pursuant to subsections (a) through (h) (m) of this Section, or a "treatability exception" adopted pursuant to subsections (m) et seq. subsection (p) of this Section. While the latter is adopted by "identical in substance" rulemaking following a USEPA

action, the former is an original Board action which that will be the only mechanism following authorization to the State of this component of the RCRA program.

- b) Each petition must be submitted in accordance with the procedures in <u>Subpart D</u> of 35 Ill. Adm. Code 106. Subpart G 104.
- c) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

- d) After receiving a petition for an adjusted treatment standard, the Board may request any additional information or samples which that are necessary to evaluate the petition.
- e) The Board will give public notice and provide an opportunity for public comment, as provided in <u>Subpart D of</u> 35 Ill. Adm. Code-106.Subpart G\_104. In conjunction with any updating of the RCRA regulations, the Board will maintain, in this Part, a listing of all adjusted treatment standards granted by the Board pursuant to this Section. A LISTING OF ALL ADJUSTED STANDARDS GRANTED PURSUANT TO THIS SECTION WILL BE PUBLISHED IN THE ILLINOIS REGISTER AND ENVIRONMENTAL REGISTER AT THE END OF EACH FISCAL YEAR. (Section 28.1(d)(3) of the Environmental Protection Act [415 ILCS 5/28.1(d)(3)]-)
- f) A generator, treatment facility or disposal facility that is managing a waste covered by an adjusted treatment standard shall-must comply with the waste analysis requirements for restricted wastes found under Section 728.107.
- g) During the petition review process, the applicant is required to comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.
- h) Based on a petition filed by a generator or treater of hazardous waste, the Board will grant an <u>andjusted adjusted</u> standard from an applicable treatment standard if the petitioner can demonstrate that either of the following applies to treatment of the waste:

- It is not physically possible to treat the waste to the level specified in the treatment standard, or by the method specified as the treatment standard. To show that this is the case, the petitioner must demonstrate that because the physical or chemical properties of the waste differ significantly from waste analyzed in developing the treatment standard, the waste cannot be treated to the specified level or by the specified method; or
- It is inappropriate to require the waste to be treated to the level specified in the treatment standard or by the method specified as the treatment standard, even though such treatment is technically possible. To show that this is the case, the petitioner must demonstrate that either of the following applies to treatment of the waste:
  - A) Treatment to the specified level or by the specified method is technically inappropriate (for example, resulting in combustion of large amounts of mildly contaminated environmental media where the treatment standard is not based on combustion of such media); or
  - B) For remediation waste only, treatment to the specified level or by the specified method is environmentally inappropriate because it would likely discourage aggressive remediation.
- 3) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) the concentrations necessary to minimize short- and long-term threats to human health and the environment. An adjusted standard from a treatment standard granted under this subsection (h)(3) will include the following features:
  - A) At a minimum, the adjusted standard from the treatment standard will impose an alternative land disposal restriction treatment standard that will achieve the following, using a reasonable maximum exposure scenario:
    - i) For carcinogens, it will achieve constituent concentrations that result in the total excess risk to an individual exposed over a lifetime, generally falling within a range from 10<sup>-4</sup> to 10<sup>-6</sup>; and
    - ii) For constituents with non-carcinogenic effects, it will achieve constituent concentrations that an individual could

be exposed to on a daily basis without appreciable risk of deleterious effect during a lifetime.

- B) The treatment adjusted standard will not consider post-land-disposal controls.
- 4) For contaminated soil only, treatment to the level or by the method specified in the soil treatment standards would result in concentrations of hazardous constituents that are below (i.e., lower than) natural background concentrations at the site where the contaminated soil will <u>be</u> land disposed.
- 5) The Board will follow the procedures of Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 106. Subpart G 104 pertaining to public notice and a reasonable opportunity for public comment before granting or denying a petition.
- i) Each petition for a site-specific adjusted treatment standard must include the information in 35 Ill. Adm. Code 720.120(b)(1) through (b)(4).
- j) After receiving a petition for a site-specific adjusted treatment standard, the Board may request any additional information or samples which that the Board determines are necessary to evaluate the petition.
- k) A generator, treatment facility or disposal facility which that is managing a waste covered by a site-specific adjusted treatment standard shall must comply with the waste analysis requirements for restricted wastes in Section 728.107.
- 1) During the petition review process, the petitioner for a site-specific adjusted treatment standard <u>shall-must</u> comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.
- m) For any adjusted standard from a treatment standard, the petitioner must also demonstrate that compliance with the requested adjusted standard is sufficient to minimize threats to human health and the environment posed by land disposal of the waste. In evaluating this demonstration, the Board will take into account whether the adjusted standard should be granted if the subject waste is to be used in a manner constituting disposal pursuant to Sections 728.120 through 728.123.
- n) This subsection (n) corresponds with 40 CFR 264.1030(n), marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules corresponding federal regulations.

- o) The facilities listed in Table H of this Part are excluded from the treatment standards under <u>Sections Section</u> 728.143(a) and Table B of this Part, and are subject to the constituent concentrations listed in Table H of this Part.
- p) If USEPA grants a treatability exception by regulatory action pursuant to 40 CFR 268.44-(1996) and a person demonstrates that the treatability exception needs to be adopted as part of the Illinois RCRA program because the waste is generated or managed in Illinois, the Board will adopt the treatability exception by identical in substance rulemaking pursuant to Section 22.4(a) of the Environmental Protection Act [415 ILCS 5/22.4(a)].

BOARD NOTE: The Board will adopt the treatability exception during a RCRA update Docket if a timely demonstration is made. Otherwise, the Board will assign the matter to a separate Docket.

(Source: Amended at	27 Ill. Reg.	, effective		_)
Section 728.145	Treatment S	tandards for Hazardous	Debris	

- a) Treatment standards. Hazardous debris must be treated prior to land disposal as follows, unless the <u>Board-Agency</u> has determined, under 35 Ill. Adm. Code 721.103(f)(2), that the debris is no longer contaminated with hazardous waste or the debris is treated to the waste-specific treatment standard provided in this Subpart <u>D</u> for the waste contaminating the debris:
  - 1) General. Hazardous debris must be treated for each "contaminant subject to treatment,", defined by subsection (b) of this Section, using the technology or technologies identified in Table F of this Part.
  - 2) Characteristic debris. Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under 35 Ill. Adm. Code 721.121, 721.122, or 721.123, respectively, must be deactivated by treatment using one of the technologies identified in Table F of this Part.
  - Mixtures of debris types. The treatment standards of Table F of this Part must be achieved for each type of debris contained in a mixture of debris types. If an immobilization technology is used in a treatment train, it must be the last treatment technology used.
  - 4) Mixtures of contaminant types. Debris that is contaminated with two or more contaminants subject to treatment identified under subsection (b) of this Section must be treated for each contaminant using one or more treatment technologies identified in Table F of this Part. If an

- immobilization technology is used in a treatment train, it must be the last treatment technology used.
- 5) Waste PCBs. Hazardous debris that is also a waste PCB under 40 CFR 761 is subject to the requirements of either 40 CFR 761 or the requirements of this Section, whichever are more stringent.
- b) Contaminants subject to treatment. Hazardous debris must be treated for each "contaminant subject to treatment." The contaminants subject to treatment must be determined as follows:
  - Toxicity characteristic debris. The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by 35 Ill. Adm. Code 721.124 are those EP constituents for which the debris exhibits the TC toxicity characteristic.
  - 2) Debris contaminated with listed waste. The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which treatment standards are established for the waste under Section 728.140 and Table T of this Part.
  - 3) Cyanide reactive debris. Hazardous debris that is reactive because of cyanide must be treated for cyanide.
- c) Conditioned exclusion of treated debris. Hazardous debris that has been treated using one of the specified extraction or destruction technologies in Table F of this Part and that does not exhibit a characteristic of hazardous waste identified under <a href="Subpart C of">Subpart C of</a> 35 Ill. Adm. Code 721. Subpart C after treatment is not a hazardous waste and need not be managed in a subtitle C facility. Hazardous debris contaminated with a listed waste that is treated by an immobilization technology specified in Table F of this Part is a hazardous waste and must be managed in a RCRA Subtitle C treatment, storage, or disposal facility.
- d) Treatment residuals.
  - 1) General requirements. Except as provided by subsections (d)(2) and (d)(4) of this Section:
    - A) Residue from the treatment of hazardous debris must be separated from the treated debris using simple physical or mechanical means; and

- B) Residue from the treatment of hazardous debris is subject to the waste-specific treatment standards provided by Subpart D of this Part for the waste contaminating the debris.
- 2) Nontoxic debris. Residue from the deactivation of ignitable, corrosive, or reactive characteristic hazardous debris (other than cyanide-reactive) that is not contaminated with a contaminant subject to treatment defined by subsection (b) of this Section, must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of Subpart D of this Part.
- 3) Cyanide-reactive debris. Residue from the treatment of debris that is reactive because of cyanide must meet the standards for USEPA hazardous waste number D003 under Section 728.140 and Table T of this Part.
- 4) Ignitable nonwastewater residue. Ignitable nonwastewater residue containing equal to or greater than 10 percent total organic carbon is subject to the technology specified in the treatment standard for USEPA hazardous waste number D001: Ignitable Liquids.
- 5) Residue from spalling. Layers of debris removed by spalling are hazardous debris that <u>remain-remains</u> subject to the treatment standards of this Section.

(Source: Amended at 27 Ill. Reg, effective)
Section 728.146 Alternative Treatment Standards Based on HTMR
For the treatment standards previously found in Section 728. Table G to this Part, as formerly referenced in this Section, refer to Sections Section 728.140 and 728. Table T to this Part, "Treatment Standards for Hazardous Wastes."
(Source: Amended at 27 III. Reg, effective)
Section 728.148 Universal Treatment Standards
Section 728. Table U to this Part, "Universal Treatment Standards (UTS),"; identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard level that are used to regulate most prohibited hazardous wastes with numerical limits. For determining compliance with treatment standards for underlying hazardous constituents, as defined in Section 728.102(i), these treatment standards may not be exceeded. Compliance with these treatment standards is measured by an analysis of grab samples, unless otherwise noted in Section 728. Table U to this Part.
(Source: Amended at 27 III Reg effective )

#### Section 728.149 Alternative LDR Treatment Standards for Contaminated Soil

a) Applicability. An owner or operator must comply with LDRs prior to placing soil that exhibits a characteristic of hazardous waste or which exhibited a characteristic of hazardous waste at the time it was generated into a land disposal unit. The following chart describes whether an owner or operator must comply with LDRs prior to placing soil contaminated by listed hazardous waste into a land disposal unit:

If the LDRs	And if the LDRs	And if	Then the owner or
Applied to the listed waste when it contaminated the soil*.	Apply to the listed waste now.		operator Must comply with LDRs.
Did not apply to the listed waste when it contamin- ated the soil*.	Apply to the listed waste now.	The soil is determined to contain the listed waste when the soil is first generated.	Must comply with LDRs.
Did not apply to the listed waste when it contamin- ated the soil*.	Apply to the listed waste now.	The soil is determined not to contain the listed waste when the soil is first generated.	Needs not comply with LDRs.
Did not apply to the listed waste when it contamin- ated the soil*.	Do not apply to the listed waste now.	_	Needs not comply with LDRs.

- \* For dates of LDR applicability, see Appendix G of this Part. To determine the date any given listed hazardous waste contaminated any given volume of soil, use the last date any given listed hazardous waste was placed into any given land disposal unit or, in the case of an accidental spill, the date of the spill.
- b) Prior to land disposal, contaminated soil identified by subsection (a) of this Section as needing to comply with LDRs must be treated according to the applicable treatment standards specified in subsection (c) of this Section or according to the universal treatment standards specified in Section 728.148 and Table U of this Part applicable to the contaminating listed hazardous waste or the applicable characteristic of hazardous waste if the soil is characteristic. The treatment standards specified in subsection (c) of this Section and the universal

- treatment standards may be modified through a treatment variance approved in accordance with Section 728.144.
- c) Treatment standards for contaminated soils. Prior to land disposal, contaminated soil identified by subsection (a) of this Section as needing to comply with LDRs must be treated according to all the standards specified in this subsection (c) or according to the universal treatment standards specified in Section 728.148 and Table U of this Part.
  - 1) All soils. Prior to land disposal, all constituents subject to treatment must be treated as follows:
    - A) For non-metals except carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in total constituent concentrations, except as provided by subsection (c)(1)(C) of this Section.
    - B) For metals and carbon disulfide, cyclohexanone, and methanol, treatment must achieve 90 percent reduction in constituent concentrations as measured in leachate from the treated 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 (c)(1)(C) of this Section.
    - C) When treatment of any constituent subject to treatment 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. The universal treatment standards are identified in Table U of this Part.
  - 2) Soils that exhibit the characteristic of ignitability, corrosivity or reactivity. In addition to the treatment required by subsection (c)(1) of this Section, prior to land disposal, soils that exhibit the characteristic of ignitability, corrosivity, or reactivity must be treated to eliminate these characteristics.
  - 3) Soils that contain nonanalyzable constituents. In addition to the treatment requirements of subsections (c)(1) and (c)(2) of this Section, prior to land disposal, the following treatment is required for soils that contain nonanalyzable constituents:

- A) For soil that contains only analyzable and nonanalyzable organic constituents, treatment of the analyzable organic constituents to the levels specified in subsections (c)(1) and (c)(2) of this Section; or
- B) For soil that contains only nonanalyzable constituents, treatment by the methods specified in Section 728.142 for the waste contained in the soil.
- d) Constituents subject to treatment. When applying the soil treatment standards in subsection (c) of this Section, constituents subject to treatment are any constituents listed in Table U of this Part, entitled "Universal Treatment Standards," that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium, zinc, and that are present at concentrations greater than ten times the universal treatment standard. PCBs are not constituents subject to treatment in any given volume of soil that exhibits the toxicity characteristic solely because of the presence of metals.
- e) Management of treatment residuals. Treatment residuals from treating contaminated soil identified by subsection (a) of this Section as needing to comply with LDRs must be managed as follows:
  - 1) Soil residuals are subject to the treatment standards of this Section;
  - 2) Non-soil residuals are subject to the following requirements:
    - A) For soils contaminated by listed hazardous waste, the RCRA Subtitle C standards applicable to the listed hazardous waste; and
    - B) For soils that exhibit a characteristic of hazardous waste, if the non-soil residual also exhibits a characteristic of hazardous waste, the treatment standards applicable to the characteristic hazardous waste.

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(Source:	Amended at 27 Ill. Reg.	, effective	

#### SUBPART E: PROHIBITIONS ON STORAGE

Section 728.150 Prohibitions on Storage of Restricted Wastes

a) Except as provided in this Section, the storage of hazardous wastes restricted from land disposal under Subpart C of this Part is prohibited, unless the following conditions are met:

- A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with the requirements in 35 Ill. Adm. Code 722.134 and 35 Ill. Adm. Code 724 and 725. (A generator that is in existence on the effective date of a regulation under this Part and which must store hazardous wastes for longer than 90 days due to the regulations under this Part becomes an owner or operator of a storage facility and shall-must obtain a RCRA permit, as required by 35 Ill. Adm. Code 703. Such a facility may qualify for interim status upon compliance with the regulations governing interim status under 35 Ill. Adm. Code 703.153.)
- An owner or operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and each of the following conditions are fulfilled:
  - A) Each container is clearly marked to identify its contents and the date each period of accumulation begins; and
  - B) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received and the date each period of accumulation begins, or such information is recorded and maintained in the operating record at the facility. Regardless of whether the tank itself is marked, the owner and operator shall must comply with the operating record requirements of 35 Ill. Adm. Code 724.173 or 725.173.
- 3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.
- b) An owner or operator of a treatment, storage, or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.
- c) An owner or operator of a treatment, storage, or disposal facility may store wastes beyond one year; however, the owner or operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.
- d) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension

under 40 CFR 268.5, incorporated by reference in Section 728.105, an approved Section 728.106 petition or a national capacity variance under 40 CFR 268, Subpart C), the prohibition in subsection (a) does not apply during the period of such exemption.

- e) The prohibition in subsection (a) of this Section does not apply to hazardous wastes that meet the treatment standards specified under Sections 728.141, 728.142, and 728.143 or the adjusted treatment standards specified under Section 728.144, or, where treatment standards have not been specified, the waste is in compliance with the applicable prohibitions specified in Section 728.132 or 728.139.
- f) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b), incorporated by reference in 35 III. Adm. Code 720.111, and must be removed from storage and treated or disposed as required by the Part within one year of the date when such wastes are first placed into storage. The provisions of subsection (c) of this Section do not apply to such PCB wastes prohibited under Section 728.132.
- g) The prohibition and requirements in this Section do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to 35 Ill. Adm. Code 724.654.

(Source: Amended at 27 III.	Reg, effective	)	
Section 728.Appendix C	List of Halogenated Organ 728.132	ic Compounds Regulated under Sec	etion

In determining the concentration of halogenated organic compounds (HOCs) in a hazardous waste for purposes of the Section 728.132 land disposal prohibition, USEPA has defined the HOCs that must be included in a calculation as any compounds having a carbon-halogen bond which that are listed in this Appendix (see Section 728.102). This Appendix C to Part 728 consists of the following compounds:

#### I. Volatiles

- 1. Bromodichloromethane
- 2. Bromomethane
- 3. Carbon Tetrachloride
- 4. Chlorobenzene
- 5. 2-Chloro-1,3-butadiene
- 6. Chlorodibromomethane
- 7. Chloroethane
- 8. 2-Chloroethyl vinyl ether
- 9. Chloroform

- 10. Chloromethane
- 11. 3-Chloropropene
- 12. 1,2-Dibromo-3-chloropropane
- 13. 1,2-Dibromomethane
- 14. Dibromomethane
- 15. Trans-1,4-Dichloro-2--butene
- 16. Dichlorodifluoromethane
- 17. 1,1-Dichloroethane
- 18. 1,2-Dichloroethane
- 19. 1,1-Dichloroethylene
- 20. Trans-1,2-Dichloroethene
- 21. 1,2-Dichloropropane
- 22. Trans-1,3-Dichloropropene
- 23. cis-1,3-Dichloropropene
- 24. Iodomethane
- 25. Methylene chloride
- 26. 1,1,1,2-Tetrachloroethane
- 27. 1,1,2,2-Tetrachloroethane
- 28. Tetrachloroethene
- 29. Tribromomethane
- 30. 1,1,1-Trichloroethane
- 31. 1,1,2-Trichloroethane
- 32. Trichloroethene
- 33. Trichloromonofluoromethane
- 34. 1,2,3-Thrichloropropane
- 35. Vinyl Chloride

## II. Semivolatiles

- 1. Bis(2-chloroethoxy)ethane
- 2. Bis(2-chloroethyl)ether
- 3. Bis(2-chloroisopropyl)ether
- 4. p-Chloroaniline
- 5. Chlorobenzilate
- 6. p-Chloro-m-cresol
- 7. 2-Chloronaphthalene
- 8. 2-Chlorophenol
- 9. 3-Chloropropionitrile
- 10. m-Dichlorobenzene
- 11. o-Dichlorobenzene
- 12. p-Dichlorobenzene
- 13. 3.3'-Dichlorobenzidine
- 14. 2,4-Dichlorophenol
- 15. 2,6-Dichlorophenol

- 16. Hexachlorobenzene
- 17. Hexachlorobutadiene
- 18. Hexachlorocyclopentadiene
- 19. Hexachloroethane
- 20. Hexachlorophene
- 21. Hexachloropropene
- 22. 4,4'-Methylenebis(2-chloroanaline)
- 23. Pentachlorobenzene
- 24. Pentachloroethane
- 25. Pentachloronitrobenzene
- 26. Pentachlorophenol
- 27. Pronamide
- 28. 1,2,4,5-Tetrachlorobenzene
- 29. 2,3,4,6-Tetrachlorophenol
- 30. 1,2,4-Trichlorobenzene
- 31. 2,4,5-Trichlorophenol
- 32. 2,4,6-Trichlorophenol
- 33. Tris(2,3-dibromopropyl)phosphate

# III. Organochlorine Pesticides

- 1. Aldrin
- 2. alpha-BHC
- 3. beta-BHC
- 4. delta-BHC
- 5. gamma-BHC
- 6. Chlorodane
- 7. DDD
- 8. DDE
- 9. DDT
- 10. Dieldrin
- 11. Endosulfan I
- 12. Endosulfan II
- 13. Endrin
- 14. Endrin aldehyde
- 15. Heptachlor
- 16. Heptachlor epoxide
- 17. Isodrin
- 18. Kepone
- 19. Methoxyclor
- 20. Toxaphene

# IV. Phenoxyacetic Acid Herbicides

- 1. 2,4-Dichlorophenoxyacetic acid
- 2. Silvex
- 3. 2,4,5-T

## V. PCBs

- 1. Aroclor 1016
- 2. Aroclor 1221
- 3. Aroclor 1232
- 4. Aroclor 1242
- 5. Aroclor 1248
- 6. Aroclor 1254
- 7. Aroclor 1260
- 8. PCBs not otherwise specified

## VI. Dioxins and Furans

- 1. Hexachlorodibenzo-p-dioxins
- 2. Hexachlorodibenzofuran
- 3. Pentachlorodibenzo-p-dioxins
- 4. Pentachlorodibenzofuran
- 5. Tetrachlorodibenzo-p-dioxins
- 6. Tetrachlorodibenzofuran
- 7. 2,3,7,8-Tetrachlorodibenzo-p-dioxin

BOARD NOTE: Derived from 40 CFR 268, Appendix III, as added at 65 Fed. Reg. 81340 (December 26, 2000) (2002).
(Source: Amended at 27 Ill. Reg, effective)
Section 728.Appendix D Wastes Excluded from Lab Packs
Hazardous waste with the following <u>U.S. EPA-USEPA</u> hazardous waste codes may not be placed in lab packs under the alternative lab pack treatment standards of Section 728.142(c): D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151.
BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.

(Source: Amended at 27 Ill. Reg. , effective

Section 728. Appendix F Technologies to Achieve Deactivation of Characteristics

The treatment standard for many characteristic wastes is stated in the Section 728. Table T of this Part, entitled "Treatment Standards for Hazardous Wastes," as "DEACT and meet Section 728.148 standards." USEPA has determined that many technologies, when used alone or in combination, can achieve the deactivation portion of the treatment standard. Characteristic wastes that are not managed in a facility regulated by the CWA or in a CWA-equivalent facility, and that also contain underlying hazardous constituents (see Section 728.102(i)) must be treated not only by a "deactivating" technology to remove the characteristic, but also to achieve the universal treatment standards (UTS) for underlying hazardous constituents. This appendix Appendix F presents a partial list of technologies, utilizing the five letter technology codes established in Table C of this Part, that may be useful in meeting the treatment standard. Use of these specific technologies is not mandatory and does not preclude direct reuse, recovery or the use of other pretreatment technologies, provided deactivation is achieved and underlying hazardous constituents are treated to achieve the UTS.

Waste code/subcategory	Nonwastewaters	Wastewaters
D001 Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)—Low TOC Nonwastewater Subcategory (containing one percent to <10 percent TOC)	RORGS WETOX INCIN CHOXD BIODG	n.a.
D001 Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)—Ignitable Wastewater Subcategory (containing <1-one percent TOC)	n.a.	WETOX RORGS INCIN CHOXD BIODG
D001 Compressed Gases based on 35 Ill. Adm. Code 721.121(a)(3)	RCGAS FSUBS INCIN ADGAS fb. INCIN ADGAS fb. (CHOXD; or CHRED)	n.a.
D001 Ignitable Reactives based on 35 Ill. Adm. Code 721.121(a)(2)	WTRRX CHOXD CHRED STABL INCIN	n.a.

D001 Ignitable Oxidizers based on 35 Ill. Adm. Code 721.121(a)(4)	CHRED INCIN	CHRED INCIN
D002 Acid Subcategory based on 35 Ill. Adm. Code 721.122(a)(1) with pH less than or equal to 2 two	RCORR NEUTR INCIN	NEUTR INCIN
D002 Alkaline Subcategory based on 35 Ill. Adm. Code 721.122(a)(1) with pH greater than or equal to 12.5	NEUTR INCIN	NEUTR INCIN
D002 Other Corrosives based on 35 Ill. Adm. Code 721.122(a)(2)	CHOXD CHRED INCIN STABL	CHOXD CHRED INCIN
D003 Water Reactives based on 35 III. Adm. Code 721.123(a)(2), (a)(3), and (a)(4)	INCIN WTRRX CHOXD CHRED	n.a.
D003 Reactive Sulfides based on 35 Ill. Adm. Code 721.123(a)(5)	CHOXD CHRED INCIN STABL	CHOXD CHRED BIODG INCIN
D003 Explosives based on 35 III. Adm. Code 721.123(a)-(6), (a)(7), and (a)(8)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
D003 Other Reactives based on 35 Ill. Adm. Code 721.123(a)(1)	INCIN CHOXD CHRED	INCIN CHOXD CHRED BIODG CARBN
K044 Wastewater treatment sludges from the manufacturing and processing of explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN

K045 Spent carbon from the treatment of wastewaters containing explosives	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
K047 Pink/red water from TNT operations	CHOXD CHRED INCIN	CHOXD CHRED BIODG CARBN INCIN
Note: "n.a." stands for "not applicable.":		
"fb." Stands for "followed by.":		
(Source: Amended at 27 Ill. Reg, effective	/e	)
Section 728.Appendix G Federal Effective Dates		

The following are the effective dates for the USEPA rules in 40 CFR 268. These generally became effective as Illinois rules at a later date.

# TABLE 1 EFFECTIVE DATES OF SURFACE DISPOSED WASTES (NON-SOIL AND DEBRIS) REGULATED IN THE LDRS<sup>a</sup>—COMPREHENSIVE LIST

Waste code	Waste category	Effective date
D001 <sup>c</sup>	All (except High TOC Ignitable Liquids)	Aug. August 9, 1993.
D001	High TOC Ignitable Liquids	Aug. August 8, 1990.
D002 <sup>c</sup>	All	Aug. August 9, 1993.
D003 <sup>e</sup>	Newly identified surface-disposed	May 26, 2000 <del>.</del>
	elemental phosphorus processing wastes	
D004	Newly identified D004 and mineral	Aug. August 24,
	processing wastes	1998 <del>.</del>
D004	Mixed radioactive/newly identified D004	May 26, 2000 <del>.</del>
	or mineral processing wastes	
D005	Newly identified D005 and mineral	Aug. August 24,
	processing wastes	1998 <del>.</del>
D005	Mixed radioactive/newly identified D005	May 26, 2000 <del>.</del>
	or mineral processing wastes	-
D006	Newly identified D006 and mineral	Aug. August 24,
	processing wastes	1998 <del>.</del>

D006	Mixed radioactive/newly identified D006	May 26, 2000 <del>.</del>
D005	or mineral processing wastes	
D007	Newly identified D007 and mineral processing wastes	<del>Aug. <u>A</u>ugust</del> 24, 1998 <del>.</del>
D007	Mixed radioactive/newly identified	May 26, 2000-
	D007or mineral processing wastes	11147 20, 2000.
D008	Newly identified D008 and mineral	Aug. August 24,
D000	processing waste	1998 <del>.</del>
D008	Mixed radioactive/newly identified D008	May 26, 2000 <del>.</del>
D009	or mineral processing wastes Newly identified D009 and mineral	Aug. August 24,
D00)	processing waste	1998 <del>.</del>
D009	Mixed radioactive/newly identified	May 26, 2000 <del>.</del>
	D009or mineral processing wastes	•
D010	Newly identified D010 and mineral	Aug. August 24,
D010	processing wastes	1998 <del>.</del>
D010	Mixed radioactive/newly identified D010 or mineral processing wastes	May 26, 2000 <del>.</del>
D011	Newly identified D011 and mineral	Aug. August 24,
2011	processing wastes	1998 <del>.</del>
D011	Mixed radioactive/newly identified	May 26, 2000 <del>.</del>
	D011or mineral processing wastes	
D012 (that exhibit the toxici-	All	Dec. December 14,
ty characteristic based on the		1994 <del>.</del>
TCLP) <sup>d</sup> D013 (that exhibit the toxici-	Δ11	Dec. December 14,
ty characteristic based on the	7111	1994 <del>.</del>
TCLP) <sup>d</sup>		
D014 (that exhibit the toxici-	All	Dec. December 14,
ty characteristic based on the		1994 <del>.</del>
TCLP) <sup>d</sup>	A 11	D D 1 14
D015 (that exhibit the toxicity characteristic based on the	All	Dec. <u>December</u> 14, 1994.
TCLP) <sup>d</sup>		177 <del>1.</del>
D016 (that exhibit the toxici-	All	Dec. December 14,
ty characteristic based on the		1994 <del>.</del>
TCLP) <sup>d</sup>		
D017 (that exhibit the toxici-	All	Dec. December 14,
ty characteristic based on the TCLP) <sup>d</sup>		1994 <del>.</del>
D018	Mixed with radioactive wastes	Sep. September 19,
2010	Timed with real-out of wastes	1996 <del>.</del>
D018	All others	Dec. December 19,
		1994 <del>.</del>

D019	Mixed with radioactive wastes	Sep. September 19,
D019	All others	Dec. <u>December</u> 19, 1994.
D020	Mixed with radioactive wastes	Sep. September 19,
D020	All others	Dec. December 19, 1994.
D021	Mixed with radioactive wastes	Sep. September 19,
D021	All others	Dec. December 19,
D022	Mixed with radioactive wastes	Sep. September 19,
D022	All others	Dec. December 19, 1994.
D023	Mixed with radioactive wastes	Sep. September 19,
D023	All others	Dec. December 19,
D024	Mixed with radioactive wastes	Sep. September 19,
D024	All others	Dec. <u>December</u> 19,
D025	Mixed with radioactive wastes	Sep. September 19,
D025	All others	Dec. <u>December</u> 19,
D026	Mixed with radioactive wastes	Sep. September 19,
D026	All others	Dec. December 19, 1994.
D027	Mixed with radioactive wastes	Sep. September 19,
D027	All others	Dec. December 19,
D028	Mixed with radioactive wastes	Sep. September 19,
D028	All others	Dec. December 19, 1994.
D029	Mixed with radioactive wastes	Sep. September 19,
D029	All others	Dec. <u>December</u> 19, 1994.

D030	Mixed with radioactive wastes	Sep. September 19,
D030	All others	Dec. <u>December</u> 19, 1994.
D031	Mixed with radioactive wastes	Sep. September 19,
D031	All others	Dec. <u>December</u> 19,
D032	Mixed with radioactive wastes	Sep. September 19,
D032	All others	Dec. <u>December</u> 19,
D033	Mixed with radioactive wastes	Sep. September 19,
D033	All others	Dec. <u>December</u> 19,
D034	Mixed with radioactive wastes	Sep. September 19,
D034	All others	Dec. <u>December</u> 19,
D035	Mixed with radioactive wastes	Sep. September 19, 1996.
D035	All others	Dec. <u>December</u> 19,
D036	Mixed with radioactive wastes	Sep. September 19,
D036	All others	Dec. <u>December</u> 19,
D037	Mixed with radioactive wastes	Sep. September 19, 1996.
D037	All others	Dec. December 19,
D038	Mixed with radioactive wastes	1994 <del>.</del> Sep. September 19,
D038	All others	1996 <del>.</del> Dec. December 19, 1994.
D039	Mixed with radioactive wastes	Sep. September 19,
D039	All others	Dec. December 19,
D040	Mixed with radioactive wastes	1994 <del>.</del> Sep. September 19,
D040	All others	1996 <del>.</del> Dec. December 19, 1994.

D041	Mixed with radioactive wastes	Sep. September 19, 1996.
D041	All others	Dec. <u>December</u> 19, 1994.
D042	Mixed with radioactive wastes	Sep. September 19,
D042	All others	Dec. <u>December</u> 19, 1994.
D043	Mixed with radioactive wastes	Sep. September 19, 1996.
D043	All others	Dec. <u>December</u> 19, 1994 <del>.</del>
F001	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	Nov. November 8, 1988.
F001	All others	Nov. <u>November</u> 8, 1986.
F002 (1,1,2-trichloroethane) F002	Wastewater and Nonwastewater Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent- containing sludges and solids	Aug. August 8, 1990. Nov. November 8, 1988.
F002	All others	Nov. November 8,
F003	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	NovNovember 8, 1988.
F003	All others	November 8, 1986.
F004	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	NovNovember 8, 1988-
F004	All others	November 8, 1986.
F005 (benzene, 2-ethoxy ethanol, 2-nitropropane)	Wastewater and Nonwastewater	Aug. August 8, 1990.
F005	Small quantity generators, CERCLA response/RCRA corrective action, initial generator's solvent-water mixtures, solvent-containing sludges and solids	November 8, 1988 <del>.</del>

F005	All others	Nov. November 8, 1986.
F006	Wastewater	Aug. August 8, 1990.
F006	Nonwastewater	Aug. August 8, 1988.
F006 (cyanides)	Nonwastewater	July 8, 1989 <del>.</del>
F007	All	July 8, 1989 <del>.</del>
F008	All	July 8, 1989 <del>.</del>
F009	All	July 8, 1989 <del>.</del>
F010	All	June 8, 1989 <del>.</del>
F011 (cyanides)	Nonwastewater	Dec. December 8,
,	1 to il waste water	1989 <del>.</del>
F011	All others	July 8, 1989 <del>.</del>
F012 (cyanides)	Nonwastewater	<del>Dec.</del> <u>December</u> 8, 1989 <del>.</del>
F012	All others	July 8, 1989 <del>.</del>
F019	All	Aug. August 8, 1990.
F020	All	Nov. November 8,
		1988 <del>.</del>
F021	All	Nov. November 8,
		1988 <del>.</del>
F025	All	Aug. August 8, 1990.
F026	All	November 8,
		1988 <del>.</del>
F027	All	Nov. November 8,
		1988 <del>.</del>
F028	All	Nov. November 8,
		1988 <del>.</del>
F032	Mixed with radioactive wastes	May 12, 1999 <del>.</del>
F032	All others	Aug. August 12,
		1997 <del>.</del>
F034	Mixed with radioactive wastes	May 12, 1999 <del>.</del>
F034	All others	Aug. August 12,
		1997 <del>.</del>
F035	Mixed with radioactive wastes	May 12, 1999 <del>.</del>
F035	All others	<del>Aug. <u>A</u>ugust</del> 12, 1997 <del>.</del>
F037	Not generated from surface impoundment	June 30, 1993.
1037	cleanouts or closures	June 30, 1773.
F037	Generated from surface impoundment	June 30, 1994 <del>.</del>
	cleanouts or closures	0 0110 00, 1771.
F037	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
F038	Not generated from surface impoundment	June 30, 1993 <del>.</del>
	cleanouts or closures	0, 1,,,,

F038	Generated from surface impoundment	June 30, 1994 <del>.</del>
F020	cleanouts or closures	I 20 1004
F038	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
F039	Wastewater	Aug. August 8, 1990.
F039	Nonwastewater	May 8, 1992 <del>.</del>
K001 (organics) <sup>b</sup>	All	Aug. August 8, 1988.
K001	All others	Aug. August 8, 1988.
K002	All	Aug. August 8, 1990.
K003	All	Aug. August 8, 1990.
K004	Wastewater	Aug. August 8, 1990.
K004	Nonwastewater	Aug. August 8, 1988.
K005	Wastewater	Aug. <u>August</u> 8, 1990 <del>.</del>
K005	Nonwastewater	June 8, 1989 <del>.</del>
K006	All	Aug. August 8, 1990.
K007	Wastewater	Aug. <u>August</u> 8, 1990.
K007	Nonwastewater	June 8, 1989 <del>.</del>
K008	Wastewater	Aug. August 8, 1990.
K008	Nonwastewater	Aug. August 8, 1988.
K009	All	June 8, 1989 <del>.</del>
K010	All	June 8, 1989 <del>.</del>
K011	Wastewater	Aug. August 8, 1990.
K011	Nonwastewater	June 8, 1989 <del>.</del>
K013	Wastewater	Aug. August 8, 1990.
K013	Nonwastewater	June 8, 1989 <del>.</del>
K014	Wastewater	Aug. August 8, 1990.
K014	Nonwastewater	June 8, 1989 <del>.</del>
K015	Wastewater	Aug. August 8, 1988.
K015	Nonwastewater	Aug. August 8, 1990.
K016	All	Aug. August 8, 1988.
K017	All	Aug. August 8, 1990.
K018	All	Aug. August 8, 1988.
K019	All	Aug. August 8, 1988.
K020	All	Aug. August 8, 1988.
K021	Wastewater	Aug. August 8, 1990.
K021	Nonwastewater	Aug. August 8, 1988.
K022	Wastewater	Aug. August 8, 1990.
K022	Nonwastewater	Aug. August 8, 1988.
K023	All	June 8, 1989 <del>.</del>
K024	All	Aug. August 8, 1988.
K025	Wastewater	Aug. August 8, 1990.
K025	Nonwastewater	Aug. August 8, 1988.
K026	All	Aug. August 8, 1990.
K027	All	June 8, 1989 <del>.</del>
K027 K028 (metals)	Nonwastewater	Aug. August 8, 1990.
11020 (11101115)	1 101111 4010 11 4101	1145. <u>114545t</u> 0, 1770 <del>.</del>

K028	All others	June 8, 1989 <del>.</del>
K029	Wastewater	Aug. August 8, 1990.
K029	Nonwastewater	June 8, 1989 <del>.</del>
K030	All	Aug. August 8, 1988.
K031	Wastewater	Aug. August 8, 1990.
K031	Nonwastewater	May 8, 1992 <del>.</del>
K032	All	Aug. August 8, 1990.
K033	All	Aug. August 8, 1990.
K034	All	Aug. August 8, 1990.
K035	All	Aug. August 8, 1990.
K036	Wastewater	June 8, 1989 <del>.</del>
K036	Nonwastewater	Aug. August 8, 1988.
K037 <sup>b</sup>	Wastewater	Aug. August 8, 1988.
K037	Nonwastewater	Aug. August 8, 1988.
K038	All	June 8, 1989 <del>.</del>
K039	All	June 8, 1989 <del>.</del>
K040	All	June 8, 1989 <del>.</del>
K041	All	Aug. August 8, 1990.
K042	All	Aug. August 8, 1990.
K043	All	June 8, 1989 <del>.</del>
K044	All	Aug. August 8, 1988.
K045	All	Aug. August 8, 1988.
K046 (Nonreactive)	Nonwastewater	Aug. August 8, 1988.
K046	All others	Aug. August 8, 1990.
K047	All	Aug. August 8, 1988.
K048	Wastewater	Aug. August 8, 1990.
K048	Nonwastewater	Nov. November 8,
		1990 <del>.</del>
K049	Wastewater	Aug. August 8, 1990.
K049	Nonwastewater	Nov. November 8,
		1990 <del>.</del>
K050	Wastewater	Aug. August 8, 1990.
K050	Nonwastewater	Nov. November 8,
		1990 <del>.</del>
K051	Wastewater	Aug. August 8, 1990.
K051	Nonwastewater	Nov. November 8,
		1990 <del>.</del>
K052	Wastewater	Aug. August 8, 1990.
K052	Nonwastewater	November 8,
		1990 <del>.</del>
K060	Wastewater	Aug. August 8, 1990.
K060	Nonwastewater	Aug. <u>August</u> 8, 1988.
K061	Wastewater	Aug. August 8, 1990.
K061	Nonwastewater	June 30, 1992 <del>.</del>

K062	All	Aug. August 8, 1988.
K069 (Non-Calcium Sulfate)	Nonwastewater	Aug. August 8, 1988.
(non-calcium sulfate)		g. <u>g</u> .,
K069	All others	Aug. August 8, 1990.
K071	All	Aug. August 8, 1990.
K073	All	Aug. August 8, 1990.
K083	All	Aug. August 8, 1990.
K084	Wastewater	Aug. August 8, 1990.
K084	Nonwastewater	May 8, 1992 <del>.</del>
K085	All	Aug. August 8, 1990.
K086 (organics) <sup>b</sup>	All	Aug. August 8, 1988.
K086	All others	Aug. August 8, 1988.
K087	All	Aug. August 8, 1988.
K088	Mixed with radioactive wastes	Apr. <u>April</u> 8, 1998.
K088	All others	Oct. October 8,
		1997 <del>.</del>
K093	All	June 8, 1989 <del>.</del>
K094	All	June 8, 1989 <del>.</del>
K095	Wastewater	Aug. August 8, 1990.
K095	Nonwastewater	June 8, 1989 <del>.</del>
K096	Wastewater	Aug. August 8, 1990.
K096	Nonwastewater	June 8, 1989 <del>.</del>
K097	All	Aug. August 8, 1990.
K098	All	Aug. August 8, 1990.
K099	All	Aug. <u>August</u> 8, 1988.
K100	Wastewater	Aug. August 8, 1990.
K100	Nonwastewater	Aug. August 8, 1988.
K101 (organics)	Wastewater	Aug. <u>August</u> 8, 1988.
K101 (metals)	Wastewater	Aug. August 8, 1990.
K101 (organics)	Nonwastewater	Aug. <u>August</u> 8, 1988.
K101 (metals)	Nonwastewater	May 8, 1992 <del>.</del>
K102 (organics)	Wastewater	Aug. <u>August</u> 8, 1988.
K102 (metals)	Wastewater	Aug. August 8, 1990.
K102 (organics)	Nonwastewater	Aug. August 8, 1988.
K102 (metals)	Nonwastewater	May 8, 1992 <del>.</del>
K103	All	Aug. August 8, 1988.
K104	All	Aug. August 8, 1988.
K105	All	Aug. <u>August</u> 8, 1990 <del>.</del>
K106	Wastewater	Aug. August 8, 1990.
K106	Nonwastewater	May 8, 1992 <del>.</del>
K107	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K107	All others	November 9, 1992.
K108	Mixed with radioactive wastes	June 30, 1994 <del>.</del>

K108	All others	Nov. November 9,
K109	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K109	All others	Nov. November 9, 1992.
K110	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K110	All others	November 9,
		1992 <del>.</del>
K111	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K111	All others	Nov. <u>November</u> 9, 1992 <del>.</del>
K112	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K112	All others	Nov. <u>November 9,</u> 1992.
K113	All	June 8, 1989 <del>.</del>
K114	All	June 8, 1989 <del>.</del>
K115	All	June 8, 1989 <del>.</del>
K116	All	June 8, 1989 <del>.</del>
K117	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K117	All others	Nov. November 9,
V 1 1 0	Missad swith madicactive sweeter	1992 <del>.</del>
K118	Mixed with radioactive wastes	June 30, 1994.
K118	All others	Nov. <u>November 9,</u> 1992 <del>.</del>
K123	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K123	All others	Nov. November 9,
17.1.2.4	Missadassida sadisa satisa	1992 <del>.</del>
K124	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K124	All others	Nov. <u>November 9,</u> 1992 <del>.</del>
K125	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K125	All others	Nov. November 9, 1992.
K126	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K126	All others	November 9, 1992 <del>.</del>
K131	Mixed with radioactive wastes	June 30, 1994 <del>.</del>
K131	All others	Nov. November 9,
K132	Mixed with radioactive wastes	1992 <del>.</del> June 30, 1994 <del>.</del>
K132 K132	All others	Nov. November 9,
18134	in onion	1992 <del>.</del>
K136	Mixed with radioactive wastes	June 30, 1994 <del>.</del>

K136	All others	Nov. November 9,
K141	Mixed with radioactive wastes	Sep. September 19,
K141	All others	Dec. <u>December</u> 19,
K142	Mixed with radioactive wastes	Sep. September 19,
K142	All others	Dec. <u>December</u> 19,
K143	Mixed with radioactive wastes	Sep. September 19,
K143	All others	Dec. <u>December</u> 19,
K144	Mixed with radioactive wastes	Sep. September 19,
K144	All others	Dec. <u>December</u> 19,
K145	Mixed with radioactive wastes	Sep. September 19,
K145	All others	Dec. <u>December</u> 19,
K147	Mixed with radioactive wastes	Sep. September 19, 1996.
K147	All others	Dec. <u>December</u> 19,
K148	Mixed with radioactive wastes	Sep. September 19,
K148	All others	Dec. <u>December</u> 19,
K149	Mixed with radioactive wastes	Sep. September 19,
K149	All others	1996 <del>.</del> DecDecember 19, 1994 <del>.</del>
K150	Mixed with radioactive wastes	1994 <del>.</del> Sep. September 19, 1996.
K150	All others	Dec. <u>December</u> 19,
K151	Mixed with radioactive wastes	Sep. September 19,
K151	All others	1996 <del>.</del> Dec. December 19,
K156 K156	Mixed with radioactive wastes All others	1994 <del>.</del> <del>Apr. <u>April</u> 8, 1998.</del> July 8, 1996 <del>.</del>

K157	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
K157	All others	July 8, 1996 <del>.</del>
K158	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
K158	All others	July 8, 1996 <del>.</del>
K159	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
K159	All others	July 8, 1996 <del>.</del>
K160	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
K160	All others	July 8, 1996 <del>.</del>
K161	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
K161	All others	July 8, 1996 <del>.</del>
P001	All	Aug. August 8, 1990.
P002	All	Aug. August 8, 1990.
P003	All	Aug. August 8, 1990.
P004	All	Aug. August 8, 1990.
P005	All	Aug. August 8, 1990.
P006	All	Aug. August 8, 1990.
P007	All	Aug. August 8, 1990.
P008	All	Aug. August 8, 1990.
P009	All	Aug. August 8, 1990.
P010	Wastewater	Aug. August 8, 1990.
P010	Nonwastewater	May 8, 1992 <del>.</del>
P011	Wastewater	Aug. August 8, 1990.
P011	Nonwastewater	May 8, 1992 <del>.</del>
P012	Wastewater	Aug. August 8, 1990.
P012	Nonwastewater	May 8, 1992 <del>.</del>
P013 (barium)	Nonwastewater	Aug. August 8, 1990.
P013	All others	June 8, 1989 <del>.</del>
P014	All	Aug. August 8, 1990.
P015	All	Aug. August 8, 1990.
P016	All	Aug. August 8, 1990.
P017	All	Aug. August 8, 1990.
P018	All	Aug. August 8, 1990.
P020	All	Aug. August 8, 1990.
P021	All	June 8, 1989 <del>.</del>
P022	All	Aug. August 8, 1990.
P023	All	Aug. August 8, 1990.
P024	All	Aug. August 8, 1990.
P026	All	Aug. August 8, 1990.
P027	All	Aug. August 8, 1990.
P028	All	Aug. August 8, 1990.
P029	All	June 8, 1989 <del>.</del>
P030	All	June 8, 1989 <del>.</del>
P031	All	Aug. August 8, 1990.
P033	All	Aug. August 8, 1990.
=	<del>= ===</del>	wg. <u> wg. ws. </u> 0, 1770.

P034	All	Aug. August 8, 1990.
P036	Wastewater	Aug. <u>August</u> 8, 1990-
P036	Nonwastewater	May 8, 1992 <del>.</del>
P037	All	Aug. August 8, 1990.
P038	Wastewater	Aug. August 8, 1990.
P038	Nonwastewater	May 8, 1992 <del>.</del>
P039	All	June 8, 1989 <del>.</del>
P040	All	June 8, 1989 <del>.</del>
P041	All	June 8, 1989 <del>.</del>
P042	All	Aug. August 8, 1990.
P043	All	June 8, 1989 <del>.</del>
P044	All	June 8, 1989 <del>.</del>
P045	All	Aug. August 8, 1990.
P046	All	Aug. August 8, 1990.
P047	All	Aug. August 8, 1990.
P048	All	Aug. August 8, 1990.
P049	All	Aug. August 8, 1990.
P050	All	Aug. August 8, 1990.
P051	All	Aug. August 8, 1990.
P054	All	Aug. August 8, 1990.
P056	All	Aug. August 8, 1990.
P057	All	Aug. August 8, 1990.
P058	All	Aug. August 8, 1990.
P059	All	Aug. August 8, 1990.
P060	All	Aug. August 8, 1990.
P062	All	June 8, 1989 <del>.</del>
P063	All	June 8, 1989 <del>.</del>
P064	All	Aug. August 8, 1990.
P065	Wastewater	Aug. August 8, 1990.
P065	Nonwastewater	May 8, 1992 <del>.</del>
P066	All	Aug. August 8, 1990.
P067	All	Aug. August 8, 1990.
P068	All	Aug. August 8, 1990.
P069	All	Aug. August 8, 1990.
P070	All	Aug. August 8, 1990.
P071	All	June 8, 1989-
P072	All	Aug. August 8, 1990.
P073	All	Aug. August 8, 1990.
P074	All	June 8, 1989 <del>.</del>
P075	All	Aug. August 8, 1990.
P076	All	Aug. August 8, 1990.
P077	All	Aug. August 8, 1990.
P078	All	Aug. August 8, 1990.
P081	All	Aug. August 8, 1990.
		~ <del>~ ~</del> /

P082	All	Aug. August 8, 1990.
P084	All	Aug. August 8, 1990.
P085	All	June 8, 1989 <del>.</del>
P087	All	May 8, 1992 <del>.</del>
P088	All	Aug. August 8, 1990.
P089	All	June 8, 1989 <del>.</del>
P092	Wastewater	Aug. August 8, 1990.
P092	Nonwastewater	May 8, 1992 <del>.</del>
P093	All	Aug. August 8, 1990.
P094	All	June 8, 1989 <del>.</del>
P095	All	Aug. August 8, 1990.
P096	All	Aug. August 8, 1990.
P097	All	June 8, 1989 <del>.</del>
P098	All	June 8, 1989 <del>.</del>
P099 (silver)	Wastewater	Aug. August 8, 1990.
P099	All others	June 8, 1989 <del>.</del>
P101	All	Aug. August 8, 1990.
P102	All	Aug. August 8, 1990.
P103	All	Aug. August 8, 1990.
P104 (silver)	Wastewater	Aug. August 8, 1990.
P104	All others	June 8, 1989 <del>.</del>
P105	All	Aug. August 8, 1990.
P106	All	June 8, 1989 <del>.</del>
P108	All	Aug. August 8, 1990.
P109	All	June 8, 1989 <del>.</del>
P110	All	Aug. August 8, 1990.
P111	All	June 8, 1989 <del>.</del>
P112	All	Aug. August 8, 1990.
P113	All	Aug. August 8, 1990.
P114	All	Aug. August 8, 1990.
P115	All	Aug. August 8, 1990.
P116	All	Aug. August 8, 1990.
P118	All	Aug. August 8, 1990.
P119	All	Aug. August 8, 1990.
P120	All	Aug. August 8, 1990.
P121	All	June 8, 1989 <del>.</del>
P122	All	Aug. August 8, 1990.
P123	All	Aug. August 8, 1990.
P127	Mixed with radioactive wastes	Apr. April 8, 1998.
P127	All others	July 8, 1996 <del>.</del>
P128	Mixed with radioactive wastes	Apr. April 8, 1998.
P128	All others	July 8, 1996 <del>.</del>
P185	Mixed with radioactive wastes	Apr. April 8, 1998.
P185	All others	July 8, 1996 <del>.</del>
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P188	Mixed with radioactive wastes	Apr. April 8, 1998.
P188	All others	July 8, 1996 <del>.</del>
P189	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
P189	All others	July 8, 1996 <del>.</del>
P190	Mixed with radioactive wastes	Apr. April 8, 1998.
P190	All others	July 8, 1996 <del>.</del>
P191	Mixed with radioactive wastes	Apr. April 8, 1998.
P191	All others	July 8, 1996 <del>.</del>
P192	Mixed with radioactive wastes	Apr. April 8, 1998.
P192	All others	July 8, 1996 <del>.</del>
P194	Mixed with radioactive wastes	Apr. April 8, 1998.
P194	All others	July 8, 1996 <del>.</del>
P196	Mixed with radioactive wastes	Apr. April 8, 1998.
P196	All others	July 8, 1996 <del>.</del>
P197	Mixed with radioactive wastes	Apr. April 8, 1998.
P197	All others	July 8, 1996 <del>.</del>
P198	Mixed with radioactive wastes	Apr. <u>April</u> 8, 1998.
P198	All others	July 8, 1996 <del>.</del>
P199	Mixed with radioactive wastes	Apr. April 8, 1998.
P199	All others	July 8, 1996 <del>.</del>
P201	Mixed with radioactive wastes	Apr. April 8, 1998.
P201	All others	July 8, 1996 <del>.</del>
P202	Mixed with radioactive wastes	Apr. April 8, 1998.
P202	All others	July 8, 1996 <del>.</del>
P203	Mixed with radioactive wastes	Apr. April 8, 1998.
P203	All others	July 8, 1996 <del>.</del>
P204	Mixed with radioactive wastes	Apr. April 8, 1998.
P204	All others	July 8, 1996 <del>.</del>
P205	Mixed with radioactive wastes	Apr. April 8, 1998.
P205	All others	July 8, 1996 <del>.</del>
U001	All	Aug. August 8, 1990.
U002	All	Aug. August 8, 1990.
U003	All	Aug. August 8, 1990-
U004	All	Aug. August 8, 1990-
U005	All	Aug. August 8, 1990.
U006	All	Aug. August 8, 1990.
U007	All	Aug. August 8, 1990-
U008	All	Aug. August 8, 1990.
U009	All	Aug. August 8, 1990.
U010	All	Aug. August 8, 1990-
U011	All	Aug. August 8, 1990.
U012	All	Aug. August 8, 1990.
U014	All	Aug. August 8, 1990.
U015	All	Aug. August 8, 1990.
		-

U016	All	Aug. August 8, 1990.
U017	All	Aug. August 8, 1990.
U018	All	Aug. August 8, 1990.
U019	All	Aug. August 8, 1990.
U020	All	Aug. August 8, 1990.
U021	All	Aug. August 8, 1990.
U022	All	Aug. August 8, 1990.
U023	All	Aug. August 8, 1990.
U024	All	Aug. August 8, 1990.
U025	All	Aug. August 8, 1990.
U026	All	Aug. August 8, 1990.
U027	All	Aug. August 8, 1990.
U028	All	June 8, 1989 <del>.</del>
U029	All	Aug. August 8, 1990.
U030	All	Aug. August 8, 1990.
U031	All	Aug. August 8, 1990.
U032	All	Aug. August 8, 1990.
U033	All	Aug. August 8, 1990.
U034	All	Aug. August 8, 1990.
U035	All	Aug. August 8, 1990.
U036	All	Aug. August 8, 1990.
U037	All	Aug. August 8, 1990.
U038	All	Aug. August 8, 1990.
U039	All	Aug. August 8, 1990.
U041	All	Aug. August 8, 1990.
U042	All	Aug. August 8, 1990.
U043	All	Aug. August 8, 1990.
U044	All	Aug. August 8, 1990.
U045	All	Aug. August 8, 1990.
U046	All	Aug. August 8, 1990.
U047	All	Aug. August 8, 1990.
U048	All	Aug. August 8, 1990.
U049	All	Aug. August 8, 1990.
U050	All	Aug. August 8, 1990.
U051	All	Aug. August 8, 1990.
U052	All	Aug. August 8, 1990.
U053	All	Aug. August 8, 1990.
U055	All	Aug. August 8, 1990.
U056	All	Aug. August 8, 1990.
U057	All	Aug. August 8, 1990.
U058	All	June 8, 1989 <del>.</del>
U059	All	Aug. August 8, 1990.
U060	All	Aug. August 8, 1990.
U061	All	Aug. August 8, 1990.
		S /

U062	All	Aug. August 8, 1990.
U063	All	Aug. August 8, 1990.
U064	All	Aug. August 8, 1990.
U066	All	Aug. August 8, 1990.
U067	All	Aug. August 8, 1990.
U068	All	Aug. August 8, 1990.
U069	All	June 30, 1992 <del>.</del>
U070	All	Aug. August 8, 1990.
U071	All	Aug. August 8, 1990.
U072	All	Aug. August 8, 1990.
U073	All	Aug. August 8, 1990.
U074	All	Aug. August 8, 1990.
U075	All	Aug. August 8, 1990.
U076	All	Aug. August 8, 1990.
U077	All	Aug. August 8, 1990.
U078	All	Aug. August 8, 1990.
U079	All	Aug. August 8, 1990.
U080	All	Aug. August 8, 1990.
U081	All	Aug. August 8, 1990.
U082	All	Aug. August 8, 1990.
U083	All	Aug. August 8, 1990.
U084	All	Aug. August 8, 1990.
U085	All	Aug. August 8, 1990.
U086	All	Aug. August 8, 1990.
U087	All	June 8, 1989 <del>.</del>
U088	All	June 8, 1989 <del>.</del>
U089	All	Aug. August 8, 1990.
U090	All	Aug. August 8, 1990.
U091	All	Aug. August 8, 1990.
U092	All	Aug. August 8, 1990.
U093	All	Aug. August 8, 1990.
U094	All	Aug. August 8, 1990.
U095	All	Aug. August 8, 1990.
U096	All	Aug. August 8, 1990.
U097	All	Aug. August 8, 1990.
U098	All	Aug. August 8, 1990.
U099	All	Aug. August 8, 1990.
U101	All	Aug. August 8, 1990.
U102	All	June 8, 1989 <del>.</del>
U103	All	Aug. August 8, 1990.
U105	All	Aug. August 8, 1990.
U106	All	Aug. August 8, 1990.
U107	All	June 8, 1989 <del>.</del>
U108	All	Aug. August 8, 1990.
		S

U109	All	Aug. August 8, 1990.
U110	All	Aug. August 8, 1990.
U111	All	Aug. August 8, 1990.
U112	All	Aug. August 8, 1990.
U113	All	Aug. August 8, 1990.
U114	All	Aug. August 8, 1990.
U115	All	Aug. August 8, 1990.
U116	All	Aug. August 8, 1990.
U117	All	Aug. August 8, 1990.
U118	All	Aug. August 8, 1990.
U119	All	Aug. August 8, 1990.
U120	All	
		Aug. August 8, 1990.
U121	All	Aug. August 8, 1990.
U122	All	Aug. August 8, 1990.
U123	All	Aug. August 8, 1990.
U124	All	Aug. August 8, 1990.
U125	All	Aug. August 8, 1990.
U126	All	Aug. <u>August</u> 8, 1990.
U127	All	Aug. <u>August</u> 8, 1990 <del>.</del>
U128	All	Aug. August 8, 1990.
U129	All	Aug. August 8, 1990.
U130	All	Aug. August 8, 1990.
U131	All	Aug. August 8, 1990.
U132	All	Aug. August 8, 1990.
U133	All	Aug. August 8, 1990.
U134	All	Aug. August 8, 1990.
U135	All	Aug. August 8, 1990.
U136	Wastewater	Aug. August 8, 1990.
U136	Nonwastewater	May 8, 1992 <del>.</del>
U137	All	Aug. August 8, 1990.
U138	All	Aug. August 8, 1990.
U140	All	Aug. August 8, 1990.
U141	All	Aug. August 8, 1990.
U142	All	Aug. August 8, 1990.
U143	All	Aug. August 8, 1990.
U144	All	Aug. August 8, 1990.
U145	All	Aug. August 8, 1990.
U146	All	Aug. August 8, 1990.
		·
U147	All All	Aug. August 8, 1990.
U148		Aug. August 8, 1990.
U149	All	Aug. August 8, 1990.
U150	All	Aug. August 8, 1990.
U151	Wastewater	Aug. August 8, 1990.
U151	Nonwastewater	May 8, 1992 <del>.</del>

U152	All	Aug. <u>August</u> 8, 1990 <del>.</del>
U153	All	Aug. <u>August</u> 8, 1990 <del>.</del>
U154	All	Aug. August 8, 1990.
U155	All	Aug. August 8, 1990.
U156	All	Aug. August 8, 1990.
U157	All	Aug. August 8, 1990.
U158	All	Aug. August 8, 1990.
U159	All	Aug. August 8, 1990.
U160	All	Aug. August 8, 1990.
U161	All	Aug. August 8, 1990.
U162	All	Aug. August 8, 1990.
U163	All	Aug. August 8, 1990.
U164	All	Aug. August 8, 1990.
U165	All	Aug. August 8, 1990.
U166	All	Aug. August 8, 1990.
U167	All	Aug. August 8, 1990.
U168	All	Aug. August 8, 1990.
U169	All	Aug. August 8, 1990.
U170	All	Aug. August 8, 1990.
U171	All	Aug. August 8, 1990.
U172	All	Aug. August 8, 1990.
U173	All	Aug. August 8, 1990.
U174	All	Aug. August 8, 1990.
U176	All	Aug. August 8, 1990.
U177	All	Aug. August 8, 1990.
U178	All	Aug. August 8, 1990.
U179	All	Aug. August 8, 1990.
U180	All	Aug. August 8, 1990.
U181	All	Aug. August 8, 1990.
U182	All	Aug. August 8, 1990.
U183	All	Aug. August 8, 1990.
U184	All	Aug. <u>August</u> 8, 1990.
U185	All	Aug. <u>August</u> 8, 1990.
U186	All	Aug. <u>August</u> 8, 1990.
U187	All	Aug. August 8, 1990.
U188	All	Aug. August 8, 1990.
U189	All	Aug. August 8, 1990.
U190	All	June 8, 1989 <del>.</del>
U191	All	Aug. August 8, 1990.
U192	All	Aug. August 8, 1990.
U193	All	Aug. August 8, 1990.
U194	All	June 8, 1989 <del>.</del>
U196	All	Aug. August 8, 1990.
U197	All	Aug. August 8, 1990.
		1 105. 1105 dot 0, 1770.

11200	A 11	A A
U200	All	Aug. August 8, 1990.
U201	All	Aug. <u>August</u> 8, 1990 <del>.</del>
U202	All	Aug. <u>August</u> 8, 1990 <del>.</del>
U203	All	Aug. August 8, 1990.
U204	All	Aug. August 8, 1990.
U205	All	Aug. August 8, 1990.
U206	All	Aug. August 8, 1990.
U207	All	Aug. August 8, 1990.
U208	All	Aug. August 8, 1990.
U209	All	Aug. August 8, 1990.
U210	All	Aug. August 8, 1990.
U211	All	Aug. August 8, 1990.
U213	All	Aug. August 8, 1990.
U214	All	· ·
		Aug. August 8, 1990.
U215	All	Aug. August 8, 1990.
U216	All	Aug. August 8, 1990.
U217	All	Aug. August 8, 1990.
U218	All	Aug. August 8, 1990.
U219	All	Aug. August 8, 1990.
U220	All	Aug. August 8, 1990.
U221	All	June 8, 1989 <del>.</del>
U222	All	Aug. August 8, 1990.
U223	All	June 8, 1989 <del>.</del>
U225	All	Aug. August 8, 1990.
U226	All	Aug. August 8, 1990.
U227	All	Aug. August 8, 1990.
U228	All	Aug. August 8, 1990.
U234	All	Aug. August 8, 1990.
U235	All	June 8, 1989 <del>.</del>
U236	All	Aug. August 8, 1990.
U237	All	Aug. August 8, 1990.
U238	All	Aug. August 8, 1990.
		~ <del>~ ~</del> /
U239	All	Aug. August 8, 1990.
U240	All	Aug. August 8, 1990.
U243	All	Aug. August 8, 1990.
U244	All	Aug. August 8, 1990.
U246	All	Aug. August 8, 1990.
U247	All	Aug. August 8, 1990.
U248	All	Aug. August 8, 1990.
U249	All	Aug. August 8, 1990.
U271	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
U271	All others	July 8, 1996 <del>.</del>
U277	Mixed with radioactive wastes	Apr. April 8, 1998.
U277	All others	July 8, 1996.

U278	Mixed with radioactive wastes	Apr. April 8, 1998.
U278	All others	July 8, 1996 <del>.</del>
U279	Mixed with radioactive wastes	Apr. April 8, 1998.
U279	All others	July 8, 1996 <del>.</del>
U280	Mixed with radioactive wastes	Apr. April 8, 1998.
U280	All others	
	Mixed with radioactive wastes	July 8, 1996 <del>.</del>
U328		June 30, 1994 <del>.</del>
U328	All others	Nov. November 9,
U353	Mixed with radioactive wastes	1992 <del>.</del> June 30, 1994 <del>.</del>
U353	All others	· ·
0333	All oulers	Nov. <u>November</u> 9, 1992 <del>.</del>
11250	Mixed with radioactive wastes	
U359		June 30, 1994 <del>.</del>
U359	All others	Nov. November 9,
11264	NC 1 21 12 42	1992 <del>.</del>
U364	Mixed with radioactive wastes	Apr. April 8, 1998.
U364	All others	July 8, 1996 <del>.</del>
U365	Mixed with radioactive wastes	Apr. April 8, 1998.
U365	All others	July 8, 1996 <del>.</del>
U366	Mixed with radioactive wastes	Apr. April 8, 1998.
U366	All others	July 8, 1996 <del>.</del>
U367	Mixed with radioactive wastes	<del>Apr. <u>April</u> 8, 1998.</del>
U367	All others	July 8, 1996 <del>.</del>
U372	Mixed with radioactive wastes	Apr. April 8, 1998.
U372	All others	July 8, 1996 <del>.</del>
U373	Mixed with radioactive wastes	Apr. April 8, 1998.
U373	All others	July 8, 1996 <del>.</del>
U375	Mixed with radioactive wastes	Apr. April 8, 1998.
U375	All others	July 8, 1996 <del>.</del>
U376	Mixed with radioactive wastes	Apr. April 8, 1998.
U376	All others	July 8, 1996.
U377	Mixed with radioactive wastes	Apr. <u>Ápril</u> 8, 1998 <del>.</del>
U377	All others	July 8, 1996.
U378	Mixed with radioactive wastes	Apr. April 8, 1998.
U378	All others	July 8, 1996 <del>.</del>
U379	Mixed with radioactive wastes	Apr. April 8, 1998.
U379	All others	July 8, 1996 <del>.</del>
U381	Mixed with radioactive wastes	Apr. April 8, 1998.
U381	All others	July 8, 1996 <del>.</del>
U382	Mixed with radioactive wastes	Apr. April 8, 1998.
U382	All others	July 8, 1996 <del>.</del>
U383	Mixed with radioactive wastes	Apr. April 8, 1998.
U383	All others	July 8, 1996.
U384	Mixed with radioactive wastes	Apr. April 8, 1998.
U 30 <del>4</del>	WITACU WITH TAUTOACTIVE WASIES	<del>1101.</del> <u>11011</u> 0, 1790 <del>.</del>

U384	All others	July 8, 1996 <del>.</del>
U385	Mixed with radioactive wastes	Apr. <u>April</u> 8, 1998.
U385	All others	July 8, 1996 <del>.</del>
U386	Mixed with radioactive wastes	Apr. <u>April</u> 8, 1998.
U386	All others	July 8, 1996 <del>.</del>
U387	Mixed with radioactive wastes	Apr. April 8, 1998.
U387	All others	July 8, 1996 <del>.</del>
U389	Mixed with radioactive wastes	Apr. April 8, 1998.
U389	All others	July 8, 1996 <del>.</del>
U390	Mixed with radioactive wastes	Apr. April 8, 1998.
U390	All others	July 8, 1996 <del>.</del>
U391	Mixed with radioactive wastes	Apr. April 8, 1998.
U391	All others	July 8, 1996.
U392	Mixed with radioactive wastes	Apr. April 8, 1998.
U392	All others	July 8, 1996.
U393	Mixed with radioactive wastes	Apr. April 8, 1998.
U393	All others	July 8, 1996 <del>.</del>
U394	Mixed with radioactive wastes	Apr. April 8, 1998.
U394	All others	July 8, 1996 <del>.</del>
U395	Mixed with radioactive wastes	Apr. April 8, 1998.
U395	All others	July 8, 1996 <del>.</del>
U396	Mixed with radioactive wastes	Apr. April 8, 1998.
U396	All others	July 8, 1996 <del>.</del>
U400	Mixed with radioactive wastes	Apr. April 8, 1998.
U400	All others	July 8, 1996 <del>.</del>
U401	Mixed with radioactive wastes	Apr. April 8, 1998.
U401	All others	July 8, 1996 <del>.</del>
U402	Mixed with radioactive wastes	Apr. April 8, 1998.
U402	All others	July 8, 1996 <del>.</del>
U403	Mixed with radioactive wastes	Apr. April 8, 1998.
U403	All others	July 8, 1996 <del>.</del>
U404	Mixed with radioactive wastes	Apr. April 8, 1998.
U404	All others	July 8, 1996 <del>.</del>
U407	Mixed with radioactive wastes	Apr. April 8, 1998.
U407	All others	July 8, 1996 <del>.</del>
U409	Mixed with radioactive wastes	Apr. April 8, 1998.
U409	All others	July 8, 1996.
U410	Mixed with radioactive wastes	Apr. <u>April</u> 8, 1998.
U410	All others	July 8, 1996.
U411	Mixed with radioactive wastes	•
U411	All others	Apr. April 8, 1998. July 8, 1996.
0711	All officia	July 0, 1770 <del>.</del>

- This table does not include mixed radioactive wastes (from the First, Second, and Third <u>Third</u> rules) which that are receiving a national capacity variance until May 8, 1992. This table also does not include contaminated soil and debris wastes.
- The standard was revised in the Third Final Rule (adopted by USEPA at 55 Fed. Reg. 22520 (June 1, 1990) and by the Board in docket R90-11 by orders dated April 11, May 23, and August 8 and 22, 1991).
- USEPA amended the standard in the Third Third Emergency Rule (at 58 Fed. Reg. 29860 (May 24, 1993), which the Board adopted in docket R93-16 on March 17, 1994); the original effective date was August 8, 1990.
- The standard was revised in the Phase II Final Rule (which that USEPA adopted at 59 Fed. Reg. 47982 (Sept. September 19, 1994) and the Board adopted in docket R95-6 by orders dated June 1 and 15, 1995); the original effective date was August 8, 1990.
- The standards for selected reactive wastes was revised in the Phase III Final Rule (which that USEPA adopted at 61 Fed. Reg. 15566 (Apr. April 8, 1996) and the Board adopted in docket R96-10/R97-3/R97-5 (consolidated) by an order dated November 6, 1997); the original effective date was August 8, 1990.

## TABLE 2 SUMMARY OF EFFECTIVE DATES OF LAND DISPOSAL RESTRICTIONS FOR CONTAMINATED SOIL AND DEBRIS (CSD)

## FOR CONTAMINATED SOIL AND DEBRIS (CSD)

Restricted hazardous waste in CSD

1. Solvent- (F001-F005) and dioxin- (F020-F023 and F026-F028) containing soil and debris from CERCLA response or RCRA corrective actions.

2. Soil and debris not from CERCLA response or RCRA corrective actions contaminated with less than one percent total solvents (F001-F005) or dioxins (F020-F023 and F026-F028).

3. All soil and debris contaminated with First Third wastes for which treatment standards are based on incineration.

4. All soil and debris contaminated with Second Third wastes for which treatment standards are based on incineration.

5. All soil and debris contaminated with Third Third wastes or, First or Second Third "soft hammer" wastes which that had treatment standards promulgated in the Third Third rule, for which treatment standards are based on incineration, vitrification, or mercury retorting, acid leaching followed by chemical precipitation, or thermal recovery of metals, as well as all inorganic solids debris contaminated with D004-D011 wastes, and all soil and debris contaminated with mixed RCRA/radioactive wastes.

6. Soil and debris contaminated with D012-D043, K141-K145, and K147-151 wastes.

Effective date Nov. November 8, 1990.

Nov. <u>November</u> 8, 1988.

Aug. <u>August</u> 8, 1990<del>.</del>

June 8, 1991<del>.</del>

May 8, 1992<del>.</del>

Dec. <u>December</u> 19, 1994.

K123-K126, K131, I 8. Soil and debris conta P194, P196- P199, P	ninated with F037, F038, K107-K112, K117, K118, K132, K136, U328, U353, U359.  minated with K156- K161, P127, P128, P188-P192, P201-P205, U271, U277-U280, U364-U367, U372, U374, U389-U396, U400-U404, U407, and U409-U411	Dec. December 19, 1994 July 8, 1996. 3,
	aminated with K088 wastes.	Oct. October 8, 1997.
K156-K161, P127, F U277-U280, U364-U	minated with radioactive wastes mixed with K088, P128, P188-P192, P194, P196-P199, P201-P205, U271, U367, U372, U373, U375-U379, U381-U387, U389-U407, and U409-U411 wastes.	April 8, 1998 <del>.</del>
	aminated with F032, F034, and F035.	May 12, 1997 <del>.</del>
	nminated with newly identified D004-D011 toxicity and mineral processing wastes.	<del>Aug.</del> <u>August</u> 24, 1998 <del>.</del>
13. Soil and debris conta	aminated with mixed radioactive newly identified D011 and mineral processing wastes.	May 26, 2000 <del>.</del>
BOARD NOTE: This ta	able is provided for the convenience of the reader.	
(Source: Amended at 27	7 Ill. Reg, effective	_)
Section 728.Appendix H	National Capacity LDR Variances for UIC Waste	S
See Note <sup>a</sup>		
Waste code	Waste category	Effective date
D001 (except High	All	Feb. February
TOC Ignitable Liquids Subcategory) <sup>c</sup>		10, 1994.
D001 (High TOC	Nonwastewater	Sep. September
Ignitable Characteristic Liquids Subcategory)		19, 1995.
D002 <sup>b</sup>	All	May 8, 1992 <del>.</del>
D002 <sup>c</sup>	All	Feb. February
		10, 1994 <del>.</del>
D003 (cyanides)	All	May 8, 1992 <del>.</del>
D003 (sulfides)	All	May 8, 1992 <del>.</del>
D003 (explosives, reactives).	All	May 8, 1992 <del>.</del>
D007	All	May 8, 1992 <del>.</del>
D009	Nonwastewater	May 8, 1992 <del>.</del>
D012	All	Sep. September 19, 1995.

D013	All	Sep. September 19, 1995.
D014	All	September
D015	All	19, 1995- Sep. September
D016	All	19, 1995 <del>.</del> Sep. September 19, 1995 <del>.</del>
D017	All	Sep. September 19, 1995.
D018	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D019	All, including mixed with radioactive wastes	<del>Apr. <u>A</u>pril</del> 8, 1998 <del>.</del>
D020	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D021	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D022	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D023	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D024	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D025	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D026	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D027	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D028	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D029	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D030	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>
D031	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>
D032	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D033	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>
D034	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>

D035	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D036	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>
D037	All, including mixed with radioactive wastes	Apr. April 8, 1998 <del>.</del>
D038	All, including mixed with radioactive wastes	Apr. <u>April</u> 8, 1998 <del>.</del>
D039	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D040	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D041	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D042	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
D043	All, including mixed with radioactive wastes	<del>Apr. <u>April</u> 8,</del> 1998 <del>.</del>
F001-F005	All spent F001-F005 solvent containing less than 1 percent total F001-F005 solvent constituents	Aug. August 8, 1990.
F007	All	June 8, 1991 <del>.</del>
F032	All, including mixed with radioactive wastes	May 12, 1999 <del>.</del>
F034	All, including mixed with radioactive wastes	May 12,1999 <del>.</del>
F035	All, including mixed with radioactive wastes	May 12, 1999 <del>.</del>
F037	All	Nov. November
1037	7111	8, 1992 <del>.</del>
F038	All	Nov. November 8, 1992.
F039	Wastewater	May 8, 1992 <del>.</del>
K009	Wastewater	June 8, 1991 <del>.</del>
K011	Nonwastewater	June 8, 1991 <del>.</del>
K011	Wastewater	May 8, 1992 <del>.</del>
K013	Nonwastewater	June 8, 1991 <del>.</del>
K013	Wastewater	May 8, 1992 <del>.</del>
K013	All	May 8, 1992.
K014 K016 (dilute)	All	June 8, 1991 <del>.</del>
K049	All	Aug. August 8,
IXO+)	7 KH	1990 <del>.</del>
K050	All	Aug. August 8,
K051	All	Aug. August 8,
K052	All	Aug. August 8, 1990 <del>.</del>

K062	All	<del>Aug.</del> <u>August</u> 8, 1990 <del>.</del>
K071	All	Aug. August 8,
****		1990 <del>.</del>
K088	All	<del>Jan.</del> <u>January</u> 8, 1997 <del>.</del>
K104	All	<del>Aug.</del> <u>August</u> 8, 1990 <del>.</del>
K107	All	Nov. November 8, 1992.
K108	All	Nov. November 9, 1992-
K109	All	Nov. November
		9 <del>,</del> 1992 <del>.</del>
K110	All	Nov. November 9, 1992.
K111	All	Nov. November
K112	All	9, 1992 <del>.</del> <del>Nov.</del> November
11112	7 111	9, 1992 <del>.</del>
K117	All	June 30, 1995 <del>.</del>
K118	All	June 30, 1995-
K123	All	Nov. November
17.1.2.4	A 11	9, 1992 <del>.</del>
K124	All	Nov. November 9, 1992.
K125	All	Nov. November 9, 1992.
K126	All	Nov. November
		9 <del>,</del> 1992 <del>.</del>
K131	All	June 30, 1995 <del>.</del>
K132	All	June 30, 1995 <del>.</del>
K136	All	Nov. November 9, 1992.
K141	All	<del>Dec.</del> <u>December</u> 19, 1994 <del>.</del>
K142	All	Dec. December
K143	All	19, 1994 <del>.</del> <del>Dec.</del> <u>December</u>
11110	. 111	19, 1994 <del>.</del>
K144	All	<del>Dec.</del> <u>December</u> 19, 1994 <del>.</del>
K145	All	Dec. December
111 10	<i>1</i> 111	19, 1994 <del>.</del>
		,

K147	All	Dec. December
K148	All	19, 1994 <del>.</del> Dec. December
K149	All	19, 1994 <del>.</del> Dec. December
K150	All	19, 1994 <del>.</del> Dec. December
K130	All	19, 1994 <del>.</del>
K151	All	Dec. December
K156	All	19, 1994 <del>.</del> July 8, 1996 <del>.</del>
K157	All	July 8, 1996 <del>.</del>
K158	All	July 8, 1996 <del>.</del>
K159	All	July 8, 1996 <del>.</del>
K160	All	July 8, 1996 <del>.</del>
K161	All	July 8, 1996 <del>.</del>
NA	Newly identified mineral processing wastes from titanium dioxide production and mixed	May 26, 2000 <del>.</del>
	radioactive/newly identified D004-D011	
	characteristic wastes and mineral processing wastes-	
P127	All	July 8, 1996 <del>.</del>
P128	All	July 8, 1996 <del>.</del>
P185	All	July 8, 1996 <del>.</del>
P188	All	July 8, 1996 <del>.</del>
P189	All	July 8, 1996 <del>.</del>
P190	All	July 8, 1996 <del>.</del>
P191	All	July 8, 1996 <del>.</del>
P192	All	July 8, 1996 <del>.</del>
P194	All	July 8, 1996 <del>.</del>
P196	All	July 8, 1996 <del>.</del>
P197	All	July 8, 1996 <del>.</del>
P198	All	July 8, 1996 <del>.</del>
P199	All	July 8, 1996 <del>.</del>
P201	All	July 8, 1996 <del>.</del>
P202	All	July 8, 1996 <del>.</del>
P203	All	July 8, 1996 <del>.</del>
P204	All	July 8, 1996 <del>.</del>
P205	All	July 8, 1996 <del>.</del>
U271	All	July 8, 1996 <del>.</del>
U277	All	July 8, 1996 <del>.</del>
U278	All	July 8, 1996 <del>.</del>
U279	All	July 8, 1996 <del>.</del>
U280	All	July 8, 1996 <del>.</del>

U328	All	Nov. November 9, 1992-
U353	All	Nov. November
U359	All	9, 1992 <del>.</del> <del>Nov.</del> <u>November</u> 9, 1992 <del>.</del>
U364	All	July 8, 1996 <del>.</del>
U365	All	July 8, 1996-
U366	All	July 8, 1996 <del>.</del>
U367	All	July 8, 1996 <del>.</del>
U372	All	July 8, 1996 <del>.</del>
U373	All	July 8, 1996 <del>.</del>
U375	All	July 8, 1996 <del>.</del>
U376	All	July 8, 1996 <del>.</del>
U377	All	July 8, 1996 <del>.</del>
U378	All	July 8, 1996 <del>.</del>
U379	All	July 8, 1996 <del>.</del>
U381	All	July 8, 1996 <del>.</del>
U382	All	July 8, 1996 <del>.</del>
U383	All	July 8, 1996 <del>.</del>
U384	All	July 8, 1996 <del>.</del>
U385	All	July 8, 1996 <del>.</del>
U386	All	July 8, 1996 <del>.</del>
U387	All	July 8, 1996 <del>.</del>
U389	All	July 8, 1996 <del>.</del>
U390	All	July 8, 1996 <del>.</del>
U391	All	July 8, 1996 <del>.</del>
U392	All	July 8, 1996 <del>.</del>
U395	All	July 8, 1996 <del>.</del>
U396	All	July 8, 1996 <del>.</del>
U400	All	July 8, 1996 <del>.</del>
U401	All	July 8, 1996 <del>.</del>
U402	All	July 8, 1996 <del>.</del>
U403	All	July 8, 1996 <del>.</del>
U404	All	July 8, 1996 <del>.</del>
U407	All	July 8, 1996 <del>.</del>
U409	All	July 8, 1996 <del>.</del>
U410	All	July 8, 1996 <del>.</del>
U411	All	July 8, 1996 <del>.</del>

Wastes that are deep well disposed on-site receive a six-month variance, with restrictions, effective in November 1990.

- Deep well injected D002 liquids with a pH less than 2-two must meet the California List treatment standards on August 8, 1990.
- Managed in systems defined in 35 Ill. Adm. Code 730.105(e) as Class V injection wells that do not engage in CWA-equivalent treatment before injection.

BOARD NOTE: This table is provided for the convenience of the reader.

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 728.Appendix I EP Toxicity Test Method and Structural Integrity Test

Note: The EP (Method 1310) is published in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", U.S. EPA-<u>USEPA</u> Publication SW-846, as incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Amended at 27 III. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 728.Appendix K

Metal Bearing Metal-Bearing Wastes Prohibited From from

Dilution in a Combustion Unit According to Section 728.103(c)

BOARD NOTE: A combustion unit is defined as any thermal technology subject to <u>Subpart O of 35 Ill. Adm. Code 724.Subpart O</u>, or <u>Subpart O of 35 Ill. Adm. Code 725.Subpart O</u>, or <u>Subpart H of 35 Ill. Adm. Code 726.Subpart H</u>.

Waste code Waste description D004 Toxicity Characteristic for Arsenic. D005 Toxicity Characteristic for Barium. D006 Toxicity Characteristic for Cadmium. D007 Toxicity Characteristic for Chromium. D008 Toxicity Characteristic for Lead. D009 Toxicity Characteristic for Mercury. D010 Toxicity Characteristic for Selenium. D011 Toxicity Characteristic for Silver.

F006	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating carbon steel; (3) zinc plating basis on carbon steel; (4) aluminum or zinc-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 operations.
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.
F010	Quenching bath residues from oil baths from metal treating operations where cyanides are used in the process.
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating heat treating operations.
F012	Quenching waste water treatment sludges from metal heat treating heat-treating operations where cyanides are used in the process.
F019	Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum car washing when such phosphating is an exclusive conversion coating process.
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.
K003	Wastewater treatment sludge from the production of molybdate orange pigments.
K004	Wastewater treatment sludge from the production of zinc yellow pigments.
K005	Wastewater treatment sludge from the production of chrome green pigments.
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).
K007	Wastewater treatment sludge from the production of iron blue pigments.
K008	Oven residue from the production of chrome oxide green pigments.

K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K069	Emission control dust/sludge from secondary lead smelting.
K071	Brine purification muds from the mercury cell processes in chlorine production, where separately prepurified brine is not used.
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.
K106	Sludges from the mercury cell processes for making chlorine.
P010	Arsenic acid H <sub>3</sub> AsO <sub>4</sub> .
P011	Arsenic oxide As <sub>2</sub> O <sub>5</sub> .
P012	Arsenic trioxide.
P013	Barium cyanide.
P015	Beryllium.
P029	Copper (I) cyanide Cu(CN).
P074	Nickel (II) cyanide Ni(CN) <sub>2</sub> .
P087	Osmium (VIII) tetroxide OsO <sub>4</sub> .
P099	Potassium silver cyanide KAg(CN) <sub>2</sub> .
P104	Silver cyanide AgCN.
P113	Thallic (III) oxide Tl <sub>2</sub> O <sub>3</sub> .
P114	Thallium (I) selenite Tl <sub>2</sub> SeO <sub>3</sub> .
P115	Thallium (I) sulfate Tl <sub>2</sub> SO <sub>4</sub> .
P119	Ammonium (V) vanadate NH <sub>3</sub> VO <sub>3</sub> .
P120	Vanadium (V) oxide V <sub>2</sub> O <sub>5</sub> .
P121	Zinc cyanide ZnCN.

U032	Calcium chromate CaCrO <sub>4</sub> .				
U145	Lead phosphate.				
U151	Mercury.				
U204	Selenous acid H <sub>2</sub> SeO <sub>3</sub> .				
U205	Selenium (IV) disulfide SeS <sub>2</sub> .				
U216	Thallium (I) chloride TlCl.				
U217	Thallium (I) nitrate TlNO <sub>3</sub> .				
(Source: Amended at 27 Ill. Reg, effective)					
Section 728. Table A Constituent Concentrations in Waste Extract (CCWE)					
For the requirements previously found in this Section and Section 728.141, refer to Section 728.140 and 728. Table T to this Part, "Treatment Standards for Hazardous Wastes.":					
(Source: Ame	ended at 27 Ill. Reg, effective)				
Section 728.Table B Constituent Concentrations in Wastes (CCW)					
For the requirements previously found in this Section and for treatment standards in Section 728.143, "Constituent Concentrations in Wastes (CCW),"; refer to Section 728.140 and 728. Table T to this Part, "Treatment Standards for Hazardous Wastes.":					
(Source: Amended at 27 Ill. Reg, effective)					
Section 728.T	able C Technology Codes and Description of Technology-Based Standards				
Technology code Code	Description of technology-based standard Technology-Based Standard				
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)venting can be accomplished through physical release utilizing valves or piping; physical penetration of the container; or penetration through detonation.				
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur				

that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.

**BIODG** 

Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).

**CARBN** 

Carbon adsorption (granulated or powdered) of non-metallic inorganics, 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 <a href="Subpart O of 35 III">Subpart O of 35 III</a>. Adm. Code 724. Subpart O, or <a href="Subpart H of 35 III">Subpart H of 35 III</a>. Adm. Code 726. Subpart H, 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 <u>high level high-level</u> 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 <u>Subpart O of 35 Ill.</u>
  Adm. Code 724. Subpart O, or Subpart O of 35 Ill. Adm. Code 725. Subpart O.

All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

**INCIN** 

Incineration in units operated in accordance with the technical operating requirements of <u>Subpart O of</u> 35 Ill. Adm. Code 724. Subpart O of 35 Ill. Adm. Code 725. Subpart O.

**LLEXT** 

Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery 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 2-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 national emissions standard for hazardous air pollutants (NESHAP) for mercury (40 CFR 61, Subpart E);
- b) A best available control technology (BACT) or a lowest achievable emission rate (LAER) standard for mercury imposed pursuant to a prevention of significant deterioration (PSD) permit (including 35 Ill. Adm. Code 201 through 203); or
- c) A state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury, including a permit issued pursuant to 35 Ill. Adm. Code 201. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., high or low mercury subcategories).

RMETL Recovery of metals or inorganics utilizing one or more of the following direct physical or removal technologies:

- 1) ion exchange;
- 2) resin or solid (i.e., zeolites) adsorption;
- 3) reverse osmosis:
- 4) chelation or solvent extraction;
- 5) freeze crystallization;
- 6) ultrafiltration; or
- 7) simple precipitation (i.e., crystallization)

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RORGS Recovery of organics utilizing one or more of the following technologies:

- 1) Distillation;
- 2) thin film evaporation;

- 3) steam stripping;
- 4) carbon adsorption;
- 5) critical fluid extraction;
- 6) liquid-liquid extraction;
- 7) precipitation or crystallization (including freeze crystallization); or
- 8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals).

Note: This does not preclude the use of other physical phase separation techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.

RTHRM

Thermal recovery of metals or inorganics from nonwastewaters in units defined as cement kilns, blast furnaces, smelting, melting and refining furnaces, combustion devices used to recover sulfur values from spent sulfuric acid and "other devices" determined by the Agency pursuant to 35 Ill. Adm. Code 720.110, the definition of "industrial furnace."-

**RZINC** 

Resmelting in high temperature metal recovery units for the purpose of recovery of zinc.

STABL Stabilization with the following reagents (or waste reagents) or combinations of reagents:

- 1) Portland cement; or
- 2) lime or pozzolans (e.g., fly ash and cement kiln dust)--this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set or cure time or compressive strength, or to overall reduce the leachability of the metal or inorganic.

**SSTRP** 

Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery or reuse and an

extracted wastewater that must undergo further treatment as specified in the standard.

WETOX

Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon (TOC) can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).

WTRRX

Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic or ignitable levels of gases released during the reaction.

Note 1:

When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in Section 728. Table T to this Part by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

Note 2:

When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR."- This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

BOARD NOTE: Derived from 40 CFR 268.42, Table 1 (1997) (2002).

(Source: Amended at 27 Ill.	Reg	_, effective	_)		
Section 728.Table D	Technology-E	Based Standards by RCRA Waste Code	2		
BOARD NOTE: For the requ 728.140 and <del>728.</del> Table T to t		ously found in this Section, refer to <del>Sec</del>	etions Section		
(Source: Amended at 27 III.	Reg	_, effective	_)		
Section 728.Table E	Standards for	Radioactive Mixed Waste			
BOARD NOTE: For the requirements previously found in this Section, refer to Sections Section 728.140 and 728. Table T to this Part.					
(Source: Amended at 27 Ill.	Reg.	, effective	)		

## Section 728. Table F Alternative 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 <u>F</u>, the following terms are defined as follows:

"Clean debris surface" means the surface, when viewed without magnification, shall-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 shall-must be limited to no more than 5% 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 <u>U.S. EPA USEPA</u> <u>Hhazardous hazardous</u> waste numbers FO20, FO21, FO22, FO23, FO26, or FO27.

c) Notes. In the this Table F, the following text is to be read in conjunction with the tabulated text where the appropriate notations appear:

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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 B-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) above 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 wastespecific 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 and/or air pressure to propel a solid media Brick, Cloth, Concrete, Paper,

Glass, Metal, Plastic, Rubber: Treatment to a clean debris surface.

All Debris: None.

(e.g., steel shot, aluminum oxide Pavement, Rock, Wood: grit, plastic beads).

Removal of at least 0.6 cm of the surface layer; treatment to a clean debris surface.

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 Same as above holes at appropriate locations and depth in the contaminated debris surface and applying a tool which 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

d. Vibratory Finishing: Process Same as above utilizing scrubbing media, flushing fluid, and oscillating energy such that hazardous contaminants or contaminated debris surface layers are removed 1

Same as above

e. High Pressure Steam and Water Sprays: Application of water or steam sprays of sufficient temperature, pressure, residence time, agitation, surfactants, and detergents to remove hazardous contaminants from debris surfaces or to remove contaminated debris surface layers

Same as above

Same as above

### 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  $1.2 \text{ cm} \left(\frac{1}{2}\right)$ inch) in one dimension (i.e., thickness limit,<sup>2</sup> except that this thickness limit may be waived under an "Equivalent Technology" approval under 35 III. Adm. Code Section 728.142(b): <sup>4</sup> 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 5% five percent by weight in water solution or 5% five percent by weight in emulsion: if debris is contaminated with a dioxinlisted waste,<sup>3</sup> an "Equivalent Technology" approval under 35 III. Adm. Code Section 728.142(b) must be obtained.<sup>4</sup>

b. Liquid Phase Solvent Extraction: Removal of hazardous contaminants from debris surfaces and surface pores by applying a nonaqueous liquid or liquid solution which 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 <sup>1</sup>

Same as above

Brick, Cloth, Concrete, Paper, Pavement, Rock, Wood: Same as above, except that contaminant must be soluble to at least 5% 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 debris surfaces and surface pores to enter the vapor phase and be flushed away with the organic vapor.1

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.

### 3. Thermal Extraction

a. High Temperature Metals Recovery: Application of sufficient heat, residence time, mixing, fluxing agents, and/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,<sup>5</sup> 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:<sup>2</sup> Obtain an "Equivalent Technology" approval under 35 Ill. Adm. Code Section 728.142(b).<sup>4</sup>

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.<sup>3</sup>

All Debris: Obtain an "Equivalent Technolog approval under 35 III. Code Section 728.142 treated debris must be from treatment residual simple physical or means,<sup>5</sup> and, prior to find the waste-specific treatment standards for compounds in the waster specific treatment standards for compounds in the waste

"Equivalent Technology" approval under 35 III. Adm. Code Section 728.142(b);<sup>4</sup> treated debris must be separated from treatment residuals using simple physical or mechanical means,<sup>5</sup> 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 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 and biodegration of organic or nonmetallic inorganic All Debris: Obtain an "Equivalent Technology" approval under 35 Ill. Adm. Code Section 728.142(b);<sup>4</sup> treated debris must be separated from treatment residuals using simple physical or mechanical

All Debris: Metal contaminants.

compounds (i.e., inorganics that contain phosphorus, nitrogen, or sulfur) in units operated under either aerobic or anaerobic conditions. means,<sup>5</sup> 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 (½ inch) in one dimension (i.e., thickness limit),<sup>2</sup> except that this thickness limit may be waived under the "Equivalent Technology" approval

#### 2. Chemical Destruction

a. Chemical Oxidation: Chemical or electolytic 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; and/or (9) other oxidizing reagents of equivalent destruction efficiency.<sup>1</sup> 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);<sup>4</sup> treated debris must be separated from treatment residuals using simple physical or mechanical means,<sup>5</sup> 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),<sup>2</sup> 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; Same as above

Same as above.

(2) sodium, potassium, or alkali salts of sulfites, bisulfites, and metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/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. Subpart O or Subpart O of 35 Ill. Adm. Code 725. Subpart O; a boiler or industrial furnace operating in accordance with Subpart H of contaminating the debris. 35 Ill. Adm. Code 726. Subpart H, or other thermal treatment unit operated in accordance with Subpart X of 35 Ill. Adm. Code 724. Subpart X, or Subpart P of 35 Ill. Adm. Code 725. Subpart P, 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,<sup>5</sup> and, prior to further treatment, such residue must meet the wastespecific treatment standards for organic compounds in the waste 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.<sup>3</sup> Obtain an "Equivalent Technology" approval under 35 III. Adm. Code <u>Section 728.142(b).</u><sup>4</sup> 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.

**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).

None.

2. Microencapsulation: Stabilization of the debris with Leachability of the hazardous contaminants must be reduced.

None.

the following reagents (or waste reagents) such that the leachability of the hazardous contaminants is reduced: (1) Portland cement; or (2) lime/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 and/or compressive strength, or to reduce the leachability of the hazardous constituents.<sup>2</sup>

3. Sealing: Application of an appropriate material which 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 resistent 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 27 Ill.	Reg, effective	_)		
Section 728.Table G	Alternative Treatment Standards Based on HTMR			
For the treatment standards previously found in this Section and Section 728.146, refer to Section 728.140 and 728. Table T to this Part, "Treatment Standards for Hazardous Wastes.":				
Source: Amended at 27 Ill.	Reg, effective	_)		
Section 728.Table H	Wastes Excluded from CCW Treatment Standards			

The following facilities are excluded from the treatment standard under Section 728.143(a) and Table B to this Part, and are subject to the following constituent concentrations. These facilities have received a treatability exception by regulatory action from USEPA pursuant to 40 CFR 268.44

(1991) (2002), and have demonstrated that the Board needs to adopt the treatability exception as part of the Illinois RCRA program. The Board may also grant an "adjusted treatment standard" pursuant to Section 728.144.

Facility name and address	Waste Code	See Also	Regulated hazardous constituent	Wastewaters Concentration (mg/L)	Notes	Nonwastewaters Concentration (mg/L)	Notes
Craftsman Plating and Tinning Corp., Chicago, IL	F006	Section 728.140	Cyanides (Total)	1.2	В	1800	D
			Cyanides (amenable)	0.86	B and C	30	D
			Cadmium	1.6		NA	
			Chromium	0.32		NA	
			Lead	0.40		NA	
			Nickel	0.44		NA	
Northwestern Plating Works, Inc., Chicago, IL	F006	Section 728.140	Cyanides (Total)	1.2	В	970	D
			Cyanides (amenable)	0.86	B and C	30	D
			Cadmium	1.6		NA	
			Chromium	0.32		NA	
			Lead	0.40		NA	
			Nickel	0.44		NA	

### Notes:

- A An owner or operator may certify compliance with these treatment standards according to the provisions of Section 728.107.
- B Cyanide wastewater standards for F006 are based on analysis of composite samples.
- These owners and operators shall-must comply with 0.86 mg/L for amenable cyanides in the wastewater exiting the alkaline chlorination system. These owners and operators shall-must also comply with Section 728.107(a)(4) for appropriate monitoring frequency consistent with the facilities' waste analysis plan.
- D Cyanide nonwastewaters are analyzed using SW-846 Method 9010 or 9012, sample size 10 g, distillation time one hour and fifteen minutes. SW-846 is incorporated by reference in 35 Ill. Adm. Code 720.111.

## NA Not applicable.

BOARD NOTE: Derived from table to 40 CFR 268.44(o)-(1997) (2002).

(Source: Amended at 27 Ill. Reg, effecti	ve		)	
Section 728.Table I Generator Paperwork	Requireme	ents		
Required information			on 728.107 rk is Requir (a)(4)	
1. USEPA hazardous waste numbers and manifest number of first shipment	✓	✓	✓	✓
2. Statement: this waste is not prohibited from land disposal			✓	
3. The waste is subject to the LDRs. The constituents of concern for USEPA hazardous waste numbers F001 through F005 and F039 waste, and underlying hazardous constituents in characteristic waste, 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	✓	<b>√</b>		
4. The notice must include the applicable wastewater/ nonwastewater category (see Section 728.102(d) and (f)) and subdivisions made within a waste code based on waste-specific criteria (such as D003 reactive cyanide)	✓	✓		
5. Waste analysis data (when available)	✓	✓	✓	
6. Date the waste is subject to the prohibition			✓	
7. For hazardous debris, when treating with the alternative treatment technologies provided by Section 728.145: the contaminants subject to treatment, as described in Section 728.145(b); and an indication that these contaminants are being treated to comply with Section 728.145	✓		✓	

- 8. 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) or the universal treatment standards
- 9. A certification is needed (see applicable subsection for exact wording)

BOARD NOTE: Derived from Table 1 to 40 CFR 268.7(a)(4)-(1997) (2002), as amended at 63 Fed. Reg. 28639 (May 26, 1998).

(Source: Amended at 27 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 728. Table T Treatment Standards for Hazardous Wastes

Note: The treatment standards that heretofore appeared in tables in Sections 728.141, 728.142, and 728.143 have been consolidated into this table.

Waste Code

Waste Description and Treatment or Regulatory Subcategory<sup>1</sup>

Regulated Hazardous Constituent Wastewaters Nonwastewaters

Concentration in mg/kg<sup>5</sup> unless

Concentration in

noted as "mg/l TCLP"; or Tech-

mg/l<sup>3</sup>; or Techno-

Common Name CAS<sup>2</sup> Number logy Code<sup>4</sup> nology Code<sup>4</sup>

 $D001^{9}$ 

Ignitable Characteristic Wastes, except for the 35 Ill. Adm. Code 721.121(a)(1) High TOC

Subcategory.

NA DEACT and meet DEACT and meet

Section 728.148 Section 728.148 standards<sup>8</sup>; or standards<sup>8</sup>; or RORGS; or CMBST CMBST

	443		
D001 <sup>9</sup> High TOC Ignitable Characteris 721.121(a)(1) - Greater than or 6 (Note: This subcategory consist	equal to 10 percent	total organic carbon.	m. Code
NA	NA	NA	RORGS; CMBST; or POLYM
D002 <sup>9</sup>			
Corrosive Characteristic Wastes			
NA	NA	DEACT and meet Section 728.148 standards <sup>8</sup>	DEACT and meet Section 728.148 standards <sup>8</sup>
D002, D004, D005, D006, D007	7, D008, D009, D01	0, D011	
Radioactive high level wastes ge	enerated during the	reprocessing of fuel rod	S.
(Note: This subcategory consist	s of nonwastewater	rs only.)	
Corrosivity (pH)	NA	NA	HLVIT
Arsenic	7440-38-2	NA	HLVIT
Barium	7440-39-3	NA	HLVIT
Cadmium	7440-43-9	NA	HLVIT
Chromium (Total)	7440-47-3	NA	HLVIT
Lead	7439-92-1	NA	HLVIT
Mercury	7439-97-6	NA	HLVIT
Selenium	7782-49-2	NA	HLVIT
Silver	7440-22-4	NA	HLVIT
D003 <sup>9</sup>			
Reactive Sulfides Subcategory b	ased on 35 Ill. Adn	n. Code 721.123(a)(5).	
NA	NA	DEACT	DEACT
D003 <sup>9</sup> Explosive subcategory based on	35 Ill Adm Code	721 123(a)(6) (a)(7) an	ud (a)(8)
NA	NA NA	DEACT and meet Section 728.148 standards <sup>8</sup>	DEACT and meet Section 728.148 standards <sup>8</sup>
D0029			

D003°

Unexploded ordnance and other explosive devices that have been the subject of an emergency response.

NA NA DEACT DEACT

Г	)	Λ	n	3	9

Other Reactives Subcategory based on 35 Ill. Adm. Code 721.123(a)(1).

NA NA DEACT and meet DEACT and meet

Section 728.148 Se

Section 728.148

standards<sup>8</sup>

standards<sup>8</sup>

# $D003^{9}$

Water Reactive Subcategory based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4).

(Note: This subcategory consists of nonwastewaters only.)

NA NA NA DEACT and meet

Section 728.148

standards<sup>8</sup>

# D003<sup>9</sup>

Reactive Cyanides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

Cyanides (Total)<sup>7</sup> 57-12-5 -- 590 Cyanides (Amenable)<sup>7</sup> 57-12-5 0.86 30

### $D004^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Arsenic 7440-38-2 1.4 and meet 5.0 mg/l TCLP and

Section 728.148 meet Section standards<sup>8</sup> 728.148 standards<sup>8</sup>

# $D005^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Barium 7440-39-3 1.2 and meet 21 mg/l TCLP and

Section 728.148 meet Section

standards<sup>8</sup> 728.148 standards<sup>8</sup>

### $D006^{9}$

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Cadmium 7440-43-9 0.69 and meet 0.11 mg/l TCLP Section 728.148 and meet Section

standards<sup>8</sup> 728.148 standards<sup>8</sup>

## D0069

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.)

7440-43-9 Cadmium NA

Macroencapsulation in accordance with Section 728.145

 $D007^{9}$ 

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Chromium (Total)

7440-47-3

2.77 and meet Section 728.148 0.60 mg/l TCLP and meet Section

standards<sup>8</sup>

728.148 standards<sup>8</sup>

D0089

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Lead

7439-92-1

0.69 and meet Section 728.148 0.75 mg/l TCLP

standards<sup>8</sup>

and meet Section 728.148 standards<sup>8</sup>

D0089

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.)

7439-92-1 Lead

NA

RLEAD

D0089

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.)

7439-92-1 Lead NA **MACRO** 

## $D009^{9}$

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311; and contain greater than or equal to 260 mg/kg total mercury that also contain organics and are not incinerator residues. (High Mercury-Organic Subcategory)

Mercury 7439-97-6 NA

IMERC; or RMERC

# $D009^{9}$

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311; and contain greater than or equal to 260 mg/kg total mercury that are inorganic, including incinerator residues and residues from RMERC. (High Mercury-Inorganic Subcategory)

Mercury 7439-97-6 NA RMERC

# $D009^{9}$

Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311; 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 standards<sup>8</sup>

# $D009^{9}$

All other nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311; and contain less than 260 mg/kg total mercury and that are not residues from RMERC. (Low Mercury Subcategory)

Mercury 7439-97-6 NA 0.025 mg/l TCLP and meet Section

728.148 standards<sup>8</sup>

 $D009^{9}$ 

All D009 wastewaters.

Mercury 7439-97-6 0.15 and meet NA

Section 728.148 standards<sup>8</sup>

standar

## $D009^{9}$

Elemental mercury contaminated with radioactive materials.

(Note: This subcategory consists of nonwastewaters only.)

Mercury 7439-97-6 NA AMLGM

 $D009^{9}$ 

Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.

(Note: This subcategory consists of nonwastewaters only.)

Mercury 7439-97-6 NA IMERC

 $D009^{9}$ 

<u>Radioactively contaminated mercury-containing batteries.</u>
(Note: This subcategory consists of nonwastewaters only.)

Mercury 7439-97-6 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 the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Selenium 7782-49-2 0.82 5.7 mg/l TCLP and

meet Section

728.148 standards<sup>8</sup>

D0119

Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Silver 7440-22-4 0.43 0.14 mg/l TCLP

and meet Section 728.148 standards<sup>8</sup>

 $D011^{9}$ 

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 the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Endrin	72-20-8	BIODG; or	0.13 and meet
		CMBST	Section 728.148
			standards <sup>8</sup>
Endrin aldehyde	7421-93-4	BIODG; or	0.13 and meet
		CMBST	Section 728.148

standards<sup>8</sup>

D013 <sup>9</sup>
Wastes that are TC for Lindane based on the toxicity characteristic leaching procedure (TCLP)
in SW-846 Method 1311.

α-ВНС	319-84-6	CARBN; or	0.066 and meet
		CMBST	Section 728.148 standards <sup>8</sup>
β-ВНС	319-85-7	CARBN; or	0.066 and meet
		CMBST	Section 728.148 standards <sup>8</sup>
δ-ΒΗС	319-86-8	CARBN; or	0.066 and meet
		CMBST	Section 728.148 standards <sup>8</sup>
γ-BHC (Lindane)	58-89-9	CARBN; or	0.066 and meet
		CMBST	Section 728.148 standards <sup>8</sup>

# D014<sup>9</sup>

Wastes that are TC for Methoxychlor based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Methoxychlor	72-43-5	WETOX or	0.18 and meet
		CMBST	Section 728.148
			standards <sup>8</sup>

# $D015^{9}$

Wastes that are TC for Toxaphene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Toxaphene	8001-35-2	BIODG or	2.6 and meet
		CMBST	Section 728.148
			standards <sup>8</sup>

# D016<sup>9</sup>

Wastes that are TC for 2,4-D (2,4-Dichlorophenoxyacetic acid) based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

2,4-D (2,4-Dichlorophenoxy-	94-75-7	CHOXD; BIODG;	10 and meet
acetic acid)		or CMBST	Section 728.148
			standards <sup>8</sup>

# $D017^{9}$

Wastes that are TC for 2,4,5-TP (Silvex) based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

2,4,5-TP (Silvex)	93-72-1	CHOXD or	7.9 and meet
		CMBST	Section 728.148
			standards <sup>8</sup>

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リハノ	Iδ

Wastes that are TC for Benzene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Benzene 71-43-2 0.14 and meet 10 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

### $D019^{9}$

Wastes that are TC for Carbon tetrachloride based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Carbon tetrachloride 56-23-5 0.057 and meet 6.0 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup> standards<sup>8</sup>

# $D020^{9}$

Wastes that are TC for Chlordane based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Chlordane ( $\alpha$  and  $\chi$  isomers) 57-74-9 0.0033 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup> standards<sup>8</sup>

# $D021^{9}$

Wastes that are TC for Chlorobenzene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Chlorobenzene 108-90-7 0.057 and meet 6.0 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup> standards<sup>8</sup>

### $D022^{9}$

Wastes that are TC for Chloroform based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Chloroform 67-66-3 0.046 and meet 6.0 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup> standards<sup>8</sup>

### $D023^{9}$

Wastes that are TC for o-Cresol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

o-Cresol 95-48-7 0.11 and meet 5.6 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

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Wastes that are TC for m-Cresol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

m-Cresol 108-39-4 0.77 and meet 5.6 and meet (difficult to distinguish from p-cresol) Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

### $D025^{9}$

Wastes that are TC for p-Cresol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

p-Cresol 106-44-5 0.77 and meet 5.6 and meet (difficult to distinguish from m- Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

## $D026^{9}$

Wastes that are TC for Cresols (Total) based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Cresol-mixed isomers (Cresylic 1319-77-3 0.88 and meet 11.2 and meet section 728.148 (sum of o-, m-, and p-cresol standards st

### $D027^{9}$

Wastes that are TC for p-Dichlorobenzene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

p-Dichlorobenzene (1,4- 106-46-7 0.090 and meet 6.0 and meet Dichlorobenzene) Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

## $D028^{9}$

Wastes that are TC for 1,2-Dichloroethane based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

1,2-Dichloroethane 107-06-2 0.21 and meet 6.0 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup> standards<sup>8</sup>

## $D029^{9}$

Wastes that are TC for 1,1-Dichloroethylene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

1,1-Dichloroethylene 75-35-4 0.025 and meet 6.0 and meet Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

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Wastes that are TC for 2,4-Dinitrotoluene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

2,4-Dinitrotoluene	121-14-2	0.32 and meet	140 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# D0319

Wastes that are TC for Heptachlor based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Heptachlor	76-44-8	0.0012 and meet	0.066 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>
Heptachlor epoxide	1024-57-3	0.016 and meet	0.066 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# $D032^{9}$

Wastes that are TC for Hexachlorobenzene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Hexachlorobenzene	118-74-1	0.055 and meet	10 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

## $D033^{9}$

Wastes that are TC for Hexachlorobutadiene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Hexachlorobutadiene	87-68-3	0.055 and meet	5.6 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# $D034^{9}$

Wastes that are TC for Hexachloroethane based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Hexachloroethane	67-72-1	0.055 and meet	30 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# $D035^{9}$

Wastes that are TC for Methyl ethyl ketone based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Methyl ethyl ketone	78-93-3	0.28 and meet	36 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

_	_	_	-9
	1	13	6

Wastes that are TC for Nitrobenzene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Nitrobenzene 98-95-3 0.068 and meet 14 and meet Section 728.148 Section 728.148

standards<sup>8</sup> standards<sup>8</sup>

# $D037^{9}$

Wastes that are TC for Pentachlorophenol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Pentachlorophenol 87-86-5 0.089 and meet 7.4 and meet Section 728.148 Section 728.148

standards<sup>8</sup> standards<sup>8</sup>

# $D038^{9}$

Wastes that are TC for Pyridine based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Pyridine 110-86-1 0.014 and meet 16 and meet Section 728.148 Section 728.148

standards<sup>8</sup> standards<sup>8</sup>

# $D039^{9}$

Wastes that are TC for Tetrachloroethylene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Tetrachloroethylene 0.056 and meet 6.0 and meet 127-18-4 Section 728.148 Section 728.148

standards<sup>8</sup>

standards<sup>8</sup>

### $D040^{9}$

Wastes that are TC for Trichloroethylene based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Trichloroethylene 79-01-6 0.054 and meet 6.0 and meet Section 728.148 Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

## $D041^{9}$

Wastes that are TC for 2,4,5-Trichlorophenol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

2,4,5-Trichlorophenol 95-95-4 0.18 and meet 7.4 and meet Section 728.148 Section 728.148 standards<sup>8</sup> standards<sup>8</sup>

 $D042^{9}$ 

Wastes that are TC for 2,4,6-Trichlorophenol based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

2,4,6-Trichlorophenol	88-06-2	0.035 and meet	7.4 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# D043<sup>9</sup>

Wastes that are TC for Vinyl chloride based on the toxicity characteristic leaching procedure (TCLP) in SW-846 Method 1311.

Vinyl chloride	75-01-4	0.27 and meet	6.0 and meet
		Section 728.148	Section 728.148
		standards <sup>8</sup>	standards <sup>8</sup>

# F001, F002, F003, F004 & F005

F001, F002, F003, F004, or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-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 mg/l 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.

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.

Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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

## F007

Spent cyanide plating bath solutions from electroplating operations.

1 1 2	1	$\mathcal{L}_{\mathbf{I}}$	
Cadmium	7440-43-9	NA	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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

## F008

Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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

## F009

Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

1			
Cadmium	7440-43-9	NA	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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

Quenching bath residues from oil baths from metal heat treating heat-treating operations where cyanides are used in the process.

Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	57-12-5	0.86	NA

#### F011

Spent cyanide solutions from salt bath pot cleaning from metal heat treating heat-treating operations.

operations.			
Cadmium	7440-43-9	NA	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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 heat-treating operations where cyanides are used in the process.

7440-43-9	NA	0.11 mg/l TCLP
7440-47-3	2.77	0.60 mg/l TCLP
57-12-5	1.2	590
57-12-5	0.86	30
7439-92-1	0.69	0.75 mg/l TCLP
7440-02-0	3.98	11 mg/l TCLP
7440-22-4	NA	0.14 mg/l TCLP
	7440-47-3 57-12-5 57-12-5 7439-92-1 7440-02-0	7440-47-3 2.77 57-12-5 1.2 57-12-5 0.86 7439-92-1 0.69 7440-02-0 3.98

# F019

Wastewater treatment sludges from the chemical conversion coating of aluminum, except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.

Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	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

### F024

Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 35 Ill. Adm. Code 721.131 or 721.132.)

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All F024 wastes	NA	CMBST <sup>11</sup>	CMBST <sup>11</sup>
2-Chloro-1,3-butadiene	126-99-8	0.057	0.28
3-Chloropropylene	107-05-1	0.036	30
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,2-Dichloropropane	78-87-5	0.85	18
cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Hexachloroethane	67-72-1	0.055	30
Chromium (Total)	7440-47-3	2.77	0.60 mg/l 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.

56-23-5	0.057	6.0
67-66-3	0.046	6.0
118-74-1	0.055	10
87-68-3	0.055	5.6
67-72-1	0.055	30
75-9-2	0.089	30
79-00-5	0.054	6.0
79-01-6	0.054	6.0
75-01-4	0.27	6.0
	67-66-3 118-74-1 87-68-3 67-72-1 75-9-2 79-00-5 79-01-6	67-66-30.046118-74-10.05587-68-30.05567-72-10.05575-9-20.08979-00-50.05479-01-60.054

F027

Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

HxCDDs (All 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

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

nazaraous waste namoers rozo, ro	,21, 1 023, 1 020, un	d 1 027.	
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

# F032

Wastewaters (except those that have not come into contact with process contaminants), process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with 35 Ill. Adm. Code 721.135 or potentially cross-contaminated wastes that are otherwise currently regulated as hazardous wastes (i.e., F034 or F035), where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or penta-chlorophenol.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)			
fluoranthene)			

Benzo(k)fluoranthene (difficult to distinguish from benzo(b) fluoranthene)	207-08-9	0.11	6.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
2-4-Dimethyl phenol	105-67-9	0.036	14
Fluorene	86-73-7	0.059	3.4
Hexachlorodibenzo-p-dioxins	NA	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Hexachlorodibenzofurans	NA	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Pentachlorodibenzo-p-dioxins	NA	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Pentachlorodibenzofurans	NA	0.000035 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Tetrachlorodibenzo-p-dioxins	NA	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Tetrachlorodibenzofurans	NA	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
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.

Acenaphthene	83-32-9	0.059	3.4
Anthracene	120-12-7	0.059	3.4
	56-55-3	0.059	3.4
Benz(a)anthracene			
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 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 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 crossote 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.

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 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP

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 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP

F039
Leachate (liquids that have percolated through land disposed wastes) resulting from the disposal of more than one restricted waste classified as hazardous under Subpart D of this Part. (Leachate resulting from the disposal of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its USEPA hazardous waste numbers: F020, F021, F022, F026, F027, or F028.).

208-96-8	0.059	3.4
83-32-9	0.059	3.4
67-64-1	0.28	160
75-05-8	5.6	NA
96-86-2	0.010	9.7
53-96-3	0.059	140
107-02-8	0.29	NA
107-13-1	0.24	84
309-00-2	0.021	0.066
92-67-1	0.13	NA
62-53-3	0.81	14
120-12-7	0.059	3.4
140-57-8	0.36	NA
319-84-6	0.00014	0.066
319-85-7	0.00014	0.066
319-86-8	0.023	0.066
58-89-9	0.0017	0.066
71-43-2	0.14	10
56-55-3	0.059	3.4
205-99-2	0.11	6.8
207-08-9	0.11	6.8
191-24-2	0.0055	1.8
50-32-8	0.061	3.4
75-27-4	0.35	15
74-83-9	0.11	15
101-55-3	0.055	15
71-36-3	5.6	2.6
85-68-7	0.017	28
88-85-7	0.066	2.5
75-15-0	3.8	NA
56-23-5	0.057	6.0
	83-32-9 67-64-1 75-05-8 96-86-2 53-96-3 107-02-8 107-13-1 309-00-2 92-67-1 62-53-3 120-12-7 140-57-8 319-84-6 319-85-7 319-86-8 58-89-9 71-43-2 56-55-3 205-99-2 207-08-9 191-24-2 50-32-8 75-27-4 74-83-9 101-55-3 71-36-3 85-68-7 88-85-7	83-32-9       0.059         67-64-1       0.28         75-05-8       5.6         96-86-2       0.010         53-96-3       0.059         107-02-8       0.29         107-13-1       0.24         309-00-2       0.021         92-67-1       0.13         62-53-3       0.81         120-12-7       0.059         140-57-8       0.36         319-84-6       0.00014         319-85-7       0.00014         319-86-8       0.023         58-89-9       0.0017         71-43-2       0.14         56-55-3       0.059         205-99-2       0.11         101-24-2       0.0055         50-32-8       0.061         75-27-4       0.35         71-36-3       5.6         85-68-7       0.017         88-85-7       0.066         75-15-0       3.8

Chlordane ( $\alpha$ and $\chi$ 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)			
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
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)			
Cyclohexanone	108-94-1	0.36	NA
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
Ethylene dibromide (1,2-	106-93-4	0.028	15
Dibromoethane)			
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
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-	122-37-4	0.72	INA
amine)			
Diphenylnitrosamine (difficult	86-30-6	0.92	NA
to distinguish from diphenyl-	00 50 0	0.72	1 1/1 1
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
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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	0.00012	0.0025
dibenzo-p-dioxin (1,2,3,4,6,7,8-	33022-40-7	0.000033	0.0023
HpCDD)			
1,2,3,4,6,7,8-Heptachloro-	67562-39-4	0.000035	0.0025
dibenzofuran (1,2,3,4,6,7,8-	07302-37-4	0.000055	0.0023
HpCDF)			
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035	0.0025
dibenzofuran (1,2,3,4,7,8,9-	33013-09-1	0.000033	0.0023
HpCDF)			
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)	IVA	0.000003	0.001
HxCDFs (All Hexachloro-	55684-94-1	0.000063	0.001
dibenzofurans)	33004-74-1	0.000003	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.021	2.6
Kepone	143-50-8	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	NA
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloro-	101-14-4	0.50	30
aniline)	101 11 .	0.00	
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
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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 NA
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
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)	41705 57 5	0.000003	0.001
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)	33122-21-3	0.000003	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane			
	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10

Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromomethane)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoro-	76-13-1	0.057	30
ethane			
tris(2,3-Dibromopropyl)	126-72-7	0.11	NA
phosphate			
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			
concentrations)			
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	21 mg/l TCLP
Beryllium	7440-41-7	0.82	NA
Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	57-12-5	0.86	NA
Fluoride	16964-48-8	35	NA
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Mercury	7439-97-6	0.15	0.025 mg/l TCLP
Nickel	7440-02-0	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 treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.

Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10

Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K002 Wastewater treatment sludge from	n the production of a	chrome vellow and ora	nge nigments
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K003			
Wastewater treatment sludge from	•		
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K004 Wastewater treatment sludge from	the production of z	zinc vellow pigments.	
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K005 Wastewater treatment sludge from Chromium (Total) Lead Cyanides (Total) <sup>7</sup>	1 the production of 6 7440-47-3 7439-92-1 57-12-5	chrome green pigments 2.77 0.69 1.2	0.60 mg/l TCLP 0.75 mg/l TCLP 590
K006 Wastewater treatment sludge from	n the production of o	chrome oxide green pig	gments (anhydrous).
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K006 Wastewater treatment sludge from Chromium (Total) Lead	the production of 6 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) <sup>7</sup>	n the production of i 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 prod Chloroform	duction 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 wastewate			e.
Acetonitrile	75-05-8	5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590
K013	la a druman in the non	advestice of complemituil	
Bottom stream from the acetonitri			
Acetonitrile	75-05-8	5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590
K014 Bottoms from the acetonitrile puri	fication column in	the production of acryl	onitrile
Acetonitrile		5.6	38
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590
cyamac (10an)	0, 1 <b>2</b> 0	1.2	
K015			
Still bottoms from the distillation	of benzyl chloride.		
Anthracene	120-12-7	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult	205-99-2	0.11	6.8
to distinguish from benzo(k)-fluoranthene)			

Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-fluoranthene)	207-08-9	0.11	6.8
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Nickel	7440-02-0	3.98	11 mg/l TCLP
K016			
Heavy ends or distillation residues	from the productio	n of carbon tetrachlori	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	e purification colun	nn in the production of	epichlorohydrin.
bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
1,2-Dichloropropane	78-87-5	0.85	18
1,2,3-Trichloropropane	96-18-4	0.85	30
K018			
Heavy ends from the fractionation		_	
Chloroethane	75-00-3	0.27	6.0
Chloromethane	74-87-3	0.19	NA
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
K019			
Heavy ends from the distillation of			_
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 1,2,4,5-Tetrachlorobenzene Tetrachloroethylene 1,2,4-Trichlorobenzene	85-01-8 95-94-3 127-18-4 120-82-1	0.059 0.055 0.056 0.055	5.6 NA 6.0 19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
K020 Heavy ends from the distillation of	f vinyl chloride in v	inyl chloride monomer	production.
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
K021			
Aqueous spent antimony catalyst v		<u>-</u>	
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
K022			
Distillation bottom tars from the pr			
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)			
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	duction of phthalic	anhydride from naphtl	nalene.
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28

K024 Distillation bottoms from the prod	uction of phthalic a	nhydride from naphtha	ılene.
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K025			
Distillation bottoms from the prod NA	uction of nitrobenze NA	ene by the nitration of LLEXT fb SSTRP fb CARBN; or CMBST	benzene. CMBST
K026 Stripping still tails from the production	•	± •	C) (D)
NA	NA	CMBST	CMBST
K027 Centrifuge and distillation residue	s from toluene diiso	ocyanate production.	
NA	NA	CARBN; or CMBST	CMBST
K028			
Spent catalyst from the hydrochlor	rinator reactor in the	e production of 1,1,1-tr	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 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Nickel	7440-02-0	3.98	11 mg/l TCLP
K029			
Waste from the product steam strip	oper in the production	on of 1,1,1-trichloroeth	nane.
Chloroform	67-66-3	0.046	6.0

	17.1		
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
, my r emeriae	75 01 1	0.27	0.0
K030			
Column bodies or heavy ends from	n the combined pro-	duction of trichloroeth	vlene and perchloro-
ethylene.	pro		) reme una peremere
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
1,2,1 1110111010001120110	120 02 1	0.000	1)
K031			
By-product salts generated in the	production of MSM	A and cacodylic acid	
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
	,		0.0 11.8,1 1 0.21
K032			
Wastewater treatment sludge from	the production of o	chlordane	
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Chlordane ( $\alpha$ and $\gamma$ 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
першенног срокие	1021373	0.010	0.000
K033			
Wastewater and scrub water from	the chlorination of	cyclonentadiene in the	production of
chlordane.	the emormation of	cyclopentualene in the	production of
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Trexacmorocycropentaciene	// ग/ ग	0.037	2.7
K034			
Filter solids from the filtration of l	nexachlorocycloner	tadiene in the producti	on of chlordane
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Trexacmorocycropentaciene	/ /	0.037	2.4
K035			
Wastewater treatment sludges gen	erated in the produc	ction of creosote	
Acenaphthene	83-32-9	NA	3.4
Anthracene	120-12-7	NA NA	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Denzialaninacelle	JU-JJ-J	U.U.J.J	J. <del>†</del>

Macrosol (difficult to distinguish from processol) p-Cresol (108-39-4 0.77 5.6 (difficult to distinguish from processol) p-Cresol 106-44-5 0.77 5.6 (difficult to distinguish from moresol) 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 Phenanthrene 85-01-8 0.059 5.6 Phenol 108-95-2 0.039 6.2 Pyrene 129-00-0 0.067 8.2  K036 Still bottoms from toluene reclamation distillation in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2  K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040  Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041  Wastewater treatment sludge from the production of phorate. Toxaphene 8001-35-2 0.0095 2.6	Benzo(a)pyrene Chrysene o-Cresol	50-32-8 218-01-9 95-48-7	0.061 0.059 0.11	3.4 3.4 5.6
(difficult to distinguish from m-cresol)         S3-70-3         NA         8.2           Fluoranthene         206-44-0         0.068         3.4           Fluorene         86-73-7         NA         3.4           Indeno(1,2,3-ed)pyrene         193-39-5         NA         3.4           Naphthalene         91-20-3         0.059         5.6           Phenanthrene         85-01-8         0.059         5.6           Phenol         108-95-2         0.039         6.2           Pyrene         129-00-0         0.067         8.2           K036         Still bottoms from toluene reclamation distillaiton in the production of disulfoton.         Disulfoton         298-04-4         0.017         6.2           K037         Wastewater treatment sludges from the production of disulfoton.         Disulfoton         298-04-4         0.017         6.2           Toluene         108-88-3         0.080         10           K038         Wastewater from the washing and stripping of phorate production.         Phorate         298-02-2         0.021         4.6           K039         Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.         NA         CARBN; or CMBST           K040         Wastewater treatment sludge from the produc	m-Cresol (difficult to distinguish from p-			
Fluoranthene 206-44-0 0.068 3.4 Fluorene 86-73-7 NA 3.4 Indeno(1,2,3-cd)pyrene 193-39-5 NA 3.4 Naphthalene 91-20-3 0.059 5.6 Phenanthrene 85-01-8 0.059 5.6 Phenol 108-95-2 0.039 6.2 Pyrene 129-00-0 0.067 8.2    K036 Still bottoms from toluene reclamation distillation in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2    K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2    Toluene 108-88-3 0.080 10    K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6    K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST CMBST    K040 Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6    K041 Wastewater treatment sludge from the production of toxaphene.	p-Cresol (difficult to distinguish from m-	106-44-5	0.77	5.6
Fluorene		53-70-3	NA	8.2
Indeno(1,2,3-cd)pyrene	Fluoranthene	206-44-0	0.068	3.4
Naphthalene         91-20-3         0.059         5.6           Phenanthrene         85-01-8         0.059         5.6           Phenol         108-95-2         0.039         6.2           Pyrene         129-00-0         0.067         8.2           K036         Still bottoms from toluene reclamation distillation in the production of disulfoton.           Disulfoton         298-04-4         0.017         6.2           K037         Wastewater treatment sludges from the production of disulfoton.         Disulfoton         298-04-4         0.017         6.2           Toluene         108-88-3         0.080         10         10           K038         Wastewater from the washing and stripping of phorate production.           Phorate         298-02-2         0.021         4.6           K039         Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.           NA         NA         CARBN; or CMBST           K040         Wastewater treatment sludge from the production of phorate.           Phorate         298-02-2         0.021         4.6           K041         Wastewater treatment sludge from the production of toxaphene.	Fluorene	86-73-7	NA	3.4
Naphthalene         91-20-3         0.059         5.6           Phenanthrene         85-01-8         0.059         5.6           Phenol         108-95-2         0.039         6.2           Pyrene         129-00-0         0.067         8.2           K036         Still bottoms from toluene reclamation distillation in the production of disulfoton.           Disulfoton         298-04-4         0.017         6.2           K037         Wastewater treatment sludges from the production of disulfoton.         Disulfoton         298-04-4         0.017         6.2           Toluene         108-88-3         0.080         10         10           K038         Wastewater from the washing and stripping of phorate production.           Phorate         298-02-2         0.021         4.6           K039         Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.           NA         NA         CARBN; or CMBST           K040         Wastewater treatment sludge from the production of phorate.           Phorate         298-02-2         0.021         4.6           K041         Wastewater treatment sludge from the production of toxaphene.	Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4
Phenanthrene 85-01-8 0.059 5.6 Phenol 108-95-2 0.039 6.2 Pyrene 129-00-0 0.067 8.2  K036 Still bottoms from toluene reclamation distillaiton in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2  K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040 Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041 Wastewater treatment sludge from the production of toxaphene.		91-20-3	0.059	5.6
Phenol 108-95-2 0.039 6.2 Pyrene 129-00-0 0.067 8.2  K036 Still bottoms from toluene reclamation distillation in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2  K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040 Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041 Wastewater treatment sludge from the production of toxaphene.		85-01-8	0.059	5.6
Ryrene 129-00-0 0.067 8.2  K036 Still bottoms from toluene reclamation distillaiton in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2  K037  Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038  Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039  Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  CMBST  K040  Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041  Wastewater treatment sludge from the production of toxaphene.	Phenol			
K036 Still bottoms from toluene reclamation distillaiton in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2  K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040 Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041 Wastewater treatment sludge from the production of toxaphene.				
Still bottoms from toluene reclamation distillation in the production of disulfoton. Disulfoton 298-04-4 0.017 6.2    K037   Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2   Toluene 108-88-3 0.080 10    K038   Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6    K039   Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST CMBST    K040   Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6    K041   Wastewater treatment sludge from the production of toxaphene.	Tyrono	120 00 0	0.007	0.2
K037 Wastewater treatment sludges from the production of disulfoton. Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038 Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039 Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040 Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041 Wastewater treatment sludge from the production of toxaphene.		ation distillaiton in	the production of disult	foton.
Wastewater treatment sludges from the production of disulfoton.  Disulfoton 298-04-4 0.017 6.2 Toluene 108-88-3 0.080 10  K038  Wastewater from the washing and stripping of phorate production. Phorate 298-02-2 0.021 4.6  K039  Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. NA NA CARBN; or CMBST  K040  Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041  Wastewater treatment sludge from the production of toxaphene.	Disulfoton	298-04-4	0.017	6.2
Wastewater from the washing and stripping of phorate production.  Phorate 298-02-2 0.021 4.6  K039  Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.  NA NA CARBN; or CMBST  CMBST  K040  Wastewater treatment sludge from the production of phorate.  Phorate 298-02-2 0.021 4.6  K041  Wastewater treatment sludge from the production of toxaphene.	Wastewater treatment sludges from Disulfoton	298-04-4	0.017	
Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.  NA NA CARBN; or CMBST  K040  Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041  Wastewater treatment sludge from the production of toxaphene.	Wastewater from the washing and			4.6
Wastewater treatment sludge from the production of phorate. Phorate 298-02-2 0.021 4.6  K041 Wastewater treatment sludge from the production of toxaphene.	Filter cake from the filtration of di		CARBN; or	_
Wastewater treatment sludge from the production of toxaphene.	Wastewater treatment sludge from			4.6
	Wastewater treatment sludge from	•	<u> </u>	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
1,2,4 111011010001120110	120 02 1	0.033	1)
K043			
2,6-Dichlorophenol waste from the	e production of 2,4-	D.	
2,4-Dichlorophenol	120-83-2	0.044	14
2,6-Dichlorophenol	187-65-0	0.044	14
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4
Tetrachloroethylene	127-18-4	0.056	6.0
HxCDDs (All Hexachloro-	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)			
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	n the manufacturing	and processing of exp	olosives.
NA	NA	DEACT	DEACT
K045			
Spent carbon from the treatment of	f wastewater contain	ning explosives.	
NA	NA	DEACT	DEACT
K046			
Wastewater treatment sludges from	n the manufacturing	, formulation and load	ing of lead-based
initiating compounds.			
Lead	7439-92-1	0.69	0.75 mg/l TCLP

	477		
K047			
Pink or red water from TNT ope	erations		
NA	NA	DEACT	DEACT
	1111	BEITET	BEITET
K048			
Dissolved air flotation (DAF) flo	oat from the petrol	eum refining industr	y.
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) <sup>7</sup>	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP
Y/0.40			
K049	. 1 ~ ~ :	. 1	
Slop oil emulsion solids from th	_	_	2.4
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) <sup>7</sup>	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP
K050			
Heat exchanger bundle cleaning slu	udge from the netro	leum refining industry	
Benzo(a)pyrene	50-32-8	0.061	3.4
Phenol	108-95-2	0.039	6.2
_			
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP
K051			
API separator sludge from the petro	oleum refining indu	stry	
Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
	56-55-3	0.059	3.4
Benz(a)anthracene			
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
=	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)	57 10 5	1.2	500
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP
K052			
Tank bottoms (leaded) from the pe	troleum refining ind	lustry.	
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
0-010301	/J- <del>1</del> 0-1	0.11	5.0

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	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Toluene	108-88-3	0.08	10
Xylenes-mixed isomers	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) <sup>7</sup>	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	11 mg/l TCLP
K060			
Ammonia still lime sludge from co	oking 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) <sup>7</sup>	57-12-5	1.2	590
	-,		
K061	o 41. o	dustion of steel in also	tui a firma a a a
Emission control dust or sludge fro			
Antimony Arsenic	7440-36-0 7440-38-2	NA NA	1.15 mg/l TCLP
		NA NA	5.0 mg/l TCLP
Barium	7440-39-3	NA NA	21 mg/l TCLP
Beryllium	7440-41-7	NA 0.60	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 NA	5.7 mg/l TCLP
Silver	7440-22-4	NA NA	0.14 mg/l TCLP
Thallium	7440-28-0	NA NA	0.20 mg/l TCLP
Zinc	7440-66-6	NA	4.3 mg/l TCLP

K062 Spent pickle liquor generated by stindustry (SIC Codes 331 and 332)	<b>U</b> 1	tions of facilities within	n the iron and steel
Chromium (Total)	7440-47-3	2.77	0.60 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
Nickel	7440-02-0	3.98	NA
NICKCI	7440-02-0	3.70	147 1
K069 Emission control dust or sludge fro Subcategory.	om secondary lead s	smelting <del>.</del> - Calcium sul	fate (Low Lead)
Cadmium	7440-43-9	0.69	0.11 mg/l TCLP
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K069 Emission control dust or sludge fro Lead) Subcategory. NA	om secondary lead s	smelting <del>.</del> - Non-Calciu NA	m sulfate (High
K071 K071 (Brine purification muds fro separately prepurified brine is not Mercury			
K071 K071 (Brine purification muds fro separately prepurified brine is not Mercury			
K071 All K071 wastewaters. Mercury	7439-97-6	0.15	NA
K073 Chlorinated hydrocarbon waste frographite anodes in chlorine produc	etion.		
Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
K083 Distillation bottoms from aniline p	production. 62-53-3	0.81	14
	02 00 0	V.U1	± 1

Benzene	71-43-2	0.14	10
Cyclohexanone	108-94-1	0.36	NA
Diphenylamine	122-39-4	0.92	13
(difficult to distinguish from			
diphenylnitrosamine)			
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.

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

D: 4.1.14.17	101 11 0	0.045	20
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 mg/l TCLP
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K087			
Decanter tank tar sludge from cok	ing operations		
Acenaphthylene	208-96-8	0.059	3.4
Benzene	71-43-2	0.14	10
Chrysene	218-01-9	0.059	3.4
Fluoranthene	206-44-0	0.068	3.4
	193-39-5	0.0055	3.4
Indeno(1,2,3-cd)pyrene	91-20-3	0.059	
Naphthalene			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)	<b>-</b> 120 02 1	0.60	0 <b></b> /
Lead	7439-92-1	0.69	0.75 mg/l TCLP
K088			
Spent potliners from primary alum	inum 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
. /			

D (13) 1	101 24 2	0.0055	1.0
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Antimony	7440-36-0	1.9	1.15 mg/l TCLP
Arsenic	7440-38-2	1.4	26.1 mg/l
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 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	0.15	0.025 mg/l TCLP
Nickel	7440-02-0	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
Cyanide (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanide (Amenable) <sup>7</sup>	57-12-5	0.86	30
Fluoride	16984-48-8	35	NA
K093 Distillation light ends from the prophthalic anhydride (measured as Phthalic acid or Terephthalic acid) Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	oduction of phthalic 100-21-0 85-44-9	anhydride from ortho- 0.055 0.055	exylene. 28 28
K094 Distillation bottoms from the prod Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	uction of phthalic a 100-21-0	nhydride from ortho-x 0.055	ylene. 28
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	85-44-9	0.055	28
K095 Distillation bottoms from the prod	uction of 1.1.1-trick	nloroethane	
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	0.055	6.0
1 Situatifol Confunc	,001	0.000	0.0

1,1,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane	630-20-6 79-34-6	0.057 0.057	6.0 6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-00-3 79-01-6	0.054	6.0
Themoroculytene	/ 9-01-0	0.034	0.0
K096			
Heavy ends from the heavy ends c	_		
m-Dichlorobenzene	541-73-1	0.036	6.0
Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
V.005			
K097 Vacuum stripper discharge from the	ne chlordane chlorin	ator in the production	of chlordane
Chlordane ( $\alpha$ and $\chi$ isomers)	57-74-9	0.0033	0.26
Heptachlor	76-44-8	0.0033	0.066
Heptachlor epoxide	1024-57-3	0.0012	0.066
Hexachlorocyclopentadiene	77-47-4	0.010	2.4
Trexaemorocyclopentatione	/ / - 4 / - 4	0.037	2.4
K098			
Untreated process wastewater from	_	_	
Toxaphene	8001-35-2	0.0095	2.6
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)			
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)			
TCDDs (All Tetrachloro-	41903-57-5	0.000063	0.001
dibenzo-p-dioxins)			
TCDFs (All Tetrachloro-	55722-27-5	0.000063	0.001
dibenzofurans)			

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Waste leaching solution	from acid lea	aching of	emission	control	dust or	sludge	from seco	ndary
lead smelting.								

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

Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

,			
o-Nitroaniline	88-74-4	0.27	14
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA

## K102

Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

o-Nitrophenol	88-75-5	0.028	13
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Cadmium	7440-43-9	0.69	NA
Lead	7439-92-1	0.69	NA
Mercury	7439-97-6	0.15	NA

## K103

Process residues from aniline extraction from the production of aniline.

Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2

## K104

Combined wastewater streams generated from nitrobenzene or aniline production.

Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
2,4-Dinitrophenol	51-28-5	0.12	160
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590

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Separated aqueous stream from the reactor produ	ct washing step in the production of chloro-
benzenes.	

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) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.

Mercury 7439-97-6 NA RMERC

### K106

K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC. Mercury

7439-97-6

NA

0.20 mg/l 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.

OM CO

NA	NA	CMBST; or	CMBST
		CHOXD fb	
		CARBN; or	
		BIODG fb	
		CARBN	

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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

#### K110

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
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

TZ	1	1	$^{\sim}$

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	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
		CMRST	

## K116

Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.

NA	NA	CARBN; or	CMBST
		CMBST	

### K117

Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.

oronniation of entene.			
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 (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-	106-93-4	0.028	15
Dibromoethane)			

$\mathbf{v}$	1	$^{\sim}$	$^{2}$
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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 ethylenebisdithiocarbamic 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 listing does not include 1200	(accumited turing	tai siaage mom con	mg 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 byproducts 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
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K1	43
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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.

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

## K145

Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Naphthalene	91-20-3	0.059	5.6

## K147

Tar storage tank residues from coal tar refining.

Tur storage turni residues ir	om cour tur remining.		
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4

Benzo(a)pyrene Benzo(b)fluoranthene (difficult to distinguish from benzo(k)-	50-32-8 205-99-2	0.061 0.11	3.4 6.8
fluoranthene) Benzo(k)fluoranthene (difficult to distinguish from benzo(b)-	207-08-9	0.11	6.8
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	imited 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

Distillation bottoms from the production of  $\alpha$ - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillations of benzyl chloride.)

Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
Toluene	108-88-3	0.080	10

### K150

Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of  $\alpha$ - (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

Carbon tetrachloride	56-23-5	0.057	6.0

Chloroform	67-66-3	0.046	6.0
Chloromethane	74-87-3	0.19	30
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,1,2,2- Tetrachloroethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of  $\alpha$ - (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.<sup>10</sup>

decumates) from the production of	curoumates and ca	rounnegronnines.	
Acetonitrile	75-05-8	5.6	1.8
Acetophenone	96-86-2	0.010	9.7
Aniline	62-53-3	0.81	14
Benomyl	17804-35-2	0.056	1.4
Benzene	71-43-2	0.14	10
Carbaryl	63-25-21	0.006	0.14
Carbenzadim	10605-21-7	0.056	1.4
Carbofuran	1563-66-2	0.006	0.14
Carbosulfan	55285-14-8	0.028	1.4
Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
Methomyl	16752-77-5	0.028	0.14
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2

Pyridine	110-86-1	0.014	16
Toluene	108-88-3	0.080	10
Triethylamine	121-44-8	0.081	1.5

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
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

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.

1 0	<b>L</b>		
Antimony	7440-36-0	1.9	$1.15^{11}$
Arsenic	7440-38-2	1.4	$5.0^{11}$
Carbon disulfide	75-15-0	3.8	$4.8^{11}$
Dithiocarbamates (total)	137-30-4	0.028	28

Lead	7439-92-1	0.69	$0.75^{11}$
Nickel	7440-02-0	3.98	$11^{11}$
Selenium	7782-49-2	0.82	$5.7^{11}$
K169			
Crude oil tank sediment from pe	_	•	
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	-		
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	n petroleum refinir	ng operations, includ	ling guard beds u

Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors. (This listing does not include inert support media.)

desdiffulize feeds to ether et	tury tro reactors. (Time	mount account me	rade meresan
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

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-	35822-46-9	0.000035 or	0.0025 or
dibenzo-p-dioxin (1,2,3,4,6,7,8-		CMBST <sup>11</sup>	CMBST <sup>11</sup>
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 <sup>11</sup>	CMBST <sup>11</sup>
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 <sup>11</sup>	CMBST <sup>11</sup>
HpCDF)			
All hexachlorodibenzo-p-dioxins	34465-46-8	0.000063 or	0.001 or CMBST <sup>11</sup>
(HxCDDs)		CMBST <sup>11</sup>	
All hexachlorodibenzofurans	55684-94-1	0.000063 or	0.001 or CMBST <sup>11</sup>
(HxCDFs)		CMBST <sup>11</sup>	
1,2,3,4,6,7,8,9-Octachloro-	3268-87-9	0.000063 or	0.005 or CMBST <sup>11</sup>
dibenzo-p-dioxin		CMBST <sup>11</sup>	
(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 <sup>11</sup>
dibenzofuran (1,2,3,4,6,7,8,9-		CMBST <sup>11</sup>	
OCDF)			
All pentachlorodibenzo-p-	36088-22-9	0.000063 or	0.001 or CMBST <sup>11</sup>
dioxins (PeCDDs)		CMBST <sup>11</sup>	
,			

All pentachlorodibenzofurans	30402-15-4	0.000035 or	0.001 or CMBST <sup>11</sup>
(PeCDFs)		CMBST <sup>11</sup>	
All tetrachlorodibenzo-p-dioxins	41903-57-5	0.000063 or	0.001 or CMBST <sup>11</sup>
(TCDDs)		CMBST <sup>11</sup>	
All tetrachlorodibenzofurans	55722-27-5	0.000063 or	0.001 or CMBST <sup>11</sup>
(TCDFs)		CMBST <sup>11</sup>	
Arsenic	7440-36-0	1.4	5.0 mg/L TCLP

Wastewater treatment sludge from the production of vinyl choloride monomer using mercuric chloride catalyst in an acetylene-based process.

Mercury <sup>12</sup> PH <sup>12</sup>	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 mg/L TCLP
Arsenic	7440-38-2	1.4	5.0 mg/L TCLP
Cadmium	7440-43-9	0.69	0.11 mg/L TCLP
Lead	7439-92-1	0.69	0.75 mg/L 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 mg/L TCLP

### K178

Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.

1,2,3,4,6,7,8-Heptachloro- dibenzo-p-dioxin (1,2,3,4,6,7,8-	35822-46-9	0.000035 or CMBST <sup>11</sup>	0.0025 or CMBST <sup>11</sup>
HpCDD)		CIVIDST	CMDST
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 <sup>11</sup>	CMBST <sup>11</sup>
HpCDF)			

1,2,3,4,7,8,9-Heptachloro- dibenzofuran (1,2,3,4,7,8,9- HpCDF)	55673-89-7	0.000035 or CMBST <sup>11</sup>	0.0025 or CMBST <sup>11</sup>
HxCDDs (All Hexachloro- dibenzo-p-dioxins)	34465-46-8	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
HxCDFs (All Hexachloro-dibenzofurans)	55684-94-1	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
1,2,3,4,6,7,8,9-Octachloro- dibenzo-p-dioxin (1,2,3,4,6,7,8,9-OCDD)	3268-87-9	0.000063 or CMBST <sup>11</sup>	0.005 or CMBST <sup>11</sup>
1,2,3,4,6,7,8,9-Octachloro- dibenzofuran (OCDF)	39001-02-0	0.000063 or CMBST <sup>11</sup>	0.005 or CMBST <sup>11</sup>
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	36088-22-9	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
PeCDFs (All Pentachloro-dibenzofurans)	30402-15-4	0.000035 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	41903-57-5	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
TCDFs (All Tetrachloro-dibenzofurans)	55722-27-5	0.000063 or CMBST <sup>11</sup>	0.001 or CMBST <sup>11</sup>
Thallium	7440-28-0	1.4	0.20 mg/L TCLP
P001 Warfarin, & salts, when present	at concentrations gre	eater than 0.3 percent.	
Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P002			
1-Acetyl-2-thiourea. 1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P003			
Acrolein. Acrolein	107-02-8	0.29	CMBST
P004			
Aldrin <u>.</u> 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.	<b>-</b> 440.20.2		
Barium Cryonidae (Total) <sup>7</sup>	7440-39-3	NA 1.2	21 mg/l TCLP
Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	57-12-5 57-12-5	0.86	590 30
Cyamides (Amenable)	37-12-3	0.00	30
P014 Thiophenol (Benzene thiol).			
Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P015 Beryllium dust <u>.</u>			
Beryllium	7440-41-7	RMETL;or RTHRM	RMETL; or RTHRM
P016			
Dichloromethyl ether (Bis(chloron	• / / <del>-</del>		
Dichloromethyl ether	542-88-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P017			
Bromoacetone.			
Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P018			
Brucine.			
Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
P020			
2-sec-Butyl-4,6-dinitrophenol (Dir 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	noseb) <u>.</u> 88-85-7	0.066	2.5

P021 Calcium cyanide. Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	57-12-5 57-12-5	1.2 0.86	590 30
P022 Carbon disulfide. Carbon disulfide Carbon disulfide; alternate <sup>6</sup> 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 <u>.</u> Cyanides (Total) <sup>7</sup>	57-12-5	1.2	590
Cyanides (Amenable) <sup>7</sup>	57-12-5	0.86	30
P030 Cyanides (soluble salts and comple Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	exes) <u>.</u> 57-12-5 57-12-5	1.2 0.86	590 30
P031 Cyanogen. Cyanogen	460-19-5	CHOXD;	CHOXD;
Cydnogen	100 17 3	WETOX; or CMBST	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 <u>.</u> 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)	) <u>.</u> 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 $\alpha,\alpha$ -Dimethylphenethylamine $\alpha,\alpha$ -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 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) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	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

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P065 (mercury fulminate) nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.

Mercury 7439-97-6 NA IMERC

P065

P065 (mercury fulminate) nonwastewaters that are either incinerator residues or are residues from RMERC; and contain greater than or equal to 260 mg/kg total mercury.

Mercury 7339-97-6 NA RMERC

P065

P065 (mercury fulminate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.

Mercury 7439-97-6 NA 0.20 mg/l TCLP

P065

P065 (mercury fulminate) nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.

Mercury 7439-97-6 NA 0.025 mg/l TCLP

P065

All P065 (mercury fulminate) wastewaters.

Mercury 7439-97-6 0.15 NA

P066

Methomyl.

Methomyl 16752-77-5 (WETOX or CMBST

CHOXD) fb CARBN; or CMBST

P067

2-Methyl-aziridine.

2-Methyl-aziridine 75-55-8 (WETOX or CMBST

CHOXD) fb CARBN; or CMBST

P068

Methyl hydrazine.

Methyl hydrazine 60-34-4 CHOXD; CHRED; CHOXD; CHRED,

CARBN; BIODG; or CMBST

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 <u>.</u> Nickel	7440-02-0	3.98	11 mg/l TCLP
P074 Nickel cyanide. Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup> 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 <u>.</u> 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) nare not incinerator residues or are Mercury			IMERC; or RMERC
P092 P092 (phenyl mercuric acetate) no residues from RMERC; and still of Mercury			
P092 P092 (phenyl mercuric acetate) nothan 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) nothan 260 mg/kg total mercury. Mercury	onwastewaters that a	are incinerator residues	s and contain less 0.025 mg/l TCLP
P092 All P092 (phenyl mercuric acetat Mercury		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 <u>.</u> Famphur	52-85-7	0.017	15
P098 Potassium cyanide. Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	57-12-5 57-12-5	1.2 0.86	590 30
P099 Potassium silver cyanide. Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup> 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 <u>.</u> Selenium	7782-49-2	0.82	5.7 mg/l TCLP
P104 Silver cyanide. Cyanides (Total) <sup>7</sup> Cyanides (Amenable) <sup>7</sup> 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) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	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 <u>.</u> 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) <sup>7</sup> Cyanides (Amenable) <sup>7</sup>	57-12-5 57-12-5	1.2 0.86	590 30
P122 Zinc phosphide Zn <sub>3</sub> P <sub>2</sub> , when prese Zinc Phosphide	ent at concentrations 1314-84-7	greater than 10 percent CHOXD; CHRED; or CMBST	nt <u>.</u> CHOXD; CHRED; or CMBST
P123 Toxaphene. Toxaphene	8001-35-2	0.0095	2.6
P127 Carbofuran <u>.</u> 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 <u>.</u> Carbosulfan	55285-14-8	0.028	1.4
P190 Metolcarb. Metolcarb	1129-41-5	0.056	1.4
P191 Dimetilan. <sup>10</sup> Dimetilan	644-64-4	0.056	1.4

P192 Isolan_ <sup>10</sup> Isolan	119-38-0	0.056	1.4
P194 Oxamyl <u>.</u> Oxamyl	23135-22-0	0.056	0.28
P196 Manganese dimethyldithiocarbama Dithiocarbamates (total)	ates (total) <u>.</u> 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 <sup>6</sup> 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 mg/l TCLP
U033 Carbon oxyfluoride. Carbon oxyfluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U034 Trichloroacetaldehyde (Chloral). Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U035 Chlorambucil. Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U036 Chlordane. Chlordane ( $\alpha$ and $\chi$ 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-epo Epichlorohydrin (1-Chloro-2,3- epoxypropane)	* I /-	(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 hydrochloric	le.		
4-Chloro-o-toluidine hydro- chloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U050			
Chrysene.			
Chrysene	218-01-9	0.059	3.4
U051			
Creosote.			
Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers	1330-20-7	0.32	30
(sum of o-, m-, and p-xylene			
concentrations)			
Lead	7439-92-1	0.69	0.75 mg/l 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)	106-44-5	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	100-44-3	0.77	3.0
Cresol-mixed isomers (Cresylic acid)	1319-77-3	0.88	11.2
(sum of o-, m-, and p-cresol			
concentrations)			
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; alternate <sup>6</sup> 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 <u>.</u> o,p'-DDD p,p'-DDD	53-19-0 72-54-8	0.023 0.023	0.087 0.087
U061 DDT <u>.</u> o,p'-DDT p,p'-DDT o,p'-DDD p,p'-DDD	789-02-6 50-29-3 53-19-0 72-54-8	0.0039 0.0039 0.023 0.023	0.087 0.087 0.087 0.087

o,p'-DDE p,p'-DDE	3424-82-6 72-55-9	0.031 0.031	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-Dibromo Ethylene dibromide (1,2- Dibromoethane)	ethane) <u>.</u> 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	sphate <u>.</u> 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			
$\alpha$ , $\alpha$ -Dimethyl benzyl hydro- a, $\alpha$ -Dimethyl benzyl hydro- peroxide	kide <u>.</u> 80-15-9	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U097			
Dimethylcarbamoyl chloride. Dimethylcarbamoyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U098			
1,1-Dimethylhydrazine. 1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U099			
1,2-Dimethylhydrazine. 1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U101 2,4-Dimethylphenol. 2,4-Dimethylphenol	105-67-9	0.036	14
U102 Dimethyl phthalate. Dimethyl phthalate	131-11-3	0.047	28

77-78-1	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
121-14-2	0.32	140
606-20-2	0.55	28
117-84-0	0.017	28
123-91-1	(WETOX or CHOXD) fb CARBN; or	CMBST
123-91-1	CMBST 12.0	170
122-66-7	CHOXD: CHRED:	CHOXD; CHRED;
122 00 7	CARBN; BIODG;	or CMBST
122-66-7	0.087	NA
142-84-7	(WETOX or CHOXD) fb CARBN; or	CMBST
	121-14-2 606-20-2 117-84-0 123-91-1 122-66-7 122-66-7	CARBN; BIODG; or CMBST  121-14-2  0.32  606-20-2  0.55  117-84-0  0.017  (WETOX or CHOXD) fb CARBN; or CMBST 123-91-1  122-66-7  CHOXD; CHRED; CARBN; BIODG; or CMBST 0.087  142-84-7  (WETOX or CHOXD) fb

U111 Di-n-propylnitrosamine. Di-n-propylnitrosamine	621-64-7	0.40	14
U112 Ethyl acetate Ethyl acetate	141-78-6	0.34	33
U113 Ethyl acrylate. Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U114 Ethylenebisdithiocarbamic acid sa		(WETOV 2#	CMDST
Ethylenebisdithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U115 Ethylene oxide <u>.</u>			
Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or CMBST	CHOXD; or CMBST
Ethylene oxide; alternate <sup>6</sup> standard for wastewaters only	75-21-8	0.12	NA
U116 Ethylene thiourea.	06.45.7	(WETOY	CMDCT
Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U117 Ethyl ether <u>.</u>			
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 <u>.</u> 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 <u>.</u> 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 <u>.</u> 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 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 <u>.</u> Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or CMBST	CHOXD; CHRED; or CMBST
U134 Hydrogen fluoride. Fluoride (measured in wastewaters only)	16964-48-8	35	ADGAS fb NEUTR; or NEUTR
U135 Hydrogen sulfide. Hydrogen sulfide	7783-06-4	CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U136 Cacodylic acid. Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
U137 Indeno(1,2,3-c,d)pyrene. Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055	3.4
U138 Iodomethane. Iodomethane	74-88-4	0.19	65
U140 Isobutyl alcohol <u>.</u> Isobutyl alcohol	78-83-1	5.6	170
U141 Isosafrole <u>.</u> 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 <u>.</u> Lead	7439-92-1	0.69	0.75 mg/l TCLP
U145 Lead phosphate <u>.</u> Lead	7439-92-1	0.69	0.75 mg/l TCLP
U146 Lead subacetate <u>.</u> 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 CMBST

CHOXD) fb CARBN; or 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 that contain less than 260 mg/kg total mercury and that are not

residues from RMERC only.

Mercury 7439-97-6 NA 0.025 mg/l TCLP

U151

All U151 (mercury) wastewater.

Mercury 7439-97-6 0.15 NA

U151

Element-Elemental Mercury Contaminated with Radioactive Materials.

Mercury 7439-97-6 NA AMLGM

U152

Methacrylonitrile.

Methacrylonitrile 126-98-7 0.24 84

U153

Methanethiol.

Methanethiol 74-93-1 (WETOX or CMBST

CHOXD) fb CARBN; or CMBST

U154 Methanol. Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or	CMBST
Methanol; alternate <sup>6</sup> set of standards for both wastewaters and nonwastewaters	67-56-1	CMBST 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) <u>.</u> 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-nitrosoguan N-Methyl-N'-nitro-N-nitroso- guanidine	idine <u>.</u> 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 <u>.</u> 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 <u>.</u> 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 <u>.</u> 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 <sup>6</sup> 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	100-21-0	0.055	28
acid) 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 <u>.</u> Safrole	94-59-7	0.081	22
U204 Selenium dioxide <u>.</u> Selenium	7782-49-2	0.82	5.7 mg/l TCLP
U205 Selenium sulfide <u>.</u> 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 <u>.</u> Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U214 Thallium (I) acetate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U215 Thallium (I) carbonate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U216 Thallium (I) chloride. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U217 Thallium (I) nitrate. Thallium (measured in wastewaters only)	7440-28-0	1.4	RTHRM; or STABL
U218 Thioacetamide. Thioacetamide	62-55-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U219 Thiourea. Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U220 Toluene. Toluene	108-88-3	0.080	10
U221 Toluenediamine Toluenediamine	25376-45-8	CARBN; or CMBST	CMBST
U222 o-Toluidine hydrochloride. o-Toluidine hydrochloride	636-21-5	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U223 Toluene diisocyanate Toluene diisocyanate	26471-62-5	CARBN; or CMBST	CMBST
U225 Bromoform (Tribromomethane). Bromoform (Tribromomethane)	75-25-2	0.63	15
U226 1,1,1-Trichloroethane. 1,1,1-Trichloroethane	71-55-6	0.054	6.0
U227 1,1,2-Trichloroethane. 1,1,2-Trichloroethane	79-00-5	0.054	6.0
U228 Trichloroethylene. Trichloroethylene	79-01-6	0.054	6.0
U234 1,3,5-Trinitrobenzene 1,3,5-Trinitrobenzene	99-35-4	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U235 tris-(2,3-Dibromopropyl)-phosphat tris-(2,3-Dibromopropyl)- phosphate	te <u>.</u> 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 <u>.</u>			
Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U238 Urethane (Ethyl carbamate). Urethane (Ethyl carbamate)	51-79-6	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U239 Xylenes. Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
U240 2,4-D (2,4-Dichlorophenoxyacetic	acid)		
2,4-D (2,4-Dichloro- phenoxyacetic acid)	94-75-7	0.72	10
2,4-D (2,4-Dichloro- phenoxyacetic acid) salts and esters	NA	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST

U243 Hexachloropropylene. Hexachloropropylene	1888-71-7	0.035	30
U244 Thiram. Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or CMBST	CMBST
U246 Cyanogen bromide. Cyanogen bromide	506-68-3	CHOXD; WETOX; or CMBST	CHOXD; WETOX; or CMBST
U247 Methoxychlor Methoxychlor	72-43-5	0.25	0.18
U248 Warfarin, & salts, when present at Warfarin	concentrations of 0 81-81-2	.3 percent or less.  (WETOX or  CHOXD) fb  CARBN; or  CMBST	CMBST
U249 Zinc phosphide, Zn <sub>3</sub> P <sub>2</sub> , when prese Zinc Phosphide	ent at concentration 1314-84-7	s of 10 percent or less. CHOXD; CHRED; or CMBST	CHOXD; CHRED; or CMBST
U271 Benomyl <u>.</u> Benomyl	17804-35-2	0.056	1.4
U278 Bendiocarb. Bendiocarb	22781-23-3	0.056	1.4
U279 Carbaryl <u>.</u> Carbaryl	63-25-2	0.006	0.14

U280 Barban <u>.</u> 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 <u>.</u> 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. <sup>10</sup> 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 <u>.</u> 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.
- 3 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 <u>Subpart O of 35 Ill.</u> Adm. Code 724. Subpart O or <u>Subpart O of 35 Ill.</u> Adm. Code 725. Subpart O 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 <u>35 Ill.</u> Adm. Code <u>Section 728.140(d)</u>. 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.
- Both Cyanides (Total) and Cyanides (Amenable) for nonwastewaters are to be analyzed using Method 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical or Chemical Methods,", USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, 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 <a href="Subpart O of">Subpart O of</a> 35 Ill. Adm. Code 724. Subpart O, or (3) combustion units operating under <a href="Subpart O of">Subpart O of</a> 35 Ill. Adm. Code 725. Subpart O.
- 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 (2000) (2002), as amended at 65 Fed. Reg. 67127 (November 8, 2000) and 66 Fed. Reg. 58258 (November 20, 2001).

NA means not applicabl	e.	
(Source: Amended at 27 II	1. Reg, effective	_)
Section 728 Table II	Universal Treatment Standards (UTS)	

			Nonwastewater
			Standard
		Wastewater	Concentration (in
		Standard	mg/kg <sup>3</sup> unless
Regulated Constituent-		Concentration (in	noted as "mg/l
Common Name	CAS <sup>1</sup> 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 <sup>6</sup>	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
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-BHC	319-86-8	0.023	0.066
ү-ВНС	58-89-9	0.0017	0.066
Barban <sup>6</sup>	101-27-9	0.056	1.4
Bendiocarb <sup>6</sup>	22781-23-3	0.056	1.4
Benomyl <sup>6</sup>	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 <sup>6</sup>	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)			
Carbaryl <sup>6</sup>	63-25-2	0.006	0.14
Carbenzadim <sup>6</sup>	10605-21-7	0.056	1.4
Carbofuran <sup>6</sup>	1563-66-2	0.006	0.14
Carbofuran phenol <sup>6</sup>	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 <sup>6</sup>	55285-14-8	0.028	1.4
Chlordane ( $\alpha$ and $\gamma$ 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
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 <sup>6</sup>			
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
1,2-Dibromo-3-chloro-	96-12-8	0.11	15
propane			
1,2-Dibromoethane/Ethylene	106-93-4	0.028	15
dibromide			
Dibromomethane	74-95-3	0.11	15
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
	107 00 2	0.21	0.0

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-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
Disulfoton	298-04-4	0.017	6.2
Dithiocarbamates (total) <sup>6</sup>	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 <sup>6</sup>	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
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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 <sup>6</sup>	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	0.000035	0.0025
dibenzo-p-dioxin	35022 10 3	0.000022	0.0022
(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-	0780239	0.00000	0.0022
HpCDF)			
1,2,3,4,7,8,9-Heptachloro-	55673-89-7	0.000035	0.0025
dibenzofuran (1,2,3,4,7,8,9-	33013 07 1	0.000033	0.0025
HpCDF)			
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)	1111	0.00000	0.001
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 <sup>6</sup>	2032-65-7	0.056	1.4
Methomyl <sup>6</sup>	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 <sup>6</sup>	1129-41-5	0.056	1.4
Mexacarbate <sup>6</sup>	315-18-4	0.056	1.4
Molinate <sup>6</sup>	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 <sup>6</sup>	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) <sup>8</sup>			
Pebulate <sup>6</sup>	1114-71-2	0.042	1.4
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)			
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
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 <sup>6</sup>	57-47-6	0.056	1.4
Physostigmine salicylate <sup>6</sup>	57-64-7	0.056	1.4
Promecarb <sup>6</sup>	2631-37-0	0.056	1.4
Pronamide	23950-58-5	0.093	1.5
Propham <sup>6</sup>	122-42-9	0.056	1.4
Propoxur <sup>6</sup>	114-26-1	0.056	1.4
Prosulfocarb <sup>6</sup>	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 <sup>6</sup>	59669-26-0	0.019	1.4
Thiophanate-methyl <sup>6</sup>	23564-05-8	0.056	1.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Triallate <sup>6</sup>	2303-17-5	0.042	1.4
Tribromomethane	75-25-2	0.63	15
(Bromoform)			
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,4,5-Trichlorophenoxyacetic	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 <sup>6</sup>	101-44-8	0.081	1.5
tris-(2,3-Dibromopropyl)	126-72-7	0.11	0.10
phosphate			
Vernolate <sup>6</sup>	1929-77-7	0.042	1.4

Xylenes-mixed isomers (sum 1330-20-7 0.32 30	
of o-, m-, and p-xylene	
concentrations)	
Antimony 7440-36-0 1.9 1.15 mg/l T	CLP
Arsenic 7440-38-2 1.4 5.0 mg/l TC	CLP
Barium 7440-39-3 1.2 21 mg/l TC	LP
Beryllium 7440-41-7 0.82 1.22 mg/l T	CLP
Cadmium 7440-43-9 0.69 0.11 mg/l T	CLP
Chromium (Total) 7440-47-3 2.77 0.60 mg/l T	CLP
Cyanides $(Total)^4$ 57-12-5 1.2 590	
Cyanides $(Amenable)^4$ 57-12-5 0.86 30	
Fluoride <sup>5</sup> 16984-48-8 35 NA	
Lead 7439-92-1 0.69 0.75 mg/l T	CLP
Mercury-Nonwastewater 7439-97-6 NA 0.20 mg/l T	CLP
from Retort	
Mercury-All Others 7439-97-6 0.15 0.025 mg/l	TCLP
Nickel 7440-02-0 3.98 11 mg/l TC	LP
Selenium <sup>7</sup> 7782-49-2 0.82 5.7 mg/l TO	CLP
Silver 7440-22-4 0.43 0.14 mg/l T	CLP
Sulfide 18496-25-8 14 NA	
Thallium 7440-28-0 1.4 0.20 mg/l T	CLP
Vanadium <sup>5</sup> 7440-62-2 4.3 1.6 mg/l TC	CLP
$Zinc^5$ 7440-66-6 2.61 4.3 mg/l TC	CLP

- 1 CAS means Chemical Abstract Services. When the waste code or regulated constituents are described as a combination of a chemical with its salts or esters, the CAS number is given for the parent compound only.
- 2 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 <a href="Subpart O of 35">Subpart O of 35</a> Ill. Adm. Code 724. Subpart O or <a href="Subpart O of 35">Subpart O of 35</a> Ill. Adm. Code 725. Subpart O 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 9010 or 9012, found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,", USEPA Publication SW-846, incorporated by reference in

- 35 Ill. Adm. Code 720.111, 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 <u>corresponding</u> 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 hazardous 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) (2000) (2002), as amended at 65 Fed. Reg. 81381 (December 26, 2000).

(Source: Amended at 27 Ill. Reg	, effective
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