ILLINOIS POLLUTION CONTROL BOARD
March 2, 1995

IN THE MATTER OF:	)	
	)	R95-4
UIC UPDATE, USEPA REGULATIONS (7-1-94 THROUGH 12-31-94)	)	(Identical-in-Substance Rules)
	)	
IN THE MATTER OF:	)	
	)	R95-6
RCRA UPDATE, USEPA REGULATIONS (7-1-94 THROUGH 12-31-94)	)	(Identical in Substance Rules)
	)	

Proposal for Public Comment.

PROPOSED ORDER OF THE BOARD (by E. Dunham):

Pursuant to Section 13(c) and 22.4(a) of the Environmental Protection Act (Act) [415 ILCS 5/13(c) & 22.4(a) (1992)], the Board proposes amendments to the RCRA Subtitle C hazardous waste (RCRA) and underground injection control (UIC) regulations.

Section 22.4(a) provides for quick adoption of regulations that are "identical in substance" to federal regulations adopted by U.S. EPA to implement Sections 3001 through 3005 of the Resource Conservation and Recovery Act of 1976 (RCRA, 42 U.S.C. §§ 6921-6925) and that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) [5 ILCS 100/5-35 & 5-40 (1992)] shall not apply. Section 13(c) similarly provides with respect to underground injection control regulations adopted by U.S. EPA pursuant to Section 1421 of the Safe Drinking Water Act (SDWA; 42 U.S.C. § 300h). Because this rulemaking is not subject to Section 5 of the APA, it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR). The federal RCRA Subtitle C regulations are found at 40 CFR 260 through 268, 270 through 271, and, more recently, 279. The federal UIC regulations are found at 40 CFR 144, 146, and 148.

This order is supported by a proposed opinion adopted on the same day. The Board will submit Notices of Proposed Amendments for publication in the Illinois Register. The complete text of the proposed rules follows.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the above order was adopted by the Board on the 3rd day of March, 1995, by a vote of 5-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER a: GENERAL PROVISIONS

PART 700
OUTLINE OF WASTE DISPOSAL REGULATIONS (REPEALED)

SUBPART A: GENERAL

Section
700.101 Applicability (Repealed)
700.102 Other Regulations (Repealed)
700.103 Organization (Repealed)
700.104 Intent and Purpose (Repealed)
700.105 Interim Status (Repealed)
700.106 Effective Dates
700.107 Severability (Repealed)
700.108 References to Federal Rules (Repealed)
700.109 Permits Prior to Authorization (Repealed)

SUBPART B: DEFINITIONS

Section
700.201 Definitions (Repealed)
700.205 Act (Repealed)
700.210 Chapter 7 Operating Requirements (Repealed)
700.215 Chapter 7 Permits (Repealed)
700.220 Chapter 9 Operating Requirements (Repealed)
700.225 Chapter 9 Permits (Repealed)
700.230 Conflict (Repealed)
700.235 HWM (Repealed)
700.240 Operating Requirements (Repealed)
700.245 Permit Requirements (Repealed)
700.250 RCRA Operating Requirements (Repealed)
700.255 RCRA Permit (Repealed)
700.260 RCRA Rules (Repealed)
700.265 Subject To (Repealed)

SUBPART C: GENERATORS

Section
700.301 Permits (Repealed)
700.302 Operating Requirements (Repealed)
700.303 Manifests (Repealed)
700.304 Small Quantity Exemptions (Repealed)

SUBPART D: TRANSPORTERS

Section
700.401 Permits (Repealed)
700.402 Operating Requirements (Repealed)
700.403 Manifests (Repealed)
700.404 Small Quantity Exemptions (Repealed)

SUBPART E: OWNERS AND OPERATORS OF HWM SITES

Section
700.501 Permits (Repealed)
700.502 Operating Requirements (Repealed)
700.503 Manifests (Repealed)
700.504 Small Quantity Exemptions (Repealed)

SUBPART F: HAZARDOUS (INFECTIOUS) HOSPITAL WASTE

Section

700.601 Hazardous (Infectious) Hospital Waste (Repealed)
700.602 General Rule (Repealed)
700.603 Generators (Repealed)
700.604 Transporters (Repealed)
700.605 Owners and Operators (Repealed)

700.Appendix A: Applicability Provisions (Repealed)

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R81-22, 47 PCB 93, at 6 Ill. Reg. 12655, effective May 17, 1982; amended in R82-18, 51 PCB 31, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, at 7 Ill. Reg. 14457, effective October 12, 1983; amended in R83-24, at 8 Ill. Reg. 200, effective December 27, 1983; amended in R94-5 at 18 Ill. Reg. 18244, effective December 20, 1994Repealed in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL

Section 700.101 Applicability (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.102 Other Regulations (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.103 Organization (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.104 Intent and Purpose (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.105 Interim Status (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.106 Effective Dates

a) U.S. EPA granted interim authorization to the Illinois RCRA Subtitle C Program effective May 17, 1982, at 47 Fed. Reg. 21043

(May 17, 1982). U.S. EPA granted final authorization effective January 31, 1986, at 51 Fed. Reg. 3778 (January 30, 1986).

1) The effective date of 35 Ill. Adm. Code 720, 721, 722, 723, and 725 was May 17, 1982.

2) The effective date of 35 Ill. Adm. Code 703 and 705, to the extent they apply to the issuance of RCRA permits, was May 17, 1982; however, RCRA permits were not issued prior to January 31, 1986.

3) The effective date of 35 Ill. Adm. Code 703 and 724 was October 12, 1983; however, RCRA permits were not issued prior to January 31, 1986.

b) U.S. EPA authorized the Illinois UIC program effective March 3, 1984, at 49 Fed. Reg. 3991 (Feb. 1, 1984).

1) The effective date of 35 Ill. Adm. Code 703, 704 and 705, to the extent they apply to the issuance of UIC (Underground Injection Control) permits, was March 3, 1984.

2) The effective date of 35 Ill. Adm. Code 730 was March 3, 1984.

(Source: Amended at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.107 Severability (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.108 References to Federal Rules (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.109 Permits Prior to Authorization (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

SUBPART B: DEFINITIONS

Section 700.201 Definitions (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.205 Not (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.210 Chapter 7 Operating Requirements (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.215 Chapter 7 Permits (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.220 Chapter 9 Operating Requirements (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.225 Chapter 9 Permits (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.230 Conflict (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.235 HWM (Repealed)

(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)

Section 700.240 Operating Requirements (Repealed)

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.245 Permit Requirements (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.250 RCRA Operating Requirements (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.255 RCRA Permit (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.260 RCRA Rules (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.265 Subject To (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~SUBPART C: GENERATORS~~

~~Section 700.301 Permits (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.302 Operating Requirements (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.303 Manifests (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.304 Small Quantity Exemptions (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~SUBPART D: TRANSPORTERS~~

~~Section 700.401 Permits (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.402 Operating Requirements (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.403 Manifests (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.404 Small Quantity Exemptions (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~SUBPART E: OWNERS AND OPERATORS OF HWM SITES~~

~~Section 700.501 Permits (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.502 Operating Requirements (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.503 Manifests (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.504 Small Quantity Exemptions (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~SUBPART F: HAZARDOUS (INFECTIOUS) HOSPITAL WASTE~~

~~Section 700.601 Hazardous (Infectious) Hospital Waste (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.602 General Rule (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.603 Generators (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.604 Transporters (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~Section 700.605 Owners and Operators (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

~~700.Appendix A Applicability Provisions (Repealed)~~

~~(Source: Repealed at 18 Ill. Reg. 18244, effective December 20, 1994)~~

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

PART 702
RCRA AND UIC PERMIT PROGRAMS

SUBPART A: GENERAL PROVISIONS

SUBPART B: PERMIT APPLICATIONS

SUBPART C: PERMIT CONDITIONS

SUBPART D: ISSUED PERMITS

Section
702.181 Effect of a Permit
702.182 Transfer
702.183 Modification
702.184 Causes for Modification
702.185 Facility Siting
702.186 Revocation
702.187 Minor Modifications

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

SOURCE: Adopted in R81-32, 47 PCB 93, at 6 Ill. Reg. 12479, effective May 17, 1982; amended in R82-19, at 53 PCB 131, 7 Ill. Reg. 14352, May 17, 1982; amended in R84-9 at 9 Ill. Reg. 11926, effective July 24, 1985; amended in R85-23 at 10 Ill. Reg. 13274, effective July 29, 1986; amended in R86-1 at 10 Ill. Reg. 14083, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6131, effective March 24, 1987; amended in R87-5 at 11 Ill. Reg. 19376, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2579, effective January 15, 1988; amended in R87-29 at 12 Ill. Reg. 6673, effective March 28, 1988; amended in R87-39 at 12 13083, effective July 29, 1988; amended in R89-1 at 13 Ill. Reg. 18452, effective November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3089, effective February 20, 1990; amended in R89-9 at 14 Ill. Reg. 6273, effective April 16, 1990; amended in R92-10 at 17 Ill. Reg. 5769, effective March 26, 1993; amended in R93-16 at 18 Ill. Reg. 6918, effective April 26, 1994; amended in R94-5 at 18 Ill. Reg. 18284, effective December 20, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART D: ISSUED PERMITS

Section 702.181 Effect of a Permit

a) The existence of a RCRA or UIC permit does not constitute a defense to a violation of the Environmental Protection Act or this Subtitle, except for development, modification, or operation without a permit. However, a permit may be modified, reissued, or revoked during its term for cause as set forth in 35 Ill. Adm. Code 703.270 through 703.273 (RCRA) or 35 Ill. Adm. Code 704.261 through 704.263 (UIC) and Section 702.186.

BOARD NOTE: 40 CFR 270.4(a) differs from this subsection (a) in two significant aspects: 1) it states that compliance with the permit is compliance with federal law, and 2) it enumerates exceptions when compliance with the permit can violate federal law. The exceptions are intervening 1) statutory requirements; 2) 40 CFR 268 land disposal restrictions; 3) 40 CFR 264 leak detection requirements; and 4) 40 CFR 266, subparts AA, BB, and CC air emissions limitations. By not codifying the federal exceptions, since they are not necessary in the Illinois program to accomplish the intended purpose, the Board does not intend to imply that compliance with a RCRA permit obviates immediate compliance with any of the events included in the federal exceptions.

b) The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any

infringement of State or local law or regulations, except as noted in subsection (a) above.

BOARD NOTE: Derived from 40 CFR 144.35 (1993) and 40 CFR 270.4 (1994), as amended at 59 Fed. Reg. 62952 (Dec. 6, 1994).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 703
RCRA PERMIT PROGRAM

SUBPART A: GENERAL PROVISIONS

Section
703.100 Scope and Relation to Other Parts
703.101 Purpose
703.110 References

SUBPART B: PROHIBITIONS

Section
703.120 Prohibitions in General
703.121 RCRA Permits
703.122 Specific Inclusions in Permit Program
703.123 Specific Exclusions from Permit Program
703.124 Discharges of Hazardous Waste
703.125 Reapplications
703.126 Initial Applications
703.127 Federal Permits (Repealed)

SUBPART C: AUTHORIZATION BY RULE AND INTERIM STATUS

Section
703.140 Purpose and Scope
703.141 Permits by Rule
703.150 Application by Existing HWM Facilities and Interim Status Qualifications
703.151 Application by New HWM Facilities
703.152 Amended Part A Application
703.153 Qualifying for Interim Status
703.154 Prohibitions During Interim Status
703.155 Changes During Interim Status
703.156 Interim Status Standards
703.157 Grounds for Termination of Interim Status
703.158 Permits for Less Than an Entire Facility
703.159 Closure by Removal
703.160 Procedures for Closure Determination

SUBPART D: APPLICATIONS

Section
703.180 Applications in General
703.181 Contents of Part A
703.182 Contents of Part B
703.183 General Information
703.184 Facility Location Information
703.185 Groundwater Protection Information
703.186 Exposure Information
703.187 Solid Waste Management Units
703.188 Other Information

SUBPART E: SHORT TERM AND PHASED PERMITS

SUBPART F: PERMIT CONDITIONS OR DENIAL

SUBPART G: CHANGES TO PERMITS

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

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 Ill. Reg. 14289, effective October 12, 1983; amended in R83-24 at 8 Ill. Reg. 206, effective December 27, 1983; amended in R84-9 at 9 Ill. Reg. 11899, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1110, effective January 2, 1986; amended in R85-23 at 10 Ill. Reg. 13284, effective July 28, 1986; amended in R86-1 at 10 Ill. Reg. 14093, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20702,

effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6121, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13543, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19383, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2584, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13069, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 447, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18477, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6278, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14492, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9616, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14554, effective September 30, 1991; amended in R91-13 at 16 Ill Reg. 9767, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5774, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20794, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6898, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12392, effective July 29, 1994; amended in R94-5 at 18 Ill. Reg. 18316, effective December 20, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART D: APPLICATIONS

Section 703.183 General Information

The following information is required in the Part B application for all HWM facilities, except as 35 Ill. Adm. Code 724.101 provides otherwise:

a) A general description of the facility;

b) Chemical and physical analyses of the hazardous wastes and hazardous debris to be handled at the facility. At a minimum, these analyses must contain all the information which must be known to treat, store or dispose of the wastes properly in accordance with 35 Ill. Adm. Code 724;

c) A copy of the waste analysis plan required by 35 Ill. Adm. Code 724.113(b) and, if applicable, 35 Ill. Adm. Code 724.113(c);

d) A description of the security procedures and equipment required by 35 Ill. Adm. Code 724.114, or a justification demonstrating the reasons for requesting a waiver of this requirement;

e) A copy of the general inspection schedule required by 35 Ill. Adm. Code 724.115(b). Include where applicable, as part of the inspection schedule, specific requirements in 35 Ill. Adm. Code 724.274, 724.293(i), 724.295, 724.326, 724.354, 724.373, 724.403, 724.702, 724.933, 724.952, 924.953, ~~and~~ 724.958, 724.988, and 724.991;

f) A justification of any request for a waiver of the preparedness and prevention requirements of 35 Ill. Adm. Code 724.Subpart C;

g) A copy of the contingency plan required by 35 Ill. Adm. Code 724.Subpart D;

BOARD NOTE: Include, where applicable, as part of the contingency plan, specific requirements in 35 Ill. Adm. Code 724.327 and 724.355. 35 Ill. Adm. Code 724.355 has not yet been adopted.

h) A description of procedures, structures, or equipment used at the facility to:

1) Prevent hazards in unloading operations (for example, ramps,

or special forklifts);

2) Prevent runoff from hazardous waste handling areas to other areas of the facility or environment, or to prevent flooding (for example, berms, dikes, or trenches);

3) Prevent contamination of water supplies;

4) Mitigate effects of equipment failure and power outages;

5) Prevent undue exposure of personnel to hazardous waste (for example, protective clothing); and

6) Prevent releases to the atmosphere.

i) A description of precautions to prevent accidental ignition or reaction of ignitable, reactive, or incompatible wastes, as required to demonstrate compliance with 35 Ill. Adm. Code 724.117, including documentation demonstrating compliance with 35 Ill. Adm. Code 724.117(c);

j) Traffic pattern, estimated volume (number, and types of vehicles), and control (for example, show turns across traffic lanes and stacking lanes, if appropriate); describe access road surfacing and load bearing capacity; and show traffic control signals);

k) Facility location information, as required by Section 703.184;

l) An outline of both the introductory and continuing training programs by the owners or operators to prepare persons to operate or maintain the HWM facility in a safe manner, as required to demonstrate compliance with 35 Ill. Adm. Code 724.116. A brief description of how training will be designed to meet actual job tasks in accordance with requirements in 35 Ill. Adm. Code 724.116(a)(3);

m) A copy of the closure plan and, where applicable, the post-closure plan required by 35 Ill. Adm. Code 724.212, 724.218, and 724.297. Include where applicable, as part of the plans, specific requirements in 35 Ill. Adm. Code 724.278, 724.297, 724.328, 724.358, 724.380, 724.410, 724.451, 724.701, and 724.703;

n) For hazardous waste disposal units that have been closed, documentation that notices required under 35 Ill. Adm Code 724.219 have been filed;

o) The most recent closure cost estimate for the facility, prepared in accordance with 35 Ill. Adm. Code 724.242, and a copy of the documentation required to demonstrate financial assurance under 35 Ill. Adm. Code 724.243. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if it is later than the submission of the Part B permit application;

p) Where applicable, the most recent post-closure cost estimate for the facility, prepared in accordance with 35 Ill. Adm. Code 724.244, plus a copy of the documentation required to demonstrate financial assurance under 35 Ill. Adm. Code 724.245. For a new facility, a copy of the required documentation may be submitted 60 days prior to the initial receipt of hazardous wastes, if it is later than the submission of the Part B permit application;

q) Where applicable, a copy of the insurance policy or other documentation which comprises compliance with the requirements of 35 Ill. Adm. Code 724.247. For a new facility, documentation showing the amount of insurance meeting the specification of 35 Ill. Adm. Code 724.247(a) and, if applicable, 35 Ill. Adm. Code 724.247(b), that the owner or operator plans to have in effect before initial receipt of hazardous waste for treatment, storage, or disposal. A request for an alternative level of required coverage, for a new or existing facility, may be submitted as specified in 35 Ill. Adm. Code 724.247(c);

r) A topographic map showing a distance of 1000 feet around the facility at a scale of 2.5 centimeters (1 inch) equal to not more than 61.0 meters (200 feet). Contours must be shown on the map. The contour interval must be sufficient to clearly show the pattern of surface water flow in the vicinity of and from each operational unit of the facility. For example, contours with an interval of 1.5 meters (5 feet), if relief is greater than 6.1 meters (20 feet), or an interval of 0.6 meters (2 feet), if relief is less than 6.1 meters (20 feet). Owners and operators of HWM facilities located in mountainous areas shall use larger contour intervals to adequately show topographic profiles of facilities. The map must clearly show the following:

1) Map scale and date;

2) 100-year floodplain area;

3) Surface waters including intermittent streams;

4) Surrounding land uses (e.g., residential, commercial, agricultural, recreational, etc.);

5) A wind rose (i.e., prevailing windspeed and direction);

6) Orientation of the map (north arrow);

7) Legal boundaries of the HWM facility site;

8) Access control (e.g., fences, gates, etc.);

9) Injection and withdrawal wells both on-site and off-site;

10) Buildings; treatment, storage, or disposal operations; or other structures (e.g., recreation areas, runoff control systems, access and internal roads, storm, sanitary and process sewage systems, loading and unloading areas, fire control facilities, etc.);

11) Barriers for drainage or flood control;

12) Location of operational units within the HWM facility site, where hazardous waste is (or will be) treated, stored, or disposed (include equipment cleanup areas);

BOARD NOTE: For large HWM facilities, the Agency shall allow the use of other scales on a case by case basis.

s) Applicants shall submit such information as the Agency determines is necessary for it to determine whether to issue a permit and what conditions to impose in any permit issued.

t) For land disposal facilities, if a case-by-case extension has been approved under 35 Ill. Adm. Code 728.105~~,~~ or if a petition has been approved under 35 Ill. Adm. Code 728.106, a copy of the notice of approval of the extension or of approval of the petition is required.

BOARD NOTE: Derived from 40 CFR 270.14(b) (19~~88~~94), as amended at 5~~7~~9 Fed. Reg. ~~37281, August 18, 1992~~62952 (Dec. 6, 1994).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 703.201 Containers

For facilities that store containers of hazardous waste, except as otherwise provided in 35 Ill. Adm. Code 724.270, the Part B application must include:

a) A description of the containment system to demonstrate compliance with 35 Ill. Adm. Code 724.275. Show at least the following:

1) Basic design parameters, dimensions, and materials of construction;

2) How the design promotes drainage or how containers are kept from contact with standing liquids in the containment system;

3) Capacity of the containment system relative to the number and volume of containers to be stored;

4) Provisions for preventing or managing run-on; and

5) How accumulated liquids can be analyzed and removed to prevent overflow~~;~~.

b) For storage areas that store containers holding wastes that do not contain free liquids, a demonstration of compliance with 35 Ill. Adm. Code 724.275(c), including:

1) Test procedures and results or other documentation or information to show that the wastes do not contain free liquids; and

2) A description of how the storage area is designed or operated to drain and remove liquids or how containers are kept from contact with standing liquids~~;~~.

c) Sketches, drawings, or data demonstrating compliance with 35 Ill. Adm. Code 724.276 (location of buffer zone and containers holding ignitable or reactive wastes) and Section 724.277(c) (location of incompatible wastes), where applicable.

d) Where incompatible wastes are stored or otherwise managed in containers, a description of the procedures used to ensure compliance with 35 Ill. Adm. Code 724.117(b) and (c) and 724.277(a) and (b).

e) Information on air emission control equipment, as required in Section 703.213.

BOARD NOTE: Derived from 40 CFR 270.15 (19~~92~~94), as amended at 59 Fed. Reg. 62952 (Dec. 6, 1994).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 703.202 Tank Systems

Except as otherwise provided in 35 Ill. Adm. Code 724.290, owners and operators of facilities that use tanks to store or treat hazardous waste shall provide the following additional linformation:

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

b) Dimensions and capacity of each tank;

c) Description of feed systems, safety cutoff, bypass systems, and pressure controls (e.g., vents);

d) A diagram of piping, instrumentation, and process flow for each tank system;

e) A description of materials and equipment used to provide external corrosion protection, as required under 35 Ill. Adm. Code 724.292(a)(3)(~~b~~B);

f) For new tank systems, a detailed descriptions of how the tank system(s) will be installed in compliance with 35 Ill. Adm. Code 724.292(b), (c), (d), and (e);

g) Detailed plans and description of how the secondary containment system for each tank system is or will be designed, constructed and operated to meet the requirements of 35 Ill. Adm. Code 724.293(a), (b), (c), (d), (e), and (f);

h) For tank systems for which alternative design and operating practices are sought pursuant to 35 Ill. Adm. Code 724.293(g):

1) Detailed plans and engineering and hydrogeologic reports, as appropriate, describing alternate design and operating practices that will, in conjunction with location aspects, prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water during the life of the facility, or

2) A detailed assessment of the substantial present or potential hazards posed to human health or the environment should a release enter the environment.

3) A copy of the petition for alternative design and operating practices or, if such have already been granted, a copy of the Board Order granting alternative design and operating practices.

i) Description of controls and practices to prevent spills and overflows, as required under 35 Ill. Adm. Code 724.294(b);~~and~~

j) For tank systems in which ignitable, reactive or incompatible wastes are to be stored or treated, a description of how operating procedures and tank system and facility design will achieve compliance with the requirements of 35 Ill. Adm. Code 724.298 and 724.299~~.~~; and

k) Information on air emission control equipment, as required in Section 703.213.

~~(Board Note~~BOARD NOTE: See 40 CFR 270.16 (198~~6~~94), as amended at 5~~1~~9 Fed. Reg. ~~25471, July 14, 1986~~62952 (Dec. 6, 1994).~~)~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 703.203 Surface Impoundments

For facilities that store, treat, or dispose of hazardous waste in surface impoundments, except as otherwise provided in 35 Ill. Adm. Code 724.101, the Part B application must include:

a) A list of the hazardous wastes placed or to be placed in each surface impoundment~~;~~.

b) Detailed plans and an engineering report describing how the surface impoundment is designed and is or will be constructed, operated, and maintained to meet the requirements of 35 Ill. Adm. Code 724.119, 724.321, 724.322 and 724.323, addressing the following items:

1) The liner system (except for an existing portion of a surface impoundment). If an exemption from the requirement for a liner is sought, as provided by 35 Ill. Adm. Code 724.321(b), submit a copy of the Board order granting an adjusted standard pursuant to 35 Ill. Adm. Code 724.321(b);

2) The double liner and leak (leachate) detection, collection, and removal system, if the surface impoundment must meet the requirements of 35 Ill. Adm. Code 724.321(c). If an exemption from the requirements for double liners and a leak detection, collection, and removal system or alternative design is sought as provided by 35 Ill. Adm. Code 724.321(d), (e), or (f), submit appropriate information;

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

4) The construction quality assurance (CQA) plan if required under 35 Ill. Adm. Code 724.119; and

5) Proposed action leakage rate, with rationale, if required under 35 Ill. Adm. Code 724.322~~,~~; response action plan, if required under 35 Ill. Adm. Code 724.323~~,~~; and a proposed pump operating level, if required under 35 Ill. Adm. Code 724.326(d)(3);

6) Prevention of overtopping; and

7) Structural integrity of dikes~~;~~.

c) A description of how each surface impoundment, including the double liner system, leak detection system, cover system and appurtenances for control of overtopping~~,~~ will be inspected in order to meet the requirements of 35 Ill. Adm. Code 724.326(a), (b), and (d). This information must be included in the inspection plan submitted under Section 703.183(e)~~;~~.

d) A certification by a qualified engineer which attests to the structural integrity of each dike, as required under 35 Ill. Adm. Code 724.326(c). For new units, the owner or operator shall submit a statement by a qualified engineer that the engineer will provide such a certification upon completion of construction in accordance with the plans and specifications~~;~~.

e) A description of the procedure to be used for removing a surface impoundment from service, as required under 35 Ill. Adm. Code 724.327(b) and (c). This information must be included in the contingency plan submitted under Section 703.183(g)~~;~~.

f) A description of how hazardous waste residues and contaminated materials will be removed from the unit at closure, as required under 35 Ill. Adm. Code 724.328(a)(1). For any wastes not to be removed from the unit upon closure, the owner or operator shall submit detailed plans and an engineering report describing how 35 Ill. Adm. Code 724.328(a)(2) and (b) will be complied with. This information must be included in the closure plan and, where applicable, the post-closure plan submitted under Section 703.183(m)~~;~~.

g) If ignitable or reactive wastes are to be placed in a surface impoundment, an explanation of how 35 Ill. Adm. Code 724.329 will be complied with~~;~~.

h) If incompatible wastes, or incompatible wastes and materials, will be placed in a surface impoundment, an explanation of how 35 Ill. Adm. Code 724.330 will be complied with~~; and~~.

i) A waste management plan for hazardous waste numbers F020, F021, F022, F023, F026, and F027 describing how the surface impoundment is or will be designed, constructed, operated, and maintained to meet the requirements of 35 Ill. Adm. Code 724.331. This submission must address the following items as specified in that Section:

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

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

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

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

j) Information on air emission control equipment, as required in Section 703.213.

BOARD NOTE: Derived from 40 CFR 270.17 (199~~3~~4), as amended at 5~~7~~9 Fed. Reg. ~~3486, January 29, 1992~~62952 (Dec. 6, 1994).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

a) Except as otherwise provided in 35 Ill. Adm. Code 724.101, owners

and operators of tanks, surface impoundments, or containers that use air emission controls in accordance with the requirements 35 Ill. Adm. Code 724.Subpart CC shall provide the following additional information:

1) Documentation for each cover installed on a tank subject to 35 Ill. Adm. Code 724.984(b)(2) or 724.984(b)(3) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in 35 Ill. Adm. Code 725.991(c).

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

3) Documentation for each enclosure used to control air emissions from containers in accordance with the requirements of 35 Ill. Adm. Code 724.986(b)(2)(A) that includes information prepared by the owner or operator or provided by the manufacturer or vendor describing the enclosure design, and certification by the owner or operator that the enclosure meets the specifications listed in 35 Ill. Adm. Code 725.987(b)(2)(B).

4) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of 35 Ill. Adm. Code 724.985(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in 35 Ill. Adm. Code 725.986(e).

5) Documentation for each closed-vent system and control device installed in accordance with the requirements of 35 Ill. Adm. Code 724.987 that includes design and performance information as specified in 703.24(c) and (d).

6) An emission monitoring plan for both Method 21 and control device monitoring methods. This plan must include the following information: monitoring points, monitoring methods for control devices, monitoring frequency, procedures for documenting exceedances, and procedures for mitigating noncompliances.

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

BOARD NOTE: Derived from 40 CFR 270.27, added at 59 Fed. Reg. 62952 (Dec. 6, 1994).

(Source: Added at 19 Ill. Reg. _____, effective _____)

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

SUBCHAPTER b: PERMITS

PART 705
PROCEDURES FOR PERMIT ISSUANCE

SUBPART A: GENERAL PROVISIONS

Section
705.101 Scope and Applicability
705.102 Definitions
705.103 Computation of Time

SUBPART B: PERMIT APPLICATIONS

Section
705.121 Permit Application
705.122 Completeness
705.123 Incomplete Applications
705.124 Site Visit
705.125 Effective Date
705.126 Decision Schedule
705.127 Consolidation of Permit Processing
705.128 Modification of Permits

SUBPART C: APPLICATION REVIEW

Section
705.141 Draft Permits
705.142 Statement of Basis
705.143 Fact Sheet
705.144 Administrative Record for Draft Permits or Notices of Intent to Deny

SUBPART D: PUBLIC NOTICE

Section
705.161 When Public Notice Must Be Given
705.162 Timing of Public Notice
705.163 Methods of Public Notice
705.164 Contents of Public Notice
705.165 Distribution of Other Materials

SUBPART E: PUBLIC COMMENT

Section
705.181 Public Comments and Requests for Public Hearings
705.182 Public Hearings
705.183 Obligation to Raise Issues and Provide Information
705.184 Reopening of Public Comment Period

SUBPART F: PERMIT ISSUANCE

Section
705.201 Final Permit Decision
705.202 Stay upon Timely Application for Renewal
705.203 Stay for New Application or upon Untimely Application for Renewal
705.204 Stay upon Reapplication or for Modification
705.205 Stay Following Interim Status
705.210 Agency Response to Comments
705.211 Administrative Record for Final Permits or Letters of Denial
705.212 Appeal of Agency Permit Determinations

Appendix A: Procedures for Permit Issuance
Appendix B: Modification Process
Appendix C: Application Process
Appendix D: Application Review Process
Appendix E: Public Comment Process
Appendix F: Permit Issuance or Denial

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

SOURCE: Adopted in R81-32, 47 PCB 93, at 6 Ill. Reg. 12479, effective May 17, 1982; amended in R82-19, at 7 Ill. Reg. 14352, effective May 17, 1982; amended in R84-9, at 9 Ill. Reg. 11894, effective July 24, 1985; amended in R89-2 at 14 Ill. Reg. 3082, effective February 20, 1990; amended in R94-5 at 18 Ill. Reg. 18265, effective December 20, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART B: PERMIT APPLICATIONS

Section 705.128 Modification of Permits

a) The Agency may modify a pPermits ~~may be modified~~ either at the ~~request of any interested person (including the permittee)~~ or ~~upon the Agency's~~its own initiative. However, the Agency may only modify a permits ~~may only be modified~~ for ~~the reasons specified~~ in 35 Ill. Adm. Code 704.261 through 704.263 or 35 Ill. Adm. Code 703.270 through 703.273. A~~ll~~ requests for permit modification ~~shall~~must be made in writing, must be addressed ~~to the Agency~~ (Division of Land Pollution Control), and ~~shall~~must contain facts or reasons supporting the request.

b) If the Agency ~~decides~~determines that ~~the~~a request for modification is not justified, it shall send the requester a brief written response giving a reason for the ~~decision~~determination. A dDenials of a requests for modification ~~are~~is not subject to public notice, comment, or public hearings requirements. The requester may appeal a dDenial of a request to modify a permit~~may be appealed~~ to the Board pursuant to 35 Ill. Adm. Code ~~105.~~

c) Agency Modification Procedures

1) If the Agency tentatively decides to initiate steps to modify a permit under this sSection and 35 Ill. Adm. Code 704.261 through 704.263 or 35 Ill. Adm. Code 703.270 through 703.273, ~~it shall,~~ after giving public notice pursuant to Section 705.161(a)(1), as though an application ~~had been~~ received ~~(See. 705.161(a)(1))~~, it shall prepare a draft permit under Sec~~.~~tion 705.141 ~~incorporating the~~ proposed changes. The Agency may request additional information and may require the submission of an updated permit application. For reissued permits, the Agency shall require the submission of a new application.

2) In a permit modification proceeding under this sSection, only those conditions to be modified shall be reopened when a new draft permit is prepared. During any modification proceeding, including any appeals ~~if any~~to the Board, the permittee shall comply with all conditions of ~~the~~its existing permit until a new final permit is reissued.

3) "Minor modifications", as defined in 35 Ill. Adm. Code 704.264, and "Class 1 and 2 modifications," as defined in 35 Ill. Adm. Code 703.281 and 703.282, are not subject to the requirements of this sSection. If the Agency makes a minor modification, the modified permit must be accompanied by a letter stating the reasons for the minor modification.

d) To the extent that the Agency has authority to terminate or

reissue permits, ~~if it decides to do so,~~ it must prepare a draft permit or notice of intent to deny in accordance with Section 705.141 if it decides to do so.

e) The Agency or any person may seek the revocation of a permit in accordance with Title VIII of the Environmental Protection Act and ~~in accordance with~~the procedure of 35 Ill. Adm. Code 103. Revocation may only be sought ~~only~~ for those reasons specified in 35 Ill. Adm. Code 702.186(a) through (d).

~~(Board Note~~BOARD NOTE: Derived from 40 CFR 124.5 (198893)~~, amended at 53 Fed. Reg. 37934, September 26, 1988)~~.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 720
HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

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

SUBPART B: DEFINITIONS

Section
720.110 Definitions
720.111 References

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section
720.120 Rulemaking
720.121 Alternative Equivalent Testing Methods
720.122 Waste Delisting
720.130 Procedures for Solid Waste Determinations
720.131 Solid Waste Determinations
720.132 Boiler Determinations
720.133 Procedures for Determinations
720.140 Additional regulation of certain hazardous waste Recycling Activities on a case-by-case Basis
720.141 Procedures for case-by-case regulation of hazardous waste Recycling Activities

720.Appendix A Overview of 40 CFR, Subtitle C Regulations

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended in R82-19 at 7 Ill. Reg. 14015, effective October 12, 1983; amended in R84-9, 53 PCB 131 at 9 Ill. Reg. 11819, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at

11 Ill. Reg. 6017, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2450, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 12999, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 362, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18278, effective November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3075, effective February 20, 1990; amended in R89-9 at 14 Ill. Reg. 6225, effective April 16, 1990; amended in R90-10 at 14 Ill. Reg. 16450, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7934, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9323, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14446, effective September 30, 1991; amended in R91-13 at 16 Ill. Reg. 9489, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17636, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5625, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20545, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6720, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12160, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17480, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART B: DEFINITIONS

Section 720.111 References

a) The following publications are incorporated by reference:

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

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

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

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

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

"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.

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

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

APTI. Available from the Air and Waste Management

Association, Box 2861, Pittsburgh, PA 15230, 412-232-3444:

APTI Course 415: Control of Gaseous Emissions, U.S. EPA Publication EPA-450/2-81-005, December, 1981.

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

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

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

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

ASTM 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_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_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_2879-86, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved October 31, 1986.

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 E_926-88 C, Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analysis of Metals, Bomb-Acid Digestion Method, approved March 25, 1988.

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.

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, 202-783-3238:

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

"Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," U.S. EPA Publication number SW-846 (Third Edition, November, 1986), as amended by Updates I and IIA (Document Number 955-001-00000-1) (contact U.S. EPA, Office of Solid Waste, or MICE, as indicated below, for Update IIA).

MICE. Available from Methods Information Communication Service, at 703-821-4789:

"Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," U.S. EPA Publication number SW-846 (Third Edition, November, 1986), Update IIA (Document Number 955-001-00000-1) (contact GPO, as indicated above, for SW-846 and Update I).

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

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems", NACE Recommended Practice RP0285-85, approved March, 1985.

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

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

NTIS. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, 703-487-4600:

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

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

"Methods for Chemical Analysis of Water and Wastes", Third Edition, March, 1983. (Document number PB 84-128677).

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

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

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

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

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).

U.S. EPA. 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.

U.S. EPA. Available from U.S. EPA, Office of Solid Waste (Mail Code 5304), 401 M Street SW, Washington, D.C. 20460:

"Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods," U.S. EPA Publication number SW-846 (Third Edition, November, 1986), Update IIA (Document Number 955-001-00000-1) (contact GPO, as indicated above, for SW-846 and Update I).

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

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

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

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

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

10 CFR 20, Appendix B (1992~~4~~)

40 CFR 51.100(ii) (1992~~4~~)

40 CFR 51, Subpart ~~W, as added at 58 Fed. Reg. 38822 (July 20, 1993)~~ (1994)

40 CFR 60 (1992~~4~~), as amended at 59 Fed. Reg. 62924 (Dec. 6, 1994)

40 CFR 61, Subpart V (1992~~4~~)

40 CFR 136 (1992~~4~~)

40 CFR 142 (1992~~4~~)

40 CFR 220 (1992~~4~~)

40 CFR 260.20 (1992~~4~~)

40 CFR 264 (1992~~4~~)

40 CFR 268.Appendix IX (1992~~4~~)

40 CFR 302.4, 302.5 and 302.6 (1992~~4~~)

40 CFR 761 (1992~~4~~)

49 CFR 178 (1994)

c) Federal Statutes

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

d) This Section incorporates no later editions or amendments.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART C: RULEMAKING PETITIONS AND OTHER PROCEDURES

Section 720.121 Alternative Equivalent Testing Methods

a) The Agency has no authority to alter the universe of regulated wastes. Modification of testing methods ~~which~~that are stated in ~~Part~~35 Ill. Adm. Code 721 requires rulemaking pursuant to Section 720.120. However, deviation from these methods is allowed under ~~the express provisions of Part~~35 Ill. Adm. Code 721, as for example ~~in Section~~by 35 Ill. Adm. Code 721.120(c).

b) The Agency may approve alternative equivalent testing methods ~~to be~~for a particular person's used ~~by a certain person~~ to determine whether specified ~~types of~~ waste streams are subject to these regulations. This shall be done by permit condition or ~~by a letter directed to the person~~.

c) The ~~Board does not intend to require that either the~~ testing methods specified in ~~Part~~35 Ill. Adm. Code 721 or ~~the~~ alternative equivalent testing methods approved by the Agency ~~should~~need not be applied to identify or distinguish waste streams ~~which~~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 testing procedures (Section 725.113).

d) Any petition to the Board or request to the Agency concerning alternative equivalent testing methods ~~shall~~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 at 19 Ill. Reg. _____, effective _____)

Section 720.130 Procedures for Solid Waste Determinations

In accordance with the standards and criteria in Section 720.131 and the procedures in Section 720.133, the Board will determine on a case-by-case basis that the following recycled materials are not solid wastes:

a) Materials that are accumulated speculatively without sufficient amounts being recycled (as defined in Section 721.101(c)(8))~~.~~;

b) Materials that are reclaimed and then reused within the original ~~primary~~ production process in which they were generated; and

c) Materials that have been reclaimed but must be reclaimed further before the materials are completely recovered.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 720.131 Solid Waste Determinations

a) The Board will determine that those materials that are accumulated speculatively without sufficient amounts being recycled are not solid wastes if the applicant demonstrates that sufficient amounts of the material will be recycled or transferred for recycling in the following year. Such a determination is valid only for the following year, but can be renewed, on an annual basis, by filing a new application. This determination will be based on the following criteria:

1) The manner in which the material is expected to be recycled, when the material is expected to be recycled, and whether this expected disposition is likely to occur (for example, because of past practice, market factors, the nature of the material or contractual arrangements for recycling);

2) The reason that the applicant has accumulated the material for one or more years without recycling 75 percent of the volume accumulated at the beginning of the year;

3) The quantity of material already accumulated and the quantity expected to be generated and accumulated before the material is recycled;

4) The extent to which the material is handled to minimize loss; and

5) Other relevant factors.

b) The Board will determine that those materials that are reclaimed and then reused as feedstock within the original ~~primary~~ production process in which the materials were generated are not solid wastes if the reclamation operation is an essential part of the production process. This determination will be based on the following criteria:

1) How economically viable the production process would be if it were to use virgin materials, rather than reclaimed materials;

2) The prevalence of the practice on an industry-wide basis;

3) The extent to which the material is handled before reclamation to minimize loss;

4) The time periods between generating the material and its reclamation, and between reclamation and return to the original primary production process;

5) The location of the reclamation operation in relation to the production process;

6) Whether the reclaimed material is used for the purpose for which it was originally produced when it is returned to the original process, and whether it is returned to the process in substantially its original form;

7) Whether the person ~~who~~that generates the material also reclaims it; and

8) Other relevant factors.

c) The Board will determine that those materials that have been reclaimed but must be reclaimed further before recovery is completed are not solid wastes if, after initial reclamation, the resulting material is commodity-like (even though it is not yet a commercial product, and has to be reclaimed further). This determination will be based on the following criteria:

1) The degree of processing the material has undergone and the degree of further processing that is required;

2) The value of the material after it has been reclaimed;

3) The degree to which the reclaimed material is like an analogous raw material;

4) The extent to which an end market for the reclaimed material is guaranteed;

5) The extent to which the reclaimed material is handled to minimize loss; and

6) Other relevant factors.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 721
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

SUBPART A: GENERAL PROVISIONS

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

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

SUBPART D: LISTS OF HAZARDOUS WASTE

	from Specific Sources
Table C	Wastes Excluded by U.S. EPA under 40 CFR 260.20 and 260.22 ~~f~~From Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof
Table D	Wastes Excluded by the Board by Adjusted Standard
721.Appendix J	Method of Analysis for Chlorinated Dibenzo-p-Dioxins and Dibenzofurans (Repealed)
721.Appendix Z	Table to Section 721.102

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended in R82-18, 51 PCB 31, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 PCB 247, at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9, at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective 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. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 721.102 Definition of Solid Waste

a) Solid waste.

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

2) A discarded material is any material ~~which~~that is:

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

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

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

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

1) Disposed of; or

2) Burned or incinerated; or

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

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

1) Used in a manner constituting disposal.

A) Materials noted with a "yes" in column 1 of table in Section 721.Appendix Z are solid wastes when they are:

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

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

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

2) Burned for energy recovery.

A) Materials noted with a "yes" in column 2 of table in Section 721.Appendix Z are solid wastes when they are:

i) burned to recover energy;

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

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

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

3) Reclaimed. Materials noted with a "yes" in column 3 of table in Section 721.Appendix Z are solid wastes when reclaimed.

4) Accumulated speculatively. Materials noted with "yes" in column 4 of table in Section 721.Appendix Z are solid wastes when accumulated speculatively.

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

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

2) Secondary materials fed to a halogen acid furnace that exhibit a characteristic of a hazardous waste or are listed as a hazardous waste as defined in 721.Subparts C or D, except for brominated material ~~which~~that meets the following criteria:

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

B) The material must contain less than a total of 1% of toxic organic compounds listed in Section 721.Appendix H; 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 ordinarily disposed of, burned, or incinerated; or

ii) The materials contain toxic constituents listed in Section 721.Appendix H and these constituents are not ordinarily found in raw materials or products for which the materials substitute (or are found in raw materials or products in smaller concentrations) and are not used or reused during the recycling process; and

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

e) Materials that are not solid waste when recycled.

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

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

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

C) Returned to the original process from which they are generated, without first being reclaimed. The materials must be returned as a substitute for ~~raw materials~~ feedstock materials~~, and the process must use raw materials as principal feedstocks~~. In cases where the original process to which the material is returned is a secondary process, the materials must be managed so there is no placement on the land.

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), above):

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

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

C) Materials accumulated speculatively; or

D) Materials listed in subsections (d)(1) and (d)(2), above.

f) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation. Respondents in actions to enforce regulations implementing Subtitle C of the Resource Conservation Recovery Act or Section 21 of the Environmental Protection Act ~~who~~that raise 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 terms of the exclusion or exemption. In doing so, they 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 or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.103 Definition of Hazardous Waste

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

1) It is not excluded from regulation as a hazardous waste under Section 721.104(b); and

2) It meets any of the following criteria:

A) It exhibits any of the characteristics of hazardous waste identified in 721.Subpart C ~~of this Part~~.

i) Except that any mixture of a waste from the extraction, beneficiation, or processing of ores or minerals excluded under Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under 721.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 it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture.

ii) Further, for the purposes of applying the toxicity characteristic to such mixtures under subsection (a)(2)(A)(i) above, 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 721.Subpart D ~~of this Part~~ and has not been excluded from the lists in 721.Subpart D ~~of this Part~~ under 35 Ill. Adm. Code 720.120 and 720.122.

C) It is a mixture of a solid waste and a hazardous waste that is listed in 721.Subpart D ~~of this Part~~ solely because it exhibits one or more of the characteristics of hazardous waste identified in 721.Subpart C ~~of this Part~~, unless:

i) the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 721.Subpart C ~~of this Part~~, or ~~unless~~

ii) the solid waste~~,~~ is excluded from regulation under Section 721.104(b)(7)~~,~~ and~~,~~ the resultant mixture no longer exhibits any characteristic of hazardous waste identified in 721.Subpart C ~~of this Part~~ for which the hazardous waste listed in 721.Subpart D ~~of this Part~~ was listed.

iii) ~~(However, n~~Nonwastewater mixtures are still subject to the requirements of 35 Ill. Adm. Code 728, even if they no longer exhibit a characteristic at the point of land disposal~~.~~.

D) It is a mixture of solid waste and one or more hazardous wastes listed in 721.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; however, the following mixtures of solid wastes and hazardous wastes listed in 721.Subpart D ~~of this Part~~ are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) above) 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 ~~which~~that have eliminated the discharge of wastewater) and:

i) 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; or

ii) One or more of the following spent solvents listed in Section 721.131: - methylene chloride, 1,1,1 - trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent 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; or

iii) One of the following wastes listed in Section 721.132: - heat exchanger bundle cleaning sludge from the petroleum refining industry (U.S. EPA Hhazardous Wwaste Nno. K050); or

iv) 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; or

v) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in 721.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.

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 721.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, ~~3d ed.,~~ 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 721.Appendix H).

i) The rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins~~,~~ if they are processed~~,~~ through a tolling arrangement as described in 35 Ill. Adm. Code 739.124(c)~~,~~ to reclaim metalworking oils or fluids. The presumption does apply to metalworking oils or fluids if such oils or fluids are recycled in any other manner, or disposed.

ii) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

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

1) In the case of a waste listed in 721.Subpart D ~~of this Part~~, when the waste first meets the listing description set forth in 721.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 721.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 721.Subpart C ~~of this Part~~.

c) Unless and until it meets the criteria of subsection (d) below~~+~~, 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) below.

~~1) A hazardous waste will remain a hazardous waste.~~

~~2) Specific inclusions and exclusions.~~

~~A) Except as otherwise provided in subsection (c)(2)(B) below, any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the~~

~~reclaimed material is burned for energy recovery or used in a manner constituting disposal.)~~

~~B) The following solid wastes are not hazardous even though they are generated from the treatment, storage or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste.~~

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

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

~~iii) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061, K062 or F006 waste, in units identified, 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 for all constituents, and exhibit no characteristics of hazardous waste. The types of units 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. 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. 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:~~

~~Constituent~~	~~Maximum for any single composite sample (mg/L)~~
~~Generic exclusion levels for K061 and K062 nonwastewater HTMR residues.~~	
~~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 . . . . . 1.36~~
~~Zinc . . . . . 70.~~

~~Generic exclusion levels for F006 nonwastewater HTMR residues~~

~~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~~

~~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 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 do not exhibit any characteristics that are sent to RCRA Subtitle D units. The notification and certification that is placed in the generators or treaters 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; 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."~~

~~BOARD NOTE: The generic exclusion levels for arsenic and zinc are higher than the HTMR-based alternative treatment standards for K062 and F006, and HTMR-based treatment standards for K061, specified in 35 Ill. Adm. Code 728.141. However, the HTMR residues must meet the applicable treatment standards prior to generic exclusion. Therefore, to be eligible for a generic exclusion, the treated residues must meet the lower of either the treatment standards or the generic exclusion levels for each constituent.~~

d) Any solid waste described in subsection (c) above is not a hazardous waste if it meets the following criteria:

1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in 721.Subpart C ~~of this Part~~. (However, wastes ~~which~~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 ~~which~~that is a listed waste under 721.Subpart D ~~of this Part~~, a waste that contains a waste listed under 721.Subpart D ~~of this Part~~, or a waste that is derived from a waste listed in 721.Subpart D ~~of this Part~~, it also has been excluded from subsection (c) above under 35 Ill. Adm. Code 720.120 and 720.122.

e) ~~This subsection corresponds with 40 CFR 261.3(c), a subsection which has been deleted from the federal regulations. This statement maintains structural consistency with USEPA rules~~Specific inclusions and exclusions.

1) Except as otherwise provided in subsection (e)(2) below, 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 any of Section 721.106(a)(3)(D) through

(a)(3)(F).

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 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 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:

Constituent	Maximum for any single composite sample (mg/L)
Generic exclusion levels for K061 and K062 nonwastewater HTMR residues.	
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	
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 U.S. EPA 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 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 U.S. EPA 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."

BOARD NOTE: This subsection would normally correspond with 40 CFR 261.3(e), a subsection which has been deleted and marked "reserved" by U.S. EPA. Rather, this subsection corresponds with 40 CFR 261.3(c)(2), which the Board codified here to comport with codification requirements and enhance clarity.

f) Notwithstanding subsections (a) through (~~d~~g) above and provided the debris, as defined in 35 Ill. Adm. Code 728.102, does not exhibit a characteristic identified at 721.Subpart C ~~of this Part~~, the following materials are not subject to regulation under 35 Ill. Adm. Code 720, 721 to 726, 728, or 730:

1) Hazardous debris as defined in 35 Ill. Adm. Code 728.102 that has been treated using one of the required extraction or destruction technologies specified in ~~Table A of~~ 35 Ill. Adm. Code 728.~~145~~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.

(Source: Amended at 19 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; and

B) Any mixture of domestic sewage and other waste that passes through a sewer system to publicly-owned treatment works for treatment.

C) "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.

2) Industrial wastewater discharges that are point source discharges with NPDES permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309.

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

3) Irrigation return flows.

4) Source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)

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

6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless accumulated speculatively, as defined in Section 721.101(c).

7) Spent sulfuric acid used to produce virgin sulfuric acid~~,~~ unless it is accumulated speculatively, as defined in Section 721.101(c).

8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process, provided:

A) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;

B) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces or incinerators);

C) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and

D) The reclaimed material is not used to produce a fuel~~,~~ or used to produce products that are used in a manner constituting disposal.

9) Wood preserving wastes.

A) Spent wood preserving solutions that have been used and which are reclaimed and reused for their original intended purpose; and

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

10) Hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because they exhibit the toxicity characteristic specified in Section 721.124, when~~,~~ subsequent to generation~~,~~ these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or are mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point ~~they~~it ~~are~~is generated to the point ~~they~~it ~~are~~is recycled to coke ovens, to ~~or~~ tar recovery, to ~~or~~ the tar refining processes, or prior to when it is mixed with coal.

11) Nonwastewater splash condenser dross residue from the treatment of hazardous waste number K061 in high temperature metals recovery units, provided it is shipped in drums (if shipped) and not land disposed before recovery.

12) Recovered oil from petroleum refining, exploration, and production and from transportation incident thereto that is to be inserted into the petroleum refining process (SIC Code 2911) along with normal process streams prior to crude distillation or catalytic cracking. This exclusion applies to recovered oil stored or transported prior to insertion, except that the oil must not be stored in a manner involving placement on the land and the oil must not be accumulated speculatively before being recycled. Recovered oil is oil

that has been reclaimed from secondary materials (such as wastewater) generated from normal petroleum refining, exploration and production, and transportation practices. Recovered oil includes oil that is recovered from refinery wastewater collection and treatment systems, oil recovered from oil and gas drilling operations, and oil recovered from wastes removed from crude oil storage tanks. Recovered oil does not include (among other things) oil-bearing hazardous wastes listed in 721.Subpart D (e.g., K048 through K052, F037, and F038). However, oil recovered from such wastes may be considered recovered oil. Recovered oil also does not include used oil as defined in 35 Ill. Adm. Code 739.100.

b) Solid wastes that are not hazardous wastes. The following solid wastes are not hazardous wastes:

1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this Part, if such facility:

A) Receives and burns only:

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

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

B) Such facility does not accept hazardous waste and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.

BOARD NOTE: The U.S. Supreme Court determined, in City of Chicago v. Envronmental Defense Fund, Inc., no. 92-1639 (May 2, 1994), that this exclusion and RCRA section 3001(i) (42 U.S.C. § 6921(i)) do not exclude the ash from facilities covered by this subsection from regulation as a hazardous waste. At 59 Fed. Reg. 29372 (June 7, 1994), U.S. EPA granted facilities managing ash from such facilities that is determined a hazardous waste under 721.Subpart C until December 7, 1994 to file a Part A permit application pursuant to 35 Ill. Adm. Code 703.181.

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 721.124 and 721.Appendix B) because chromium is present or which are are listed in 721.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:

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

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 wastes that meet the standard in subsectione (b)(6)(A)~~(i), (b)(6)(A)(ii), and (b)(6)(A)(iii)~~ above (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. For purposes of this subsection, beneficiation of ores and minerals is restricted to the following activities: crushing, grinding, washing, dissolution, crystallization, filtration, sorting, sizing, drying, sintering, pelletizing, briquetting, calcining to remove water or carbon dioxide, roasting, autoclaving or chlorination in preparation for leaching (except where the roasting or autoclaving or chlorination 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. For the purposes of this subsection, solid waste from the processing of ores and minerals includes only the following wastes:

A) Slag from primary copper processing~~,~~

B) Slag from primary lead processing~~,~~

C) Red and brown muds from bauxite refining~~,~~

D) Phosphogypsum from phosphoric acid production~~,~~

E) Slag from elemental phosphorus production~~,~~

F) Gasifier ash from coal gasification~~,~~

G) Process wastewater from coal gasification~~,~~

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

I) Slag tailings from primary copper processing~~,~~

J) Fluorogypsum from hydrofluoric acid production~~,~~

K) Process wastewater from hydrofluoric acid production~~,~~

L) Air pollution control dust or sludge from iron blast furnaces~~,~~

M) Iron blast furnace slag~~,~~

N) Treated residue from roasting and leaching of chrome ore~~,~~

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

P) Process wastewater from phosphoric acid production~~,~~

Q) Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production~~,~~

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

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

T) Slag from primary zinc smelting.

8) Cement kiln dust waste, except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

9) Solid waste that consists of discarded arsenical-treated wood or wood products ~~which~~that fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and ~~that~~which is not a hazardous waste for any other reason if the waste is generated by persons ~~who~~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) ~~Injected groundwater that is hazardous only because it exhibits the toxicity characteristic (U.S. EPA hazardous waste codes D018 through D024 only) in Section 721.124 that is reinjected through an underground injection well pursuant~~

~~to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals petroleum bulk plants, petroleum pipelines, and petroleum spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For groundwater returned through infiltration galleries from such at petroleum refineries, marketing terminals, and bulk plants, until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) will qualify for this compliance date extension (until January 25, 1993) only if.~~This subsection corresponds with 40 CFR 261.4(b)(11), which expired by its own terms on January 25, 1993. This statement maintains structural parity with U.S. EPA regulations.

~~A) Operations are performed pursuant to a "free product removal report" pursuant to 35 Ill. Adm. Code 731.164; and~~

~~B) A copy of the "free product removal report" has been submitted to:~~

~~Characteristics Section (OS-333)~~
~~U.S. EPA~~
~~401 M Street, SW~~
~~Washington, D.C. 20460~~

12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems, that uses chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.

13) Non-terne plated used oil filters that are not mixed with wastes listed in 721.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.

c) Hazardous wastes that are exempted from certain regulations. A hazardous waste that is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit, or an associated non-waste-treatment manufacturing unit, is not subject to regulation under 35 Ill. Adm. Code 702, 703, 705, and 722 through 725, and 728 or to the notification requirements of Section 3010 of RCRA until it exits the unit in

which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing~~,~~ or for storage or transportation of product or raw materials.

d) Samples

1) Except as provided in subsection (d)(2) below, 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 728. The sample qualifies when:

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

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

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

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

E) The sample is being stored in a laboratory for testing but before it is returned to the sample collector; or

F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).

2) In order to qualify for the exemption in subsections (d)(1)(A) ~~and~~or (d)(1)(B) above, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall:

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

B) Comply with the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:

i) Assure that the following information accompanies the sample: The sample collector's name, mailing address, and telephone number; the laboratory's name, mailing address, and telephone number; the quantity of the sample; the date of the shipment; and a description of the sample.

ii) Package the sample so that it does not leak, spill, or vaporize from its packaging.

3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer

meeting any of the conditions stated in subsection (d)(1) above.

e) Treatability study samples.

1) Except as is provided in subsection (e)(2) below, a persons ~~who~~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; ~~or~~

B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or

C) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

2) The exemption in subsection (e)(1) above is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that:

A) The generator or sample collector uses (in "treatability studies") no more than 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 wastestream; and

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; and

C) The sample must be packaged so that it does not leak, spill, or vaporize from its packaging during shipment and the requirements of subsections (e)(2)(C)(i) or (e)(2)(C)(ii), below, are met.

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

ii) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number

of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its U.S. EPA hazardous waste number.

D) The sample is shipped to a laboratory or testing facility that is exempt under subsection (f) below, or has an appropriate RCRA permit or interim status.

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

iii) Documentation showing: The amount of waste shipped under this exemption; the name, address, and U.S. EPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and, whether or not unused samples and residues were returned to the generator.

F) The generator reports the information required in subsection (e)(2)(E)(iii) above 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 subsection (e)(2)(A) and (e)(2)(B) above and (f)(4) below, 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:

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: 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$_{T,L}$ 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) above are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (e)(2)(F) above. The generator or sample collector shall apply to the Agency and provide in writing the following information:

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

ii) Documentation accounting for all samples of hazardous waste from the wastestream 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 shall 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 may be appealed to the Board.

f) Samples undergoing treatability studies at laboratories or testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 705, 722 through 726, and 728$_T$ 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)$_T$ below$_T$ are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11)$_T$ below. Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11)$_T$ below$_T$ apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

1) No less than 45 days before conducting treatability studies, the facility notifies the Agency in writing that it intends to conduct treatability studies under this subsection.

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

3) 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 includetreatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.

5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (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 ~~3~~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 U.S. EPA 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 U.S. EPA identification number.

8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending ~~3~~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 U.S. EPA 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 U.S. EPA 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 subsection (e) exemption above.

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

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.106 Requirements for Recyclable Materials

a) Recyclable materials:

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

"recyclable materials".

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

A) Recyclable materials used in a manner constituting disposal (35 Ill. Adm. Code 726.Subpart C);

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

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

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

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

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

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

ii) Transporters transporting a shipment for export shall not accept a shipment if the transporter knows that the shipment does not conform to the U.S. EPA Acknowledgement of Consent, shall ensure that a copy of the U.S. EPA Acknowledgement of Consent accompanies the shipment, and shall ensure that it is delivered to the facility designated by the person initiating the shipment.

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

C) Scrap metal;

D) 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));

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

~~F~~E) Petroleum refining wastes.

i) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices~~,~~ or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil, so long as the resulting fuel meets the used oil specification under 35 Ill. Adm. Code 726.140(e) and so long as no other hazardous wastes are used to produce the hazardous waste fuel;

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

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

G~~F~~) Petroleum coke produced from petroleum refinery hazardous wastes containing oil ~~at the same facility at which such~~by the same person that generated the ~~wastes were generated,~~ unless the resulting coke product exceeds one or more of the characteristics of hazardous waste in 721.Subpart D ~~of this Part~~.

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 ~~which~~that is reused for any purpose~~, for any purpose~~ (including the purpose for which the oil was originally used). Such term includes, but is not limited

to, oil ~~which~~that is re-refined, reclaimed, burned for energy recovery, or reprocessed.

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), above.

c) Storage and recycling:

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

2) Owners or operators of facilities that recycle recyclable materials without storing them before they are recycled are subject to the following requirements, except as provided in subsection (a)~~,~~ above~~:~~

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) subsection (d)~~,~~ below.

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

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded ~~under Section 720.120 and 720.122~~by Administrative Action

Table A Wastes Excluded by U.S. EPA under 40 CFR 260.20 and 260.22 ~~f~~From Non-Specific Sources

Facility Address	Waste Description
~~Envirite Corp., Harvey, Illinois~~	~~Dewatered wastewater sludges (EPA Hazardous Waste NO. F006) generated from electroplating operations; spent cyanide plating solutions (EPA Hazardous Waste No. F007) generated from electroplating operations; plating bath residues from the bottom of plating baths (EPA Hazardous Waste No. F008) generated from electroplating operations where cyanides are used in the process; spent stripping and cleaning bath solutions (EPA Hazardous Waste No. F009) generated from electroplating operations~~

~~where cyanides are used in the process; spent cyanide solutions from salt bath pot cleaning (EPA Hazardous Waste No. F011) generated from metal heat treating operations; quenching wastewater treatment sludges (EPA Hazardous Waste No. F012) generated from metal heat treating where cyanides are used in the process; wastewater treatment sludges (EPA Hazardous Waste No. F019) generated from the chemical conversion coating of aluminum after November 14, 1986. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern, the facility must implement a contingency testing program for the petitioned wastes. This testing program must meet the following conditions for the exclusions to be valid:~~

~~1) Each batch of treatment residue must be representatively sampled and tested using the EP Toxicity test for arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and nickel. If the extract concentrations for chromium, lead, arsenic, and silver exceed 0.315 ppm; barium levels exceed 6.3 ppm; cadmium and selenium exceed 0.063 ppm; mercury exceeds 0.0126 ppm; or nickel levels exceed 2.205 ppm, the waste must be re-treated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~2) Each batch of treatment residue must be tested for reactive and leachable cyanide. If the reactive cyanide levels exceed 250 ppm or leachable cyanide levels (using the EP Toxicity test without acetic acid adjustment) exceed 1.26 ppm, the waste must be retreated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~3) Each batch of waste must be tested for the total content of specific organic toxicants. If the total content of anthracene exceeds 76.8 ppm, 1,2-diphenyl hydrazine exceeds 0.001 ppm, methylene chloride exceeds 8.18 ppm, methyl ethyl ketone exceeds 326 ppm, n-nitrosodiphenyl-amine exceeds 11.9 ppm, phenol exceeds 1,566 ppm, tetrachloroethylene exceeds 0.188 ppm, or trichloroethylene exceeds 0.592 ppm, the waste must be managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~4) A grab sample must be collected from each batch to form one monthly composite sample which that must be tested using gas chromatography, mass spectrometry analysis for the compounds listed in No.3 above as well as the remaining organics on the Priority Pollutant List (incorporated by reference, see 40 CFR 423 App. A (1983) (as adopted at 47 Fed. Reg. 52,309 (Nov. 19, 1982)), not including later amendments.~~

~~5) The data from conditions 1-4 must be kept on file at the facility for inspection purposes and must be compiled, summarized, and submitted to the Administrator of USEPA by certified mail semi-annually. The USEPA will review this information and if needed will propose to modify or withdraw the exclusion. Should USEPA propose to modify or withdraw the exclusion, Envirite shall promptly provide notice thereof to the Board. The decision to conditionally exclude the treatment residue generated from the wastewater treatment systems at Envirite's Harvey, Illinois facility applies only to the wastewater and solids treatment systems as they presently exist as described in the delisting petition submitted to the USEPA. The exclusion does not apply to the proposed process additions described in the petition submitted to USEPA as recovery including crystallization, electrolytic metals recovery, evaporative recovery, and ion exchange.~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded ~~under Section 720.120 and 720.122~~by Administrative Action

Table B Wastes Excluded by U.S. EPA under 40 CFR 260.20 and 260.22 f~~F~~rom Specific Sources

Facility Address	Waste Description
Amoco Oil Company Wood River, Illinois	150 million gallons of DAF float from petroleum refining contained in four surge ponds after treatment with the Chemfix stabilization process. This waste contains U.S. EPA 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 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 be pumped into bermed cells to ensure that the waste is identifiable in the event that removal is necessary.

~~Envirite Corp. Harvey, Illinois~~

~~Spent pickle liquor (EPA Hazardous Waste No. K062) generated from steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332); wastewater treatment sludge (EPA Hazardous Waste No. K002) generated from the production of chromo yellow and orange pigments; wastewater treatment sludge (EPA Hazardous Waste No. K003) generated from the production of molybdate orange pigments; wastewater treatment sludge (EPA Hazardous Waste No. K004) generated from the production of zinc yellow pigments; wastewater treatment sludge (EPA Hazardous Waste No. K005) generated from the production of chrome green pigments; wastewater treatment sludge (EPA Hazardous Waste No. K006) generated from the production of chrome oxide green pigments (anhydrous and hydrated); wastewater treatment sludge (EPA Hazardous Waste No. K007) generated from the production of iron blue pigments; oven residues (EPA Hazardous Waste No. K008) generated from the production of chrome oxide green pigments after November 14, 1986. To ensure that hazardous constituents are not present in the waste at levels of regulatory concern, the facility must implement a contingency testing program for the petitioned wastes. This testing program must meet the following conditions for the exclusions to be valid:~~

~~1) Each batch of treatment residue must be representatively sampled and tested using the EP Toxicity test for arsenic, barium, cadmium, chromium, lead, selenium, silver, mercury, and nickel. If the extract concentrations for chromium, lead, arsenic, and silver exceed 0.315 ppm; barium levels exceed 6.3 ppm; cadmium and selenium exceed 0.063 ppm; mercury exceeds 0.0126 ppm; or nickel levels exceed 2.205 ppm, the waste must be re-treated or managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~2) Each batch of treatment residue must be tested for reactive and leachable cyanide. If the reactive cyanide levels exceed 250 ppm; or leachable cyanide levels (using the EP Toxicity test without acetic acid adjustment) exceed 1.26 ppm, the waste must be retreated or managed and disposed as hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~3) Each batch of waste must be tested for the total content of specific organic toxicants. If the total content of anthracene exceeds 76.8 ppm, 1,2 diphenyl hydrazine exceeds 0.001 ppm, methylene chloride exceeds 8.18 ppm, methyl ethyl ketone exceeds 326 ppm, n-nitroso-diphenylamine exceeds 11.9 ppm, phenol exceeds 1,566 ppm, tetrachloroethylene exceeds 0.188 ppm, or trichloroethylene exceeds 0.592 ppm, the waste must be managed and disposed as a hazardous waste under 35 Ill. Adm. Code 722 to 725 and the permitting standards of 35 Ill. Adm. Code 702, 703, and 705.~~

~~4) A grab sample must be collected from each batch to form one monthly composite sample which must be tested using gas chromatography, mass spectrometry, analysis for the compounds listed in No. 3 above as well as the remaining organics on the Priority Pollutant List (incorporated by reference, see 40 CFR 423 App. A (1983) (as adopted at 47 Fed. Reg. 52,309 (November 19, 1982)), not including later amendments).~~

~~5) The data from conditions 1-4 must be kept on file at the facility for inspection purposes and must be compiled, summarized, and submitted to the USEPA Administrator by certified mail semi-annually. The USEPA will review this information and if needed will propose to modify or withdraw the exclusion. Should USEPA propose to modify or withdraw the exclusion, Envirite shall promptly provide notice thereof to the Board. The decision to conditionally exclude the treatment residue generated from the wastewater treatment systems at Envirite's Harvey, Illinois facility applies only to the wastewater and solids treatment systems as they presently exist as described in the delisting petition submitted to the USEPA. The exclusion does not apply to the proposed process additions described in the petition submitted to USEPA as recovery, including crystallization, electrolytic metals recovery, evaporative recovery, and ion exchange.~~

USX Steel Corporation, Chicago, Illinois

Fully-cured chemically stabilized electric arc furnace dust/sludge (CSEAFD) treatment residue (*U.S. EPA Hazardous Waste No. 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 ~~upon~~ 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~~, SW-846 is~~, incorporated by reference in 35 Ill. Adm. Code 720.111.

   A. 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 U.S. EPA or the Agency.

2. Delisting levels: If the EP extract concentrations for chromium, lead, arsenic, or silver exceed 0.315 mg/l; ~~for~~ barium exceeds 6.3 mg/l; ~~for~~ cadmium or selenium exceed 0.063 mg/l; ~~for~~ mecury exceeds 0.0126 mg/l; ~~for~~ nickel exceeds 3.15 mg/l; or ~~for~~ 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 re-treated 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.).

3. Data submittal to and enforcement by U.S. EPA: 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), U.S. EPA, 401 M Street, S.W., Washington, DC 20460 within the time period specified. At ~~the~~ U.S. EPA'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 U.S. EPA, at its decision, sufficient basis to revoke USX's Federal exclusion to the extent directed by U.S. EPA. 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 U.S. EPA 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 U.S. EPA 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."

4. 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 U.S. EPA, USX shall file a petition, pursuant to Part 102, with this Board requesting that the Board follow the U.S. EPA action.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded ~~under Section 720.120 and 720.122~~by Administrative Action

Table C Wastes Excluded by U.S. EPA under 40 CFR 260.20 and 260.22 fFrom Commercial Chemical Products, Off-Specification Species, Container Residues, and Soil Residues Thereof

Facility Address	Waste Description

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 721.Appendix I Wastes Excluded ~~under Section 720.120 and 720.122~~by Administrative Action

Table D Wastes Excluded by the Board by Adjusted Standard

The Board has entered the following orders on petitions for adjusted standards for delisting, pursuant to 35 Ill. Adm. 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 K061 waste)

AS91-3 Petition of Peoria Disposal Co. for an Adjusted Standard from 35 Ill. Adm. Code 721.Subpart D, February 6 and March 11, 1993. (treated F006 waste)

AS93-7 Petition of Keystone Steel & Wire Co. for an Adjusted Standard from 35 Ill. Adm. Code 721.Subpart D, February 17, 1994, as modified March 17, 1994. (treated K062 waste)

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 722
STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

SUBPART A: GENERAL

Section
722.110 Purpose, Scope and Applicability
722.111 Hazardous Waste Determination
722.112 USEPA Identification Numbers

SUBPART B: THE MANIFEST

Section
722.120 General Requirements
722.121 Acquisition of Manifests
722.122 Number of Copies
722.123 Use of the Manifest

SUBPART C: PRE-TRANSPORT REQUIREMENTS

Section
722.130 Packaging
722.131 Labeling
722.132 Marking
722.133 Placarding
722.134 Accumulation Time

SUBPART D: RECORDKEEPING AND REPORTING

Section
722.140 Recordkeeping
722.141 Annual Reporting
722.142 Exception Reporting
722.143 Additional Reporting
722.144 Special Requirements for Generators of between 100 and 1000 kilograms per month

SUBPART E: EXPORTS OF HAZARDOUS WASTE

Section
722.150 Applicability
722.151 Definitions
722.152 General Requirements
722.153 Notification of Intent to Export
722.154 Special Manifest Requirements
722.155 Exception Report
722.156 Annual Reports
722.157 Recordkeeping

SUBPART F: IMPORTS OF HAZARDOUS WASTE

Section
722.160 Imports of Hazardous Waste

SUBPART G: FARMERS

Section
722.170 Farmers

722.Appendix A Hazardous Waste Manifest

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended in R82-18, 51 PCB 31, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R84-9 at 9 Ill. Reg. 11950, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1131, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14112, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20709, effective December 2, 1986; amended in R86-46 at 11 Ill. Reg. 13555, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19392, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13129, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 452, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18523, effective November 13, 1989; amended in R90-10 at 14 Ill. Reg. 16653, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9644, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14562, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17696, effective November 6, 1992; amended in R93-4 at 17 Ill. Reg. 20822, effective November 22, 1993; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART B: THE MANIFEST

Section 722.122 Number of Copies

The manifest consists of at least ~~the~~that number of copies ~~which~~that will provide the generator, each transporter, and the owner or operator of the designated receiving treatment, storage, or disposal facility each with one copy ~~each~~ for their records, ~~and another~~plus provide one copy to be returned to the generator, ~~and~~plus provide two copies to be sent to the Agency, one by each of the generator and ~~by~~ the ~~HWM~~receiving treatment, storage, or disposal facility owner or operator.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART C: PRE-TRANSPORT REQUIREMENTS

Section 722.134 Accumulation Time

a) Except as provided in subsections (d), (e), or (f) below, a generator is exempt from all the requirements in 35 Ill. Adm. Code 725.Subparts G and H, except for 35 Ill. Adm. Code 725.211 and 725.214, and may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that:

1) The waste is placed:

A) In containers and the generator complies with 35 Ill. Adm. Code 725.Subparts I, AA, BB, and CC; or

B) In tanks and the generator complies with 35 Ill. Adm. Code 725.Subparts J (except 35 Ill. Adm. Code 725.297(c) and 725.300), AA, BB, and CC; or

C) On drip pads and the generator complies with 35 Ill. Adm. Code 725.Subpart W and maintains the following records at the facility:

i) A description of the procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days, and

ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal; or

D) In containment buildings and the generator complies with 35 Ill. Adm. Code 725.Subpart DD (has placed its Professional Engineer (PE) certification that the building complies with the design standards specified in 35 Ill. Adm. Code 725.1101 in the facility's operating record ~~no later than 60 days after~~prior to the date of initial operation of the unit). ~~After February 18, 1993, the PE certification will be required prior to operation of the unit.~~ The owner or operator shall maintain the following records at the facility:

i) A written description of procedures to ensure that each waste volume remains in the unit for no more than 90 days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the 90 day limit, and documentation that the procedures are complied with; or

ii) Documentation that the unit is emptied at least once every 90 days.

BOARD NOTE: The "in addition" hanging subsection ~~which~~that appears in the Federal rules after 40 CFR 262.34(a)(1)(iv)(B) is in the introduction to subsection (a) above.

2) The date upon which each period of accumulation begins is

clearly marked and visible for inspection on each container;

3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste", and

4) The generator complies with the requirements for treatment, storage, and disposal facility owners or operators in 35 Ill. Adm. Code 725.Subparts C and D, and with 35 Ill. Adm. Code 725.116 and 728.107(a)(4).

b) A generator ~~who~~that accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702, 703 and 705 unless the generator has been granted an extension of the 90-day period. If hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of a variance or provisional variance, pursuant to Section 37 of the Environmental Protection Act and 35 Ill. Adm. Code 180 (Agency procedural regulations).

c) Accumulation near the point of generation.

1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in containers at or near any point of generation where wastes initially accumulate, ~~which~~that is under the control of the operator of the process generating the waste, without a permit or interim status and without complying with subsection (a), above, provided the generator:

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

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

2) A generator ~~who~~that accumulates either hazardous waste or acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in excess of the amounts listed in subsection (c)(1), above, at or near any point of generation must, with respect to that amount of excess waste, comply within three days with subsection (a), above, or other applicable provisions of this ~~e~~Chapter. During the three day period the generator must continue to comply with subsection (c)(1), above. The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

d) A generator ~~who~~that generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:

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

2) The generator complies with the requirements of 35 Ill. Adm.

Code 725.Subpart I, (except ~~the generator need not comply with~~ 35 Ill. Adm. Code 725.276 and 725.178);

3) The generator complies with the requirements of 35 Ill. Adm. Code 725.301;

4) The generator complies with the requirements of subsections (a)(2) and (c)(3), above, ~~of~~ 35 Ill. Adm. Code 725.Subpart C, and ~~of~~ 35 Ill. Adm. Code 728.107(a)(4); and

5) The generator complies with the following requirements:

A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in subsection (d)(5)(D), below. The employee is the emergency coordinator.

B) The generator shall post the following information next to the telephone:

i) The name and telephone number of the emergency coordinator;

ii) Location of fire extinguishers and spill control material, and, if present, fire alarm; and

iii) The telephone number of the fire department, unless the facility has a direct alarm.

C) The generator shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;

D) The emergency coordinator or designee shall respond to any emergencies that arise. The applicable responses are as follows:

i) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;

ii) In the event of a spill, contain the flow of hazardous waste to the extent possible, and, as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;

iii) In the event of a fire, explosion, or other release ~~which~~that could threaten human health outside the facility, or when the generator has knowledge that a spill has reached surface water, the generator shall immediately notify the National Response Center (using its 24-hour toll free number 800/~~-~~424-8802). The report must include the following information: the name, address, and U.S. EPA identification number (35 Ill. Adm. Code 722.112) of the generator; the date, time, and type of incident

(e.g., spill or fire); the quantity and type of hazardous waste involved in the incident; the extent of injuries, if any; and~~,~~ the estimated quantity and disposition of recoverable materials, if any.

e) A generator ~~who~~that generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and ~~who~~that must transport the waste~~,~~ or offer the waste for transportation~~,~~ over a distance of 200 miles or more for off-site treatment, storage, or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status, provided that the generator complies with the requirements of subsection (d)~~,~~ above.

f) A generator ~~who~~that generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and ~~who~~that accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if the generator must transport the waste~~,~~ or offer the waste for transportation~~,~~ over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 703 unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period. If hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of variance or provisional variance pursuant to Section 37 of the Environmental Protection Act.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 723
STANDARDS APPLICABLE TO
TRANSPORTERS OF HAZARDOUS WASTE

SUBPART A: GENERAL

Section
723.110 Scope
723.111 USEPA Identification Number
723.112 Transfer Facility Requirements

SUBPART B: COMPLIANCE WITH THE MANIFEST SYSTEM AND RECORDKEEPING

Section
723.120 The Manifest System
723.121 Compliance with the Manifest
723.122 Recordkeeping

SUBPART C: HAZARDOUS WASTE DISCHARGES

Section
723.130 Immediate Action
723.131 Discharge Clean Up

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended and codified in R81-22, 45 PCB 17, at 6 Ill. Reg. 4828, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended in R84-9, at 9 Ill. Reg. 11961, effective July 24, 1985; amended in R86-19, at 10 Ill. Reg. 20718, effective December 2, 1986; amended in R86-46 at 11 Ill. Reg. 13570, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19412, effective November 12, 1987; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART C: HAZARDOUS WASTE DISCHARGES

Section 723.130 Immediate Action

a) In the event of a discharge of hazardous waste during transportation, the transporter must take appropriate immediate action to protect human health and the environment (e.g., notify local authorities, dike the discharge area).

b) If a discharge of hazardous waste occurs during transportation and an official (of ~~S~~state or local government or of a ~~F~~federal ~~A~~agency) acting within the scope of his or her official responsibilities determines that immediate removal of the waste is necessary to protect human health or the environment, that official may authorize the removal of the waste by transporters ~~who~~that do not have U.S. EPA identification numbers and without the preparation of a manifest.

c) An air, rail, highway, or water transporter ~~who~~that has discharged hazardous waste must:

1) Give notice~~, if required by 49 CFR 171.15,~~ to the National Response Center (800-424-8802 or 202-426-2675), if required by 49 CFR 171.15; ~~and~~

2) Report in writing ~~as required by 49 CFR 171.16~~ to the Director, Office of Hazardous Materials Regulations, Materials Transportation Bureau, Department of Transportation, Washington, D.C. 20590, as required by 49 CFR 171.16; and~~,~~

3) give notice to:

~~Emergency Services and Disaster Agency, 110 E. Adams, Springfield, Il 62706, A/C 217-782-7860.~~
Illinois Emergency Management Agency
110 East Adams
Springfield, Illinois 62706
217-782-7680

d) A water (bulk shipment) transporter ~~who~~that has discharged hazardous waste must give the same notice as required by 33 CFR 153.203 for oil and hazardous substances.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL

CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 724
STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART A: GENERAL PROVISIONS

SUBPART B: GENERAL FACILITY STANDARDS

SUBPART C: PREPAREDNESS AND PREVENTION

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

SUBPART G: CLOSURE AND POST-CLOSURE

SUBPART H: FINANCIAL REQUIREMENTS

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

SUBPART J: TANK SYSTEMS

SUBPART K: SURFACE IMPOUNDMENTS

SUBPART L: WASTE PILES

SUBPART M: LAND TREATMENT

SUBPART N: LANDFILLS

SUBPART O: INCINERATORS

SUBPART S: CORRECTIVE ACTION FOR SOLID WASTE MANAGEMENT UNITS

SUBPART W: DRIP PADS

SUBPART X: MISCELLANEOUS UNITS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

SUBPART DD: CONTAINMENT BUILDINGS

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

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 Ill. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 Ill. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19397, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 458, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18527, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14511, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16658, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9654, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14572, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, 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. 5806, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20830, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6973, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12487, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17601, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 724.101 Purpose, Scope and Applicability

a) The purpose of this Part is to establish minimum standards ~~which~~that define the acceptable management of hazardous waste.

b) The standards in this Part apply to owners and operators of all facilities ~~which~~that treat, store, or dispose of hazardous waste, except as specifically provided otherwise in this Part or 35 Ill. Adm. Code 721.

c) The requirements of this Part apply to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research and Sanctuaries Act (16 U.S.C. 1431-1434, 33 U.S.C. 1401) only to the extent they are included in a RCRA permit by rule granted to such a person under 35 Ill. Adm. Code 703.141. A "RCRA permit" is a permit required by Section 21(f) of the Environmental Protection Act and 35 Ill. Adm. Code 703.121.

BOARD NOTE: This Part does apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.

d) The requirements of this Part apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued by the Agency pursuant to Section 12(g) of the Environmental Protection Act only to the extent they are required by 35 Ill. Adm. Code 704~~.~~, Subpart F.

BOARD NOTE: This Part does apply to the above-ground treatment or storage of hazardous waste before it is injected underground.

e) The requirements of this Part apply to the owner or operator of a POTW (publicly owned treatment works) ~~which~~that treats, stores, or disposes of hazardous waste only to the extent included in a RCRA permit by rule granted to such a person under 35 Ill. Adm. Code 703.141.

f) This subsection corresponds with 40 CFR 264.1(f), which provides that the federal regulations do not apply to T/S/D activities in authorized states, except under limited, enumerated circumstances. This statement maintains structural consistency with U.S. EPA rules.

g) The requirements of this Part do not apply to:

1) The owner or operator of a facility permitted by the Agency under Section 21 of the Environmental Protection Act to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under this Part by 35 Ill. Adm. Code 721.105.

BOARD NOTE: The owner or operator may be subject to 35 Ill. Adm. Code 807 and may have to have a supplemental permit under 35 Ill. Adm. Code 807.210.

2) The owner or operator of a facility managing recyclable materials described in 35 Ill. Adm. Code 721.106(a)(2)~~.~~ through (a)(4) (except to the extent that requirements of

this Part are referred to in 35 Ill. Adm. Code 726.Subparts C, F, G, or H or 35 Ill. Adm. Code 739).

3) A generator accumulating waste on-site in compliance with 35 Ill. Adm. Code 722.134.

4) A farmer disposing of waste pesticides from the farmer's own use in compliance with 35 Ill. Adm. Code 722.170.

5) The owner or operator of a totally enclosed treatment facility, as defined in 35 Ill. Adm. Code 720.110.

6) The owner or operator of an elementary neutralization unit or a wastewater treatment unit, as defined in 35 Ill. Adm. Code 720.110, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 35 Ill. Adm. Code 728.Table ~~B~~T)~~,~~ or ~~corrosive~~reactive (D00~~2~~3) waste~~,~~ to remove the characteristic before land disposal, the owner or operator must comply with the requirements set out in Section 724.117(b)~~ of this part~~;

7) Immediate response:

A) Except as provided in subsection (~~f~~g)(8)(B) below, a person engaged in treatment or containment activities during immediate response to any of the following situations:

i) A discharge of a hazardous waste;

ii) An imminent and substantial threat of a discharge of hazardous waste;

iii) A discharge of a material ~~which~~that~~, when discharged,~~ becomes a hazardous waste when discharged.

B) An owner or operator of a facility otherwise regulated by this Part must comply with all applicable requirements of 724.Subparts C and D.

C) Any person ~~who~~that is covered by subsection (~~f~~g)(8)(A) above and ~~who~~that continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Part and 35 Ill. Adm. Code 702, 703, and 705 for those activities. ~~Or~~

8) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less.

9) The addition of absorbent materials to waste in a container (as defined in 35 Ill. Adm. Code 720) or the addition of waste to absorbent material in a container, provided these actions occur at the time waste is first placed in the container~~,~~, and Sections 724.117(b), 724.271, and 724.272 are complied with.

h) This Part applies to owners and operators of facilities ~~which~~that

treat, store, or dispose of hazardous wastes referred to in 35 Ill. Adm. Code 728.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART B: GENERAL FACILITY STANDARDS

Section 724.113 General Waste Analysis

a) Analysis:

1) Before an owner or operator treats, stores, or disposes of any hazardous wastes, or non-hazardous wastes if applicable under Section 724.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, the analysis must contain all the information ~~which~~that must be known to treat, store, or dispose of the waste in accordance with this Part and 35 Ill. Adm. Code 728.

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

BOARD NOTE: For example, the facility's records of analyses performed on the waste before the effective date of these regulations~~,~~ or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility~~,~~ may be included in the data base required to comply with subsection (a)(1) above. The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by subsection (a)(1) above, except as otherwise specified in 35 Ill. Adm. Code 728.107(b) and (c). If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.

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

A) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or non-hazardous waste if applicable under Section 724.213(d), has changed; and

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

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

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

1) The parameters for which each hazardous waste, or non-hazardous waste if applicable under Section 724.213(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (a) above).

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

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

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

B) An equivalent sampling method.

BOARD NOTE: See 35 Ill. Adm. Code 720.121~~ for related discussion~~.

4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date.

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

6) Where applicable, the methods ~~which~~that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections 724.117, 724.414, 724.441, 724.934(d)~~,~~ ~~and~~ 724.963(d), and 724.983 and 35 Ill. Adm. Code 728.107.~~ And~~,

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

A) The sampling of impoundment contents;

B) The analysis of test data; and~~,~~

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

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

ii) Where no treatment standards have been established~~,~~ ~~s~~such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.132 or 728.139~~,~~ or such residues are prohibited from land disposal under 35 Ill. Adm. Code

728.133(f).

8) For owners and operators seeking an exemption to the air emission standards of 724.Subpart CC in accordance with Section 724.982:

A) The procedures and schedules for waste sampling and analysis and the analysis of test data to verify the exemption, and

B) Each generator's notice and certification of the volatile organic concentration in the waste if the waste is received from off site.

c) For off-site facilities, the waste analysis plan required in subsection (b) above must also specify the procedures ~~which~~that will be used to inspect and, if necessary, analyze each ~~movement~~shipment of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

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

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

3) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

BOARD NOTE: 35 Ill. Adm. Code 703~~,~~ requires that the waste analysis plan be submitted with Part B of the permit application.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 724.115 General Inspection Requirements

a) The owner or operator shall conduct inspections often enough to identify problems in time to correct them before they harm human health or the environment. The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors~~,~~ and discharges ~~which~~that may be causing~~,~~ or may lead to:

1) Release of hazardous waste constituents to the environment; or

2) A threat to human health.

b) Inspection schedule.

1) The owner or operator shall develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices~~,~~ and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting~~,~~ or responding to environmental or human health hazards.

2) The owner or operator shall keep this schedule at the facility.

3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) ~~which~~that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in Sections 724.274, 724.293, 724.295, 724.326, 724.354, 724.378, 724.403, 724.447, 724.702, 724.933, 724.952, 724.953, ~~and~~ 724.958, , 724.988, and 724.991(b), where applicable.

BOARD NOTE: 35 Ill. Adm. Code 703 requires the inspection schedule to be submitted with Part B of the permit application. The Agency ~~will~~must evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the Agency may modify or amend the schedule as may be necessary.

c) The owner or operator shall remedy any deterioration or malfunction of equipment or structures ~~which~~that the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

d) The owner or operator shall record inspections in an inspection log or summary. The owner or operator shall keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date, and nature of any repairs or other remedial actions.

(Source: Amended at 17 Ill. Reg. 5806, effective March 26, 1993)

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 724.156 Emergency Procedures

a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) shall immediately:

1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

2) Notify appropriate state or local agencies with designated response roles if their help is needed.

b) Whenever there is a release, fire, or explosion, the emergency

coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests, and, if necessary, by chemical analysis.

c) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions).

d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health, or the environment, outside the facility, the emergency coordinator shall report the findings as follows:

1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and

2) The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under 40 CFR Part 300), or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include:

A) Name and telephone number of reporter;

B) Name and address of facility;

C) Time and type of incident (e.g., release, fire);

D) Name and quantity of material~~(s)~~ involved, to the extent known;

E) The extent of injuries, if any; and

F) The possible hazards to human health, or the environment, outside the facility.

e) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.

f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

g) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste,

contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

BOARD NOTE: Unless the owner or operator can demonstrate, in accordance with 35 Ill. Adm. Code 721.103(ed) or (de), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 724.

h) The emergency coordinator shall ensure that, in the affected area(s) of the facility:

1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

i) The owner or operator shall notify the Agency, and appropriate state and local authorities, that the facility is in compliance with ~~paragraph~~subsection (h) above before operations are resumed in the affected area(s) of the facility.

j) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator shall submit a written report on the incident to the Agency. The report must include:

1) Name, address, and telephone number of the owner or operator;

2) Name, address, and telephone number of the facility;

3) Date, time, and type of incident (e.g., fire, explosion);

4) Name and quantity of material(s) involved;

5) The extent of injuries, if any;

6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

7) Estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 724.173 Operating Record

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

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

1) A description and the quantity of each hazardous waste received, and the method or methods and date or dates of its treatment, storage, or disposal at the facility, as required by Section 724.Appendix A;

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

BOARD NOTE: See Section 724.219 for related requirements.

3) Records and results of waste analyses and waste determinations performed as specified in Sections 724.113, 724.117, 724.414, 724.441, 724.934, 724.963, and 724.983 and in 35 Ill. Adm. Code 728.104(a) and 728.107;

4) Summary reports and details of all incidents that require implementing the contingency plan, as specified in Section 724.156(j);

5) Records and results of inspections, as required by Section 724.115(d) (except these data need to be kept only three years);

6) Monitoring, testing, or analytical data and corrective action data where required by 724.Subpart F or Sections 724.119, 724.291, 724.293, 724.295, 724.322, 724.323, 724.326, 724.352 through 724.354, 724.376, 724.378, 724.380, 724.402 through 724.404, 724.409, 724.447, 724.702, 724.934(c) through (f), 724.935, 724.963(d) through (i), or 724.964, 724.988, 724.989, and 724.991.

7) For off-site facilities, notices to generators as specified in Section 724.112(b);

8) All closure cost estimates under Section 724.242 and, for disposal facilities, all post-closure cost estimates under Section 724.244;

9) A certification by the permittee, no less often than annually: that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that the permittee generates, to the degree the permittee determines to be economically practicable, and that the proposed method of treatment, storage, or disposal is that practicable method currently available to the permittee whichthat minimizes the present and future threat to human health and the environment;

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

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

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

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

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

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

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

(Source: Amended at 17 Ill. Reg. 5806, effective March 26, 1993)

Section 724.177 Additional Reports

In addition to submitting the annual report and unmanifested waste reports described in Sections 724.175 and 724.176, the owner or operator shall also report to the Agency:

a) Releases, fires, and explosions, as specified in Section 724.156(j);

b) Facility closures specified in Section 724.215; and

c) As otherwise required by 724.Subparts F, K through N, AA, ~~and BB~~, and CC.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 724.279 Air Emission Standards

The owner or operator shall manage all hazardous waste placed in a container in accordance with the requirements of 724.Subpart CC.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART J: TANK SYSTEMS

Section 724.300 ~~Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026 and F027~~Air Emission Standards

~~In addition to the other requirements of this Subpart, the following Requirements apply to tanks storing or treating hazardous wastes F020, F021, F022, F023, F026 and F027.~~

~~a) Tanks must have systems designed and operated to detect and adequately contain spills or leaks. The design and operation of any containment system must reflect consideration of all relevant factors, including:~~

~~1) Capacity of the tank;~~

~~2) Volumes and characteristics of wastes stored or treated in the tank;~~

~~3) Method of collection of spills or leaks;~~

~~4) The design and construction materials of the tank and containment system; and~~

~~5) The need to prevent precipitation and run-on from entering into the system.~~

~~b) As part of the contingency plan required by Subpart D, the owner or operator shall specify such procedures for responding to a spill or leak from the tank into the containment system as may be necessary to protect human health and the environment. These procedures must include measures for immediate removal of the waste from the system and replacement or repair of the leaking tank.~~

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the requirements of 724.Subpart CC.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART K: SURFACE IMPOUNDMENTS

Section 724.332 Air Emission Standards

The owner or operator shall manage all hazardous waste placed in a surface impoundment in accordance with the requirements of 724.Subpart CC.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART X: MISCELLANEOUS UNITS

Section 724.701 Environmental Performance Standards

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as are necessary to protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and

requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions must include those requirements of 724, Subparts I through O and AA through CC, and ~~of~~ 35 Ill. Adm. Code 702, 703, and 730, that are appropriate ~~for the~~ miscellaneous unit being permitted. Protection of human health and the environment includes, but is not limited to:

a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the groundwater or subsurface environment, considering:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;

2) The hydrologic and geologic characteristics of the unit and the surrounding area;

3) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;

4) The quantity and direction of groundwater flow;

5) The proximity to and withdrawal rates of current and potential groundwater users;

6) The patterns of land use in the region;

7) The potential for deposition or migration of waste constituents into subsurface physical structures, and ~~into~~ the root zone of food-chain crops and other vegetation;

8) The potential for health risks caused by human exposure to waste constituents; and

9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

b) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, ~~or~~in wetlands, or on the soil surface, considering:

1) The volume and physical and chemical characteristics of the waste in the unit;

2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

3) The hydrologic characteristics of the unit and surrounding area, including the topography of the land around the unit;

4) The patterns of precipitation in the region;

5) The quantity, quality, and direction of groundwater flow;

6) The proximity of the unit to surface waters;

7) The current and potential uses of the nearby surface waters

and any water quality standards in 35 Ill. Adm. Code 302 or 303;

8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;

9) The patterns of land use in the region;

10) The potential for health risks caused by human exposure to waste constituents; and

11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.

c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering:

1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates;

2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;

3) The operating characteristics of the unit;

4) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;

5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

6) The potential for health risks caused by human exposure to waste constituents; and

7) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by waste constituents.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 724.933 Standards: Closed-vent Systems and Control Devices

a) Compliance Required.

1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this Part shall comply with the provisions of this Section.

2) The owner or operator of an existing facility ~~whe~~that cannot install a closed-vent system and control device to comply with the provisions of this Subpart on the effective date that the facility becomes subject to the provisions of this Subpart shall prepare an implementation schedule that includes dates by which the closed-vent system and control

device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 18 months after the effective date that the facility becomes subject to this Subpart for installation and startup. All units that begin operation after December 21, 1990, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 2-year implementation schedule does not apply to these units.

b) A control device involving vapor recovery (e.g., a condenser or adsorber) must be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Section 724.932(a)(1) for all affected process vents is attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, and not in carbon equivalents, on a dry basis, corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° C. If a boiler or process heater is used as the control device, then the vent stream must be introduced into the flame zone of the boiler or process heater.

d) Flares:

1) A flare must be designed for and operated with no visible emissions, as determined by the methods specified in subsection (e)(1), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

2) A flare must be operated with a flame present at all times, as determined by the methods specified in subsection (f)(2)(eC) below.

3) A flare must be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater ~~if~~and the flare is steam-assisted or air-assisted, or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater ~~if~~and the flare is nonassisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2) below.

4) Exit Velocity.

A) A steam-assisted or nonassisted flare must be designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (d)(4)(C) below.

B) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm

(1000 Btu/scf).

C) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, less than the velocity, V_{ℓ} as determined by the method specified in subsection (e)(4) below and less than 122 m/s (400 ft/s) is allowed.

5) An air-assisted flare must be designed and operated with an exit velocity less than the velocity, V_{ℓ} as determined by the method specified in subsection (e)(5) below.

6) A flare used to comply with this Section must be steam-assisted, air-assisted, or nonassisted.

e) Compliance determination and equations.

1) Reference Method 22 in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, must be used to determine the compliance of a flare with the visible emission provisions of this Subpart. The observation period is 2 hours and must be used according to Method 22.

2) The net heating value of the gas being combusted in a flare must be calculated using the following equation:

~~H = K * SUM(Ci * Hi)~~

$$H_T = K \times \sum_{i=1}^{n} C_i \times H_i$$

Where:

H_T is the net heating value of the sample in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25° C and 760 mm Hg, but the standard temperature for determining the volume correrssponding to 1 mole is 20° C.

K = 1.74 E -7 (1/ppm)(g mol/scm)(MJ/kcal) where standard temperature for (g mol/scm) 20° C.

~~SUM~~Σ(Xi) means the sum of the values of X for each component i, from i=1 to n.

~~Ci~~C_i is the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR 60, and for carbon monoxide, by ASTM D_1946-90, incorporated by reference in 35 Ill. Adm. Code 720.111.

~~Hi~~H_i is the net heat of combustion of sample component i, kcal/gmol at 25° C and 760 mm Hg. The heats of combustion must be determined using ASTM D_2382, incorporated by reference in 35 Ill. Adm. Code 720.111, if published values are not available or cannot be calculated.

3) The actual exit velocity of a flare must be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

4) The maximum allowed velocity in m/s, V for a flare complying with subsection (d)(4)(C) must be determined by the following equation:

~~LOG(V) = (H + 28.8) / 31.7~~

$$\log_{10} V_{max} = \frac{H_T + 28.8}{31.7}$$

Where:

~~LOG~~$\log_{10}$ means logarithm to the base 10

H_T is the net heating value as determined in subsection (e)(2).

5) The maximum allowed velocity in m/s, V for an air-assisted flare must be determined by the following equation:

$$V = 8.706 + 0.7084 \times H_T$$

~~V = 8.706 + 0.7084H~~

Where:

H_T is the net heating value as determined in subsection (e)(2) below.

f) The owner or operator shall monitor and inspect each control device required to comply with this Section to ensure proper operation and maintenance of the control device by implementing the following requirements:

1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor must be installed in the vent stream at the nearest feasible point to the control device inlet but before the point at which the vent streams are combined.

2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

A) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must have accuracy of +±1 percent of the temperature being monitored in ° C or +±0.5° C, whichever is greater. ~~+~~The temperature sensor must be

installed at a location in the combustion chamber downstream of the combustion zone.

B) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of +±1 percent of the temperature being monitored in ° C or +±0.5° C, whichever is greater. One temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

D) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of +±1 percent of the temperature being monitored in ° C or +±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the furnace downstream of the combustion zone.

E) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure ~~a~~ parameter~~(s)~~ that indicates good combustion operating practices are being used.

F) For a condenser, either:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

ii) A temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of +±1 percent of the temperature being monitored in ° C or +±0.5° C, whichever is greater. One temperature sensor must be installed at a location in the exhaust vent stream from the condenser, and a second temperature sensor must be installed at a location in the coolant fluid exiting the condenser.

G) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or

ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

3) Inspect the readings from each monitoring device required by subsection (f)(1) and (f)(2) at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this Section.

g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 724.935(b)(4)(C)(vi).

h) An owner or operator using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Section 724.935(b)(4)(C)(vii), whichever is longer.

2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Section 724.935(b)(4)(C)(vii).

i) An alternative operational or process parameter may be monitored if the operator demonstrates that the parameter will ensure that the control device is operated in conformance with these standards and the control device's design specifications.

j) An owner or operator of an affected facility seeking to comply with the provisions of this Part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

k) Closed vent systems.

1) Closed-vent systems must be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified at Section 724.934(b).

2) Closed-vent systems must be monitored to determine compliance with this Section during the initial leak detection monitoring, which must be conducted by the date that the facility becomes subject to the provisions of this Section annually, and at other times as specified in the RCRA permit. For the annual leak detection monitoring after the initial leak detection monitoring, the owner or operator is not required to monitor those closed-vent system components that operate in vacuum service or those closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed pipe flange).

3) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected.

4) A first attempt at repair must be made no later than 5 calendar days after the emission is detected..

l) Closed-vent systems and control devices used to comply with provisions of this Subpart must be operated at all times when emissions may be vented to them.

m) The owner or operator using a carbon adsorption system shall document that all carbon removed from a carbon adsorption system to comply with subsections (g) and (h) above is managed in one of the following manners:

1) It is regenerated or reactivated in a thermal treatment unit that is permitted under 724.Subpart.

2) It is incinerated by a process that is permitted under 724.Subpart O, or

3) It is burned in a boiler or industrial furnace that is permitted under 724.Subpart H.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 724.963 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart shall comply with the test methods and procedures requirements provided in this Section.

b) Leak detection monitoring, as required in Sections 724.952 through 724.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be:

A) Zero air (less than 10 ppm of hydrocarbon in air).

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 724.952(e), 724.953(i), 724.954, and 724.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) above apply.

2) The background level must be determined as set forth in Reference Method 21.

3) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

4) This arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) In accordance with the waste analysis plan required by Section 724.113(b), an owner or operator of a facility shall determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267-88, E 168-88, E 169-87, ~~E 168,~~ and E 260-85, incorporated by reference in 35 Ill. Adm. ~~Code~~ 720.111;

2) Method 9060 or 8240 of SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111; or

3) Application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that must be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised

only after following the procedures in subsection (d)(1) or (d)(2) above.

f) When an owner or operator and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) above must be used to resolve the dispute.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must either be obtained from standard reference texts or be determined by ASTM D-2879-86, incorporated by reference in 35 Ill. Adm. Code 720.111.

i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction must comply with the procedures of Section 724.934(c)(1) through (c)(4).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section 724.980 Applicability

a) The requirements of this Subpart apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to 724.Subparts I, J, or K, except as Section 724.101 and subsection (b) below provide otherwise.

b) The requirements of this Subpart do not apply to the following waste management units at the facility:

1) A waste management unit that holds hazardous waste placed in the unit before June 5, 1995, and in which no hazardous waste is added to the unit on or after June 5, 1995.

2) A container that has a design capacity less than or equal to 0.1 m^3 (3.5 ft^3 or 26.4 gal).

3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is generated as the result of implementing remedial activities required pursuant to the Act or Board regulations or under the

corrective action authorities of RCRA sections 3004(u), 3004(v) or 3008(h); CERCLA authorities; or similar federal or state authorities.

6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act (42 U.S.C. 2011 et seq.) and the Nuclear Waste Policy Act.

c) For the owner and operator of a facility subject to this Subpart and who received a final RCRA permit prior to June 5, 1995, the requirements of this Subpart shall be incorporated into the permit when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705. Until such date when the owner and operator receives a final permit incorporating the requirements of this Subpart, the owner and operator is subject to the requirements of 35 Ill. Adm. Code 725.Subpart CC.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.981 Definitions

As used in this Subpart, all terms shall have the meaning given to them in 35 Ill. Adm. Code 725.981, RCRA, and 35 Ill. Adm. Code 720.110.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.982 Standards: General

a) This Section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this Subpart.

b) The owner or operator shall control air emissions from each waste management unit in accordance with standards specified in Section 724.984 through 724.987, as applicable to the waste management unit, except as provided for in subsection (c) below.

c) A waste management unit is exempted from standards specified in Sections 724.984 through 724.987, provided that all hazardous waste placed in the waste management unit is determined by the owner or operator to meet either of the following conditions:

1) The average VO concentration of the hazardous waste at the point of waste origination is less than 100 parts per million by weight (ppmw). The average VO concentration shall be determined by the procedures specified in Section 724.983(a).

2) The organic content of the hazardous waste has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

A) The process removes or destroys the organics contained in the hazardous waste to a level such that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit concentration limit (C$_t$) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit

concentration limit for the process shall be determined using the procedures specified in Section 724.983(b).

B) The process removes or destroys the organics contained in the hazardous waste to a level such that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 50 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedures specified in Section 724.983(b).

C) The process removes or destroys the organics contained in the hazardous waste to a level such that the actual organic mass removal rate (MR) for the process is greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process shall be determined using the procedures specified in Section 724.983(b).

D) The process is a biological process that destroys or degrades the organics contained in the hazardous waste, so that either of the following conditions is met:

i) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process shall be determined in accordance with the procedures specified in Section 724.983(b).

ii) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process shall be determined using the procedures specified in Section 724.983(b).

E) The process removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

i) All of the materials entering the process are hazardous wastes.

ii) From the point of waste origination through the point where the hazardous waste enters the process, the hazardous waste is continuously managed in waste management units which use air emission controls in accordance with the standards specified in §Section 724.984 through 724.987, as applicable to the waste management unit.

iii) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination, determined for each of the individual hazardous waste streams entering the process, or 100 ppmw, whichever value is lower. The average VO concentration of each individual hazardous waste stream at the point of waste origination shall be determined using the procedure specified in Section 724.983(a). The average VO concentration of the hazardous waste at the point of waste treatment shall be determined using the procedure specified in Section 724.983(b).

F) A hazardous waste incinerator for which the owner or operator has either:

i) Been issued a final permit under 35 Ill. Adm. Code 703 and 705, and designs and operates the unit in accordance with the requirements of 724.Subpart O; or

ii) Has certified compliance with the interim status requirements of 35 Ill. Adm. Code 725.Subpart O.

G) A boiler or industrial furnace for which the owner or operator has either:

i) Been issued a final permit under 35 Ill. Adm. Code 703 and 705, and designs and operates the unit in accordance with the requirements of 35 Ill. Adm. Code 726.Subpart H, or

ii) Has certified compliance with the interim status requirements of 35 Ill. Adm. Code 726.Subpart H.

d) When a process is used for the purpose of treating a hazardous waste to meet one of the sets of conditions specified in subsections (c)(2)(A) through (c)(2)(E) above, each material removed from or exiting the process that is not a hazardous waste but which has an average VO concentration equal to or greater than 100 ppmw shall be managed in a waste management unit in accordance with the requirements of subsection (b) above.

e) The Agency may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container that is exempted from using air emission controls under the provisions of this Section as follows:

1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination shall be performed using direct measurement in accordance with the applicable requirements of Section 724.983(a). The waste determination for a hazardous waste at the point of waste treatment shall be performed in accordance with the applicable requirements of Section 724.983(b).

2) Where the owner or operator is requested to perform the waste determination, the Agency may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

3) Where the results of the waste determination performed or requested by the Agency do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of subsection (e)(1) above shall be used to establish compliance with the requirements of this Subpart.

4) Where the owner or operator has used an averaging period greater than one hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Agency may elect to establish compliance with this Subpart by performing or requesting that the owner or operator perform a waste determination using direct measurement based on waste samples collected within a one-hour period as follows:

A) The average VO concentration of the hazardous waste at the point of waste origination shall be determined by direct measurement in accordance with the requirements of Section 724.983(a).

B) Results of the waste determination performed or requested by the Agency showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 100 ppmw shall constitute noncompliance with this Subpart, except in a case as provided for in subsection (e)(4)(C) below.

C) Where the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than one hour to be less than 100 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given one-hour period may be equal to or greater than 100 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Section 724.983(a) and Section 724.989 shall be considered by the Agency together with the results of the waste determination performed or requested by the Agency in establishing compliance with this Subpart.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.983 Waste Determination Procedures

a) Waste determination procedure for average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.

1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in waste management units exempted

under the provisions of Section 724.982(c)(1) from using air emission controls in accordance with standards specified in Section 724.984 through Section 724.987, as applicable to the waste management unit.

2) The VO concentration at the point of waste origination for a hazardous waste shall be determined in accordance with the procedures specified in 35 Ill. Adm. Code 725.984(a)(2) through (a)(6).

b) Waste determination procedures for treated hazardous waste.

1) An owner or operator shall perform the applicable waste determinations for each treated hazardous waste placed in waste management units exempted under the provisions of Section 724.982(c)(2) from using air emission controls in accordance with standards specified in Section 724.984 through 724.987, as applicable to the waste management unit.

2) The waste determination for a treated hazardous waste shall be performed in accordance with the procedures specified in 35 Ill. Adm. Code 725.984(b)(2) through (b)(10), as applicable to the treated hazardous waste.

c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in tanks using air emission controls in accordance with standards specified in Section 724.984(c).

2) The maximum organic vapor pressure of the hazardous waste shall be determined in accordance with the procedures specified in 35 Ill. Adm. Code 725.984(c)(2) through (c)(4).

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.984 Standards: Tanks

a) This Section applies to owners and operators of tanks subject to this Subpart into which any hazardous waste is placed, except for the following tanks:

1) A tank in which all hazardous waste entering the tank meets the conditions specified in Section 724.982(c), or

2) A tank used for biological treatment of hazardous waste in accordance with the requirements of Section 724.982(c)(2)(D).

b) The owner or operator shall place the hazardous waste into one of the following tanks:

1) A tank equipped with a cover (e.g., a fixed roof) that is vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (d) below;

2) A tank equipped with a fixed roof and internal floating roof in accordance with the requirements of Section 724.991;

3) A tank equipped with an external floating roof in accordance with the requirements of Section 724.991; or

4) A pressure tank that is designed to operate as a closed system such that the tank operates with no detectable organic emissions at all times that hazardous waste is in the tank except as provided for in subsection (g) below.

c) As an alternative to complying with subsection (b) above, an owner or operator may place hazardous waste in a tank equipped with a cover (e.g., a fixed roof) meeting the requirements specified in subsection (d)(1) below when the hazardous waste is determined to meet all of the following conditions:

1) The hazardous waste is not mixed, stirred, agitated, or circulated within the tank by the owner or operator using a process that results in splashing, frothing, or visible turbulent flow on the waste surface during normal process operations;

2) The hazardous waste in the tank is not heated by the owner or operator except during conditions requiring that the waste be heated to prevent the waste from freezing or to maintain adequate waste flow conditions for continuing normal process operations;

3) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process or a process that produces an exothermic reaction; and

4) The maximum organic vapor pressure of the hazardous waste in the tank, as determined using the procedure specified in Section 724.983(c), is less than the following applicable value:

A) If the tank design capacity is equal to or greater than 151 m^3 (5333 ft^3 or 39,887 gal), then the maximum organic vapor pressure shall be less than 5.2 kPa (0.75 psia or 39 mm Hg);

B) If the tank design capacity is equal to or greater than 75 m^3 (2649 ft^3 or 19,810 gal) but less than 151 m^3 (5333 ft^3 or 39,887 gal), then the maximum organic vapor pressure shall be less than 27.6 kPa (4.0 psia or 207 mm hg); or

C) If the tank design capacity is less than 75 m^3 (2649 ft^3 or 19,810 gal), then the maximum organic vapor pressure shall be less than 76.6 kPa (11.1 psia or 574 mm Hg).

d) To comply with subsection (b)(1) above, the owner or operator shall design, install, operate, and maintain a cover that vents the organic vapors emitted from hazardous waste in the tank through a closed-vent system connected to a control device.

1) The cover shall be designed and operated to meet the following requirements:

A) The cover and all cover openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable organic

emissions when all cover openings are secured in a closed, sealed position; and

B) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the tank except as provided for in subsection (f) below.

2) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section 724.987.

e) The owner and operator shall install, operate, and maintain enclosed pipes or other closed-systems to:

BOARD NOTE: U.S. EPA considers a drain system that meets the requirements of 40 CFR 61.346(a)(1) or (b)(1) through (b)(3) to be a "closed-system". The Board intends that this meaning be included in the use of that term for the purposes of this Subpart.

1) Transfer all hazardous waste to the tank from another tank, surface impoundment, or container subject to this Subpart except for those hazardous wastes that meet the conditions specified in Section 724.982(c); and

2) Transfer all hazardous waste from the tank to another tank, surface impoundment, or container subject to this subpart except for those hazardous wastes that meet the conditions specified in Section 724.982(c).

f) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid) at all times that hazardous waste is in the tank except when it is necessary to use the cover opening to:

1) Add, remove, inspect, or sample the material in the tank;

2) Inspect, maintain, repair, or replace equipment located inside the tank; or

3) Vent gases or vapors from the tank to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 724.987.

g) One or more safety devices that vent directly to the atmosphere may be used on the tank, cover, closed-vent system, or control device provided each safety device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the tank or closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times, except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the tank, cover, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____ ___)

Section 724.985 Standards: Surface Impoundments

a) This Section applies to owners and operators of surface impoundments subject to this Subpart into which any hazardous waste is placed except for the following surface impoundments:

1) A surface impoundment in which all hazardous waste entering the surface impoundment meets the conditions specified in Section 724.982(c); or

2) A surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of Section 724.982(c)(2)(D).

b) The owner or operator shall place the hazardous waste into a surface impoundment equipped with a cover (e.g., an air-supported structure or a rigid cover) that is vented through a closed-vent system to a control device meeting the requirements specified in subsection (d) below.

c) As an alternative to complying with subsection (b) above, an owner or operator may place hazardous waste in a surface impoundment equipped with a floating membrane cover meeting the requirements specified in subsection (e) below when the hazardous waste is determined to meet all of the following conditions:

1) The hazardous waste is not mixed, stirred, agitated, or circulated within the surface impoundment by the owner or operator using a process that results in splashing, frothing, or visible turbulent flow on the waste surface during normal process operations;

2) The hazardous waste in the surface impoundment is not heated by the owner or operator; and

3) The hazardous waste is not treated by the owner or operator using a waste stabilization process or a process that produces an exothermic reaction.

d) To comply with subsection (b)(1) above, the owner or operator shall design, install, operate, and maintain a cover that vents the organic vapors emitted from hazardous waste in the surface impoundment through a closed-vent system connected to a control device.

1) The cover shall be designed and operated to meet the following requirements:

A) The cover and all cover openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable organic emissions when all cover openings are secured in a closed, sealed position;

B Each cover opening shall be secured in the closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the surface impoundment, except as provided for in subsection (g) below; and

C) The closed-vent system and control device shall be designed

and operated in accordance with Section 724.987.

e) To comply with subsection (c) above, the owner or operator shall design, install, operate, and maintain a floating membrane cover that meets all of the requirements specified in 35 Ill. Adm. Code 725.986(e)(1) through (e)(4).

f) The owner or operator shall install, operate, and maintain enclosed pipes or other closed-systems to:

BOARD NOTE: U.S. EPA considers a drain system that meets the requirements of 40 CFR 61.346(a)(1) or (b)(1) through (b)(3) to be a "closed-system". The Board intends that this meaning be included in the use of that term for the purposes of this Subpart.

1) Transfer all hazardous waste to the surface impoundment from another tank, surface impoundment, or container subject to this Subpart except for those hazardous wastes that meet the conditions specified in Section 724.982(c); and

2) Transfer all hazardous waste from the surface impoundment to another tank, surface impoundment, or container subject to this Subpart except for those hazardous wastes that meet the conditions specified in Section 724.982(c).

g) Each cover opening shall be secured in the closed, sealed position (e.g., a cover by a gasketed lid or cap) at all times that hazardous waste is in the surface impoundment except when it is necessary to use the cover opening to:

1) Add, remove, inspect, or sample the material in the surface impoundment;

2) Inspect, maintain, repair, or replace equipment located underneath the cover;

3) Remove treatment residues from the surface impoundment in accordance with the requirements of 35 Ill. Adm. Code 728.4; or

4) Vent gases or vapors from the surface impoundment to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 724.987.

h) One or more safety devices that vent directly to the atmosphere may be installed on the cover, closed-vent system, or control device provided each device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the surface impoundment or the closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times, except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the cover, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.986 Standards: Containers

a) This Section applies to the owners and operators of containers having design capacities greater than 0.1 m^3 (3.5 ft^3 or 26.4 gal) subject to this Subpart into which any hazardous waste is placed except for a container in which all hazardous waste entering the container meets the conditions specified in Section 724.982(c).

b) An owner or operator shall manage hazardous waste in containers using the following procedures:

1) The owner or operator shall place the hazardous waste into one of the following containers, except when a container is used for hazardous waste treatment as required by subsection (b)(2) below:

A) A container that is equipped with a cover which operates with no detectable organic emissions when all container openings (e.g., lids, bungs, hatches, and sampling ports) are secured in a closed, sealed position. The owner or operator shall determine that a container operates with no detectable emissions by testing each opening on the container for leaks in accordance with Method 21 in 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111, the first time any portion of the hazardous waste is placed into the container. If a leak is detected and cannot be repaired immediately, the hazardous waste shall be removed from the container and the container not used to meet the requirements of this subsection until the leak is repaired and the container is retested.

B) A container having a design capacity less than or equal to 0.46 m^3 (16.2 ft^3 or 122 gal) that is equipped with a cover and complies with all applicable Department of Transportation regulations on packaging hazardous waste for transport under 49 CFR 178, incorporated by reference at 35 Ill. Adm. Code 720.111.

i) A container that is managed in accordance with the requirements of 49 CFR 178, incorporated by reference at 35 Ill. Adm. Code 720.111, for the purpose of complying with this Subpart is not subject to any exceptions to the 49 CFR 178 regulations, except as noted in subsection (b)(1)(B)(ii) below.

ii) A lab pack that is managed in accordance with the requirements of 49 CFR part 178, incorporated by reference at 35 Ill. Adm. Code 720.111, for the purpose of complying with this Subpart may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b), incorporated by reference at 35 Ill. Adm. Code 720.111.

C) A container that is attached to or forms a part of any truck, trailer, or railcar and that has been

demonstrated within the preceding 12 months to be organic vapor tight when all container openings are in a closed, sealed position (e.g., the container hatches or lids are gasketed and latched). For the purpose of meeting the requirements of this subsection, a container is organic vapor tight if the container sustains a pressure change of not more than 0.75 kPa (0.11 psig or 5.6 mm Hg) within 5 minutes after it is pressurized to a minimum of 4.50 kPa (0.65 psig or 33.7 mm Hg). This condition is to be demonstrated using the pressure test specified in Method 27 of 40 CFR part 60, appendix A, and a pressure measurement device which has a precision of ±2.5 mm water and which is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

2) An owner or operator treating hazardous waste in a container by either a waste stabilization process, any process that requires the addition of heat to the waste, or any process that produces an exothermic reaction shall meet the following requirements:

A) Whenever it is necessary for the container to be open during the treatment process, the container shall be located inside an enclosure that is vented through a closed-vent system to a control device.

B) The enclosure shall be a structure that is designed and operated in accordance with the following requirements:

i) The enclosure shall be a structure that is designed and operated with sufficient airflow into the structure to capture the organic vapors emitted from the hazardous waste in the container and vent the vapors through the closed-vent system to the control device.

ii) The enclosure may have permanent or temporary openings to allow worker access, passage of containers through the enclosure by conveyor or other mechanical means, entry of permanent mechanical or electrical equipment, or to direct airflow into the enclosure. The pressure drop across each opening in the enclosure shall be maintained at a pressure below atmospheric pressure so that whenever an open container is placed inside the enclosure no organic vapors released from the container exit the enclosure through the opening. The owner or operator shall determine that an enclosure achieves this condition by measuring the pressure drop across each opening in the enclosure. If the pressure within the enclosure is equal to or greater than atmospheric pressure then the enclosure does not meet the requirements of this Section.

C) The closed-vent system and control device shall be designed and operated in accordance with the requirements of Section 724.987.

3) An owner or operator transferring hazardous waste into a container having a design capacity greater than 0.46 m³ (16.2 ft³ or 122 gal) shall meet the following requirements:

A) Hazardous waste transfer by pumping shall be performed using a conveyance system that uses a tube (e.g., pipe, hose) to add the waste into the container. During transfer of the waste into the container, the cover shall remain in place and all container openings shall be maintained in a closed, sealed position except for those openings through which the tube enters the container and as provided for in subsection (c) below. The tube shall be positioned in a manner so that:

i) The tube outlet continuously remains submerged below the waste surface at all times waste is flowing through the tube;

ii) The lower bottom edge of the tube outlet is located at a distance no greater than two inside diameters of the tube or 15.25 cm (6.0 in), whichever distance is greater, from the bottom of the container at all times waste is flowing through the tube; or

iii) The tube is connected to a permanent port mounted on the bottom of the container so that the lower edge of the port opening inside the container is located at a distance equal to or less than 15.25 cm (6.0 in) from the container bottom.

B) Hazardous waste transferred by a means other than pumping shall be performed such that during transfer of the waste into the container, the cover remains in place and all container openings are maintained in a closed, sealed position except for those openings through which the hazardous waste is added and as provided for in subsection (d) below.

c) Each container opening shall be maintained in a closed, sealed position (e.g., covered by a gasketed lid) at all times that hazardous waste is in the container except when it is necessary to use the opening to:

1) Add, remove, inspect, or sample the material in the container;

2) Inspect, maintain, repair, or replace equipment located inside the container; or

3) Vent gases or vapors from a cover located over or enclosing an open container to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 724.987.

d) One or more safety devices that vent directly to the atmosphere may be used on the container, cover, enclosure, closed-vent system, or control device provided each device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the container, cover, enclosure, or closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the container, cover, enclosure, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.987 Standards: Closed-vent Systems and Control Devices

a) This Section applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of this Subpart.

b) The closed-vent system shall meet the following requirements:

1) The closed-vent system shall route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in subsection (c) below.

2) The closed-vent system shall be designed and operated in accordance with the requirements specified in Section 724.933(k) of this part.

3) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, the owner or operator shall meet the following requirements:

A) For each bypass device, except as provided for in subsection (b)(3)(B) below, the owner or operator shall either:

i) Install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that indicates at least once every 15 minutes whether gas, vapor, or fume flow is present in the bypass device; or

ii) Secure a valve installed at the inlet to the bypass device in the closed position using a car-seal or a lock-and-key type configuration. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the closed position.

B) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of subsection (b)(3)(A) above.

c) The control device shall meet the following requirements:

1) The control device shall be one of the following devices:

A) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

B) An enclosed combustion device designed and operated in accordance with the requirements of Section 724.933(c); or

C) A flare designed and operated in accordance with the requirements of Section 724.933(d).

2) The control device shall be operating at all times when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device.

3) The owner or operator using a carbon adsorption system to comply with subsection (c)(1) above shall operate and maintain the control device in accordance with the following requirements:

A) Following the initial startup of the control device, all activated carbon in the control device shall be replaced with fresh carbon on a regular basis in accordance with the requirements of Section 724.933(g) or Section 724.933(h).

B) All carbon removed from the control device shall be managed in accordance with the requirements of Section 724.933(m).

4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with subsection (c)(1) above shall operate and maintain the control device in accordance with the requirements of Section 724.933(l).

5) The owner or operator shall demonstrate that a control device achieves the performance requirements of subsection (c)(1) above, as follows:

A) An owner or operator shall demonstrate using either a performance test, as specified in subsection (c)(5)(C) below, or a design analysis, as specified in subsection (c)(5)(D) below, the performance of each control device except for the following:

i) A flare;

ii) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

iii) A boiler or process heater into which the vent stream is introduced with the primary fuel;

iv) A boiler or process heater burning hazardous waste for which the owner or operator has been issued a final permit under 35 Ill. Adm. Code 703 and 705 and designs and operates the unit in

accordance with the requirements of 35 Ill. Adm. Code 726.Subpart HH; or

v) A boiler or process heater burning hazardous waste for which the owner or operator has certified compliance with the interim status requirements of 35 Ill. Adm. Code 726.Subpart H.

B) An owner or operator shall demonstrate the performance of each flare in accordance with the requirements specified in Section 724.933(e).

C) For a performance test conducted to meet the requirements of subsection (c)(5)(A) above, the owner or operator shall use the test methods and procedures specified in Section 724.934(c)(1) through (c)(4).

D) For a design analysis conducted to meet the requirements of subsection (c)(5)(A) above, the design analysis shall meet the requirements specified in Section 724.935(b)(4)(C).

E) The owner or operator shall demonstrate that a carbon adsorption system achieves the performance requirements of subsection (c)(1) above based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

6) If the owner or operator and the Agency do not agree on a demonstration of control device performance using a design analysis then the disagreement shall be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of subsection (c)(5)(C) above. The Agency may choose to have an authorized representative observe the performance test.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.988 Inspection and Monitoring Requirements

a) This Section applies to an owner or operator using air emission controls in accordance with the requirements of Sections 724.984 through 724.987.

b) Each cover used in accordance with requirements of Section 724.984 through 724.986 shall be visually inspected and monitored for detectable organic emissions by the owner or operator using the procedure specified in 35 Ill. Adm. Code 725.989(f)(1) through (f)(7), except as follows:

1) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.989(f)(1) through (f)(7) for the following tank covers:

A) A tank internal floating roof that is inspected and monitored in accordance with the requirements of Section 724.991; or

B) A tank external floating roof that is inspected and monitored in accordance with the requirements of Section 724.991.

2) If a tank is buried partially or entirely underground, an owner or operator is required to perform the cover inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.989(f)(1) through (f)(7) only for those portions of the tank cover and those connections to the tank cover or tank body (e.g. fill ports, access hatches, gauge wells, etc.) that extend to or above the ground surface and can be opened to the atmosphere.

3) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.989(f)(1) through (f)(7) for a container that meets all requirements specified in either Section 724.986(b)(1)(B) or (b)(1)(C).

4) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.989(f)(1) through (f)(7) for an enclosure used to control air emissions from containers in accordance with the requirements of Section 724.986(b)(2).

c) Each closed-vent system used in accordance with the requirements of Section 724.987 shall be inspected and monitored by the owner or operator in accordance with the procedure specified in Section 724.933(k).

d) Each control device used in accordance with the requirements of Section 724.987 shall be inspected and monitored by the owner or operator in accordance with the procedures specified in Sections 724.933(f) and 724.933(i).

e) The owner or operator shall develop and implement a written plan and schedule to perform all inspection and monitoring requirements of this section. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under Section 724.115.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.989 Recordkeeping Requirements

a) Each owner or operator of a facility subject to requirements in this Subpart shall record and maintain the following information as applicable:

1) Documentation for each cover installed on a tank in accordance with the requirements of Section 724.984(b)(2) or 724.984(b)(3) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in 35 Ill. Adm. Code 725.991(c).

2) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of Section 724.985(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the

owner or operator that the cover meets the specifications listed in 35 Ill. Adm. Code 725.986(e).

3) Documentation for each enclosure used to control air emissions from containers in accordance with the requirements of Section 724.986(b)(2)(A) that includes information prepared by the owner or operator or provided by the manufacturer or vendor describing the enclosure design, and certification by the owner or operator that the enclosure meets the specifications listed in Section 724.986(b)(2)(B).

4) Documentation for each closed-vent system and control device installed in accordance with the requirements of Section 724.987 that includes:

A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in subsection (a)(4)(B) below or by performance tests as specified in subsection (a)(4)(C) below when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

B) If a design analysis is used, then design documentation as specified in Section 724.935(b)(4). The documentation shall include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 724.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications.

C) If performance tests are used, then a performance test plan as specified in Section 724.935(b)(3) and all test results.

D) Information as required by Section 724.935(c)(1) and (c)(2).

5) Records for all Method 27 tests performed by the owner or operator for each container used to meet the requirements of Section 724.986(b)(1)(C).

6) Records for all visual inspections conducted in accordance with the requirements of Section 724.988.

7) Records for all monitoring for detectable organic emissions conducted in accordance with the requirements of Section 724.988.

8) Records of the date of each attempt to repair a leak, repair methods applied, and the date of successful repair.

9) Records for all continuous monitoring conducted in accordance with the requirements of Section 724.988.

10) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section

724.987(c)(3)(B).

11) Records for all inspections of each cover installed on a tank in accordance with the requirements of Section 724.984(b)(2) or Section 724.984(b)(3) that includes information as listed in 35 Ill. Adm. Code 725.991(c).

b) An owner or operator electing to use air emission controls for a tank in accordance with the conditions specified in Section 724.984(c) shall record the following information:

1) Date and time each waste sample is collected for direct measurement of maximum organic vapor pressure in accordance with Section 724.983(c).

2) Results of each determination of the maximum organic vapor pressure of the waste in a tank performed in accordance with Section 724.983(c).

3) Records specifying the tank dimensions and design capacity.

c) An owner or operator electing to use air emission controls for a tank in accordance with the requirements of Section 724.991 shall record the information required by Section 724.991(c).

d) An owner or operator electing not to use air emission controls for a particular tank, surface impoundment, or container subject to this Subpart in accordance with the conditions specified in Section 724.982(c) shall record the information used by the owner or operator for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of Section 724.983.

e) An owner or operator electing to comply with requirements in accordance with Section 724.982(c)(2)(E) or Section 724.982(c)(2)(F) shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

f) An owner or operator designating a cover as unsafe to inspect and monitor pursuant to 35 Ill. Adm. Code 725.989(f)(5) or difficult to inspect and monitor pursuant to 35 Ill. Adm. Code 725.989(f)(6) shall record in a log that is kept in the facility operating record the following information:

1) A list of identification numbers for tanks with covers that are designated as unsafe to inspect and monitor in accordance with the requirements of 35 Ill. Adm. Code 725.989(f)(5), an explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

2) A list of identification numbers for tanks with covers that are designated as difficult to inspect and monitor in accordance with the requirements of 35 Ill. Adm. Code 725.989(f)(6), an explanation for each cover stating why the cover is difficult to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

g) All records required by subsections (a) through (f) above, except as required in subsections (a)(1) through (a)(4), shall be maintained in the operating record for a minimum of 3 years. All records required by subsections (a)(1) through (a)(4) above shall be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service.

h) The owner or operator of a facility that is subject to this Subpart and to the control device standards in 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, incorporated by reference in 35 Ill. Adm. Code 720.111, may elect to demonstrate compliance with the applicable Sections of this Subpart by documentation either pursuant to this Subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this Section.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.990 Reporting Requirements

a) Each owner or operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of Section 724.982(c) shall report to the Agency each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions specified in Section 724.982(c)(1) or (c)(2), as applicable. Examples of such occurrences include placing in the waste management unit a hazardous waste having an average VO concentration equal to or greater than 100 ppmw at the point of waste origination or placing in the waste management unit a treated hazardous waste which fails to meet the applicable conditions specified in Section 724.982(c)(2)(A) through (c)(2)(E). The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the U.S. EPA identification number, the facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

b) Each owner or operator using air emission controls on a tank in accordance with the requirements Section 724.984(c) shall report to the Agency each occurrence when hazardous waste is managed in the tank in noncompliance with the conditions specified in Section 724.984(c)(1) through (c)(4). The owner or operator shall submit a written report within 15 calendar days of the time that the owner or operator becomes aware of the occurrence. The written report shall contain the U.S. EPA identification number, the facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

c) Each owner or operator using a control device in accordance with the requirements of Section 724.987 shall submit a semiannual written report to the Agency excepted as provided for in subsection (d) below. The report shall describe each occurrence

during the previous 6-month period when a control device is operated continuously for 24 hours or longer in noncompliance with the applicable operating values defined in Section 724.935(c)(4) or when a flare is operated with visible emissions as defined in Section 724.933(d). The written report shall include the U. S. EPA identification number, the facility name and address, and an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance. The report shall be signed and dated by an authorized representative of the owner or operator.

d) A report to the Agency in accordance with the requirements of subsection (c) above is not required for a 6-month period during which all control devices subject to this Subpart are operated by the owner or operator so that during no period of 24 hours or longer did a control device operate continuously in noncompliance with the applicable operating values defined in Section 724.935(c)(4) or a flare operate with visible emissions, as defined in Section 724.933(d).

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 724.991 Alternative Control Requirements for Tanks

a) This Section applies to owners and operators of tanks that elect to comply with Section 724.984(b)(2) or Section 724.984(b)(3).

1) The owner or operator that elects to comply with Section 724.984(b)(2) shall design, install, operate, and maintain a fixed roof and internal floating roof that meet the requirements specified in 35 Ill. Adm. Code 725.991(a)(1)(A) through (a)(1)(I).

2) The owner or operator that elects to comply with Section 724.984(b)(3) shall design, install, operate, and maintain an external floating roof that meets the requirements specified in 35 Ill. Adm. Code 725.991(a)(2)(A) through (a)(2)(C).

b) The owner or operator shall inspect and monitor the control equipment in accordance with the following requirements:

1) For a tank equipped with a fixed roof and internal floating roof in accordance with the requirements of subsection (a)(1) above, the owner or operator shall perform the inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.991(b)(1).

2) For a tank equipped with an external floating roof in accordance with the requirements of subsection (a)(2) above, the owner or operator shall perform the inspection and monitoring requirements specified in 35 Ill. Adm. Code 725.991(b)(2).

c) The owner or operator shall record the following information in the operating record in accordance with the requirements of Section 724.989(a)(1) and (a)(11):

1) For a tank equipped with a fixed roof and internal floating roof in accordance with the requirements of subsection (a)(1) above, the owner or operator shall record the information listed in 35 Ill. Adm. Code 725.991(c)(1).

2) For a tank equipped with an external floating roof in accordance with the requirements of subsection (a)(1) above, the owner or operator shall record the information listed in 35 Ill. Adm. Code 725.991(c)(2).

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1102 Closure and post closure care

a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 35 Ill. Adm. Code 721.103(ee) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in 739.Subparts G and H.

b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in subsection (a) above, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (35 Ill. Adm. Code 724.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator must meet all the requirements for landfills specified in 739.Subparts G and H.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 725
INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART A: GENERAL PROVISIONS

SUBPART B: GENERAL FACILITY STANDARDS

SUBPART C: PREPAREDNESS AND PREVENTION

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

SUBPART F: GROUNDWATER MONITORING

SUBPART G: CLOSURE AND POST-CLOSURE

SUBPART H: FINANCIAL REQUIREMENTS

SUBPART R: UNDERGROUND INJECTION

SUBPART W: DRIP PADS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

SUBPART DD: CONTAINMENT BUILDINGS

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

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective ~~as noted in 35 Ill. Adm. Code 700.106~~May 17, 1982; amended in R82-18, 51 PCB 831, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, at 7 Ill. Reg. 14034, effective October 12, 1983; amended in R84-9, at 9 Ill. Reg. 11869, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1085, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14069, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6044, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338, effective November 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9398, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14534, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9578, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17672, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5681, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20620, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6771, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12190, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17548, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 725.101 Purpose, Scope and Applicability

a) The purpose of this Part is to establish minimum standards ~~which~~that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.

b) Except as provided in Section 725.980(b), t~~T~~he standards in this Part and ~~of~~ 35 Ill. Adm. Code 724.652 and 724.653 apply to owners and operators of facilities ~~which~~that treat, store, or dispose of hazardous waste ~~who~~that have fully complied with the requirements for interim status under Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) (42 U.S.C. 6901 et seq.) and 35 Ill. Adm. Code 703, until either a permit is issued under Section 3005 of the Resource Conservation and Recovery Act or Section 21(f) of the Environmental Protection Act, or until applicable closure and post-closure responsibilities under this Part are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980, ~~who~~that have failed to provide timely notification as required by Section 3010(a) of RCRA~~,~~ or that have failed to file Part A of the Permit Application, as required by 40 CFR 270.10(e) and (g) or 35 Ill. Adm. Code 703.150 and 703.152. These standards apply to all

treatment, storage, or disposal of hazardous waste at these facilities after November 19, 1980, except as specifically provided otherwise in this Part or 35 Ill. Adm. Code 721;

BOARD NOTE: As stated in Section 3005(a) of RCRA, after the effective date of regulations under that Section, (i.e., 40 CFR 270 and 124,) the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA provides for the continued operation of an existing facility ~~which~~that meets certain conditions until final administrative disposition of the owner's and operator's permit application is made. 35 Ill. Adm. Code 703.140 et seq. provide that a permit is deemed issued under Section 21(f)(1) of the Environmental Protection Act under conditions similar to federal interim status.

c) The requirements of this Part do not apply to:

1) A person disposing of hazardous waste by means of ocean disposal subject to a permit issued under the Marine Protection, Research and Sanctuaries Act (16 U.S.C. 1431-1434; 33 U.S.C. 1401);

BOARD NOTE: This Part applies to the treatment or storage of hazardous waste before it is loaded into an ocean vessel for incineration or disposal at sea, as provided in subsection (b) above.

3) The owner or operator of a POTW (publicly owned treatment works) ~~which~~that treats, stores or disposes of hazardous waste;

BOARD NOTE: The owner or operator of a facility under subsections (c)(1) through (c)(3) is subject to the requirements of 35 Ill. Adm. Code 724 to the extent they are included in a permit by rule granted to such a person under 35 Ill. Adm. Code 702 and 703 or are required by 35 Ill. Adm. Code 704.Subpart F.

5) The owner or operator of a facility permitted, licensed, or registered by Illinois to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation under this Part by 35 Ill. Adm. Code 721.105;

6) The owner or operator of a facility managing recyclable materials described in 35 Ill. Adm. Code 721.106(a)(2), through (a)(4), ~~except~~ to the extent that requirements of this Part are referred to in 35 Ill. Adm. Code 726.Subparts C, F, G, ~~or~~ H or 35 Ill. Adm. Code 739~~.~~;

7) A generator accumulating waste on-site in compliance with 35 Ill. Adm. Code 722.134, except to the extent the requirements are included in 35 Ill. Adm. Code 722.134;

8) A farmer disposing of waste pesticides from the farmer's own use in compliance with 35 Ill. Adm. Code 722.170;

9) The owner or operator of a totally enclosed treatment facility, as defined in 35 Ill. Adm. Code 720.110;

10) The owner or operator of an elementary neutralization unit

or a wastewater treatment unit as defined in 35 Ill. Adm. Code 720.110, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in 35 Ill. Adm. Code 728.Table ~~D~~T), or corrosive (D002) waste, in order to remove the characteristic before land disposal, the owner or operator must comply with the requirements set out in Section 725.117(b);

11) Immediate response:

A) Except as provided in subsection (c)(11)(B), below, a person engaged in treatment or containment activities during immediate response to any of the following situations:

i) A discharge of a hazardous waste;

ii) An imminent and substantial threat of a discharge of a hazardous waste;

iii) A discharge of a material ~~which, when discharged,~~ that becomes a hazardous waste when discharged.

B) An owner or operator of a facility otherwise regulated by this Part must comply with all applicable requirements of 725.Subparts C and D.

C) Any person ~~who~~that is covered by subsection (c)(11)(A), above ~~and who~~that continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Part and 35 Ill. Adm. Code 702, 703, and 705 for those activities.

12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less.

13) The addition of absorbent material to waste in a container (as defined in 35 Ill. Adm. Code 720.110), or the addition of waste to the absorbent material in a container, provided that these actions occur at the time that the waste is first placed in the containers, and Sections 725.117(b), 725.271, and 725.272 are complied with.

d) The following hazardous wastes must not be managed at facilities subject to regulation under this Part: hazardous waste numbers F020, F021, F022, F023, F026, or F027 unless:

1) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

2) The waste is stored in tanks or containers;

3) The waste is stored or treated in waste piles that meet the requirements of 35 Ill. Adm. Code 724.350(c) ~~as well as~~and all other applicable requirements of 725.Subpart L;

4) The waste is burned in incinerators that are certified pursuant to the standards and procedures in Section 725.452; or

5) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in Section 725.483.

e) This Part applies to owners and operators of facilities ~~which~~that treat, store, or dispose of hazardous wastes referred to in 35 Ill. Adm. Code 728, and the 35 Ill. Adm. Code 728 standards are considered material conditions or requirements of the interim status standards of this Part.

f) ~~35 Ill. Adm. Code 700 contains rules concerning application of other Board regulations.~~Other bodies of regulations may apply a person, facility, or activity, such as 35 Ill. Adm. Code 809 (special waste hauling), 35 Ill. Adm. Code 807 or 810 through 817 (solid waste landfills), 35 Ill. Adm. Code 848 or 849 (used and scrap tires), or 35 Ill. Adm. Code 1420 through 1422 (potenyially infectious medical waste), depending on the provisions of those other regulations.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART B: GENERAL FACILITY STANDARDS

Section 725.113 General Waste Analysis

a) Waste analysis:

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

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

BOARD NOTE: For example, the facility's record of analyses performed on the waste before the effective date of these regulations or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility may be included in the data base required to comply with subsection (a)(1)~~,~~ above, except as otherwise specified in 35 Ill. Adm. Code 728.107(b) and (c). The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by subsection (a)(1), above. If the generator does not supply the information and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.

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

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

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

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

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

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

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

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

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

B) An equivalent sampling method.

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

4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date.

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

6) Where applicable, the methods ~~which~~that will be used to meet the additional waste analysis requirements for specific waste management methods, as specified in Sections 725.300, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475, 725.502, 725.934(d)~~,~~ ~~and~~ 725.963(d), and 725.984, and 35 Ill. Adm. Code 728.107.~~ And,~~

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

A) The sampling of impoundment contents;

B) The analysis of test data; and~~,~~

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

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

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

8) For owners and operators seeking an exemption to the air emission standards of 724.Subpart CC of this part in accordance with Section 725.983:

A) The procedures and schedules for waste sampling and analysis, and the analysis of test data to verify the exemption.

B) Each generator's notice and certification of the volatile organic concentration in the waste if the waste is received from offsite.

c) For off-site facilities, the waste analysis plan required in subsection (b)~~,~~ above~~,~~ must also specify the procedures ~~which~~that will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:

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

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

3) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.114 Security

a) The owner or operator must prevent the unknowing entry and minimize the possibility for the unauthorized entry of persons or livestock onto the active portion of his facility, unless:

1) Physical contact with the waste, structures~~,~~ or equipment of the active portion of the facility will not injure unknowing or unauthorized persons or livestock ~~which~~that may enter the active portion of ~~a~~the facility; and

2) Disturbance of the waste or equipment~~,~~ by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility will not cause a violation of the requirements of this ~~p~~Part.

b) Unless exempt under ~~paragraphs~~subsections (a)(1) and (a)(2) ~~of this section~~above, a facility must have:

1) A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) ~~which~~that continuously monitors and controls entry into the active portion of the facility; or ~~2)~~

2) Controlled access, including the following minimum elements:

A) An artificial or natural barrier (e.g., a fence in good repair or a fence combined with a cliff)~~,~~ ~~which~~that completely surrounds the active portion of the facility; and

B) A means to control entry at all times through the gates or other entrances to the active portion of the facility (e.g., an attendant, television monitors, locked entrance~~,~~ or controlled roadway access to the facility).

BOARD NOTE: The requirements of ~~paragraph~~subsection (b) ~~of this section~~above are satisfied if the facility or plant within which the active portion is located itself has a surveillance system or a barrier and a means to control entry ~~which~~that complies with the requirements of ~~paragraph~~subsection (b)(1) or (b)(2) ~~of this section~~.

c) Unless exempt under ~~paragraphs~~subsection (a)(1) ~~and~~or (a)(2) ~~of this section~~above, a sign with the legend, "Danger--Unauthorized Personnel Keep Out," must be posted at each entrance to the active portion of a facility and at other locations~~,~~ in sufficient numbers to be seen from any approach to this active portion. The sign must be legible from a distance of at least 25 feet. Existing signs with a legend other than "Danger--Unauthorized Personnel Keep Out" may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion and that entry onto the active portion can be dangerous.

BOARD NOTE: See Section 725.217(b) for discussion of security requirements at disposal facilities during the post-closure care period.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.115 General Inspection Requirements

a) The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors and discharges ~~which~~that may be causing--or may lead to--the conditions listed below. The owner

or operator shall conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

1) Release of hazardous waste constituents to the environment, or

2) A threat to human health.

b) Written schedule.

1) The owner or operator shall develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.

2) The owner or operator shall keep this schedule at the facility.

3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) ~~which~~that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).

4) The frequency of inspection may vary for the items on the schedule. However, it should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use. At a minimum, the inspection schedule must include the items and frequencies called for in Sections 725.274, 725.293, 725.295, 725.326, 725.360, 725.378, 725.404, 725.447, 725.477, 725.503, 725.933, 725.952, 725.953, ~~and~~ 725.958, 725.989, and 725.991(b), where applicable.

c) The owner or operator shall remedy any deterioration or malfunction of equipment or structure ~~which~~that the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

d) The owner or operator shall record inspections in an inspection log or summary. The owner or operator shall keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date, and nature of any repairs or other remedial actions.

(Source: Amended at 17 Ill. Reg. 5806, effective March 26, 1993)

Section 725.117 General Requirements for Ignitable, Reactive, or Incompatible Wastes

a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or

reaction, including, but not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the owner or operator must confine smoking and open flame to specially designated locations. "No Smoking" signs must be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

b) Where specifically required by other ~~s~~Sections of this ~~p~~Part, the treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible waste or incompatible wastes and materials, must be conducted so that it does not:

1) Generate extreme heat or pressure, fire or explosion, or violent reaction;

2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;

3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

4) Damage the structural integrity of the device or facility containing the waste; or

5) Through other like means, threaten human health or the environment.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 725.150 Applicability

The regulations in this ~~s~~Subpart apply to owners and operators of all hazardous waste facilities, except as Section 725.101 provides otherwise.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.156 Emergency Procedures

a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) shall immediately:

1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

2) Notify appropriate state or local agencies with designated response roles if their help is needed.

b) Whenever there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and a real extent of any released materials. He or she may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

c) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from

the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water runoffs from water or chemical agents used to control fire and heat-induced explosions).

d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, he or she shall report his findings as follows:

1) If his assessment indicates that evacuation of local areas may be advisable, he or she shall immediately notify appropriate local authorities. He or she must be available to help appropriate officials decide whether local areas should be evacuated; and

2) He or she shall immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan under 40 CFR Part 300), or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include:

A) Name and telephone number of reporter;

B) Name and address of facility;

C) Time and type of incident (e.g., release, fire);

D) Name and quantity of material~~(s)~~ involved, to the extent known;

E) The extent of injuries, if any; and

F) The possible hazards to human health or the environment outside the facility.

e) During an emergency the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.

f) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

g) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil, or surface water, or any other material that results from a release, fire, or explosion at the facility.

~~Comment~~BOARD NOTE: Unless the owner or operator can demonstrate~~,~~ in accordance with Section 721.103(~~c~~d) or (~~d~~e) that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage it in accordance with all applicable requirements of Parts 722, 723, and 725.

h) The emergency coordinator shall ensure that, in the affected area~~(s)~~ of the facility:

1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and

2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.

i) The owner or operator shall notify the Director and other appropriate state and local authorities that the facility is in compliance with ~~paragraph~~subsection (h) ~~of this section~~above before operations are resumed in the affected area~~(s)~~ of the facility.

j) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, it shall submit a written report on the incident to the Director. The report must include:

1) Name, address, and telephone number of the owner or operator;

2) Name, address, and telephone number of the facility;

3) Date, time, and type of incident (e.g., fire, explosion);

4) Name and quantity of material~~(s)~~ involved;

5) The extent of injuries, if any;

6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

7) Estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 725.171 Use of Manifest System

a) If a facility receives hazardous waste accompanied by a manifest, the owner or operator or his agent must:

1) Sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;

2) Note any significant discrepancies in the manifest~~,~~ ~~(~~as defined in Section 725.172(a)~~)~~, on each copy of the manifest;

~~Comment~~BOARD NOTE: ~~The Board does not intend that the~~An owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis ~~must~~need not perform that analysis before signing the manifest and giving it to the transporter. Section 725.172(b), however,

requires the owner or operator to report~~ing~~ any unreconciled discrepancy discovered during later analysis.

3) Immediately give the transporter at least one copy of the signed manifest;

4) ~~Within 30 days after the delivery, s~~Send a copy of the manifest to each of the generator and ~~to~~ the Agency within 30 days of the date of delivery; and

5) Retain at the facility a copy of each manifest for at least three years from the date of delivery.

b) If a facility receives from a rail or water (bulk shipment) transporter hazardous waste ~~which~~that is accompanied by a shipping paper containing all the information required on the manifest (excluding the U.S. EPA identification numbers, generator's certification and signatures), the owner or operator or ~~his~~its agent must:

1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;

2) Note any significant discrepancies, ~~t~~as defined in Section 725.172(a)~~)~~, in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

~~Comment~~BOARD NOTE: The ~~Board does not intend that the~~ owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis ~~must~~need not perform that analysis before signing the shipping paper and giving it to the transporter. Section 725.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);

4) ~~Within 30 days after the delivery, s~~Send a copy of the signed and dated manifest to the generator and to the Agency within 30 days after the delivery; however, if the manifest has not been received within 30 days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator; and

~~Comment~~BOARD NOTE: ~~Section~~35 Ill. Adm. Code 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.

c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of ~~Part~~35 Ill. Adm. Code 722.

~~Comment~~BOARD NOTE: The provisions of ~~Section~~35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of ~~Section~~35 Ill. Adm. Code 722.134 ~~only~~ apply only to owners or operators ~~who~~that are shipping hazardous waste ~~which~~that they generated at that facility.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.173 Operating Record

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

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

1) A description and the quantity of each hazardous waste received and the method or methods and date or dates of its treatment, storage, or disposal at the facility as required by Section 725.Appendix A;

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

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

3) Records and results of waste analysis, waste determinations, and trial tests performed as specified in Sections 725.113, 725.300, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475, 725.502, 725.934, ~~and~~ 725.963, and 725.984 and 35 Ill. Adm. Code 728.104(a) and 728.107;

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

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

6) Monitoring, testing, or analytical data ~~and corrective action data where~~ required by 725.Subpart F or Sections 725.119, 725.190, 725.194, 725.291, 725.293, 725.295, 725.322, 725.323, 725.326, 725.355, 725.359, 725.360, 725.376, 725.378, 725.380(d)(1), 725.402 through 725.404, 725.447, 725.477, 725.934(c) through (f), 725.935, 725.963(d) through (i), or 725.964 725.989 through 725.991;

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

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

Section 725.244;

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

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

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

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

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

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

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

(Source: Amended at 17 Ill. Reg. 5806, effective March 26, 1993)

Section 725.177 Additional Reports

In addition to submitting the annual report and unmanifested waste reports described in Sections 725.175 and 725.176, the owner or operator shall also report to the Agency:

a) Releases, fires, and explosions, as specified in Section 725.156(j);

b) Groundwater contamination and monitoring data, as specified in Section 725.193 and 725.194;

c) Facility closure, as specified in Section 725.215; and

d) As otherwise required by 725.Subparts AA, ~~and~~ BB, and CC.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART F: GROUNDWATER MONITORING

Section 725.192 Sampling and Analysis

a) The owner or operator ~~must~~shall obtain and analyze samples from the installed groundwater monitoring system. The owner or operator ~~must~~shall develop and follow a groundwater sampling and analysis plan. ~~He~~The owner or operator ~~must~~shall keep this plan at the facility. The plan must include procedures and techniques for:

1) Sample collection;

2) Sample preservation and shipment;

3) Analytical procedures; and

4) Chain of custody control.

~~Comment~~BOARD NOTE: See "Procedures Manual For Groundwater Monitoring At Solid Waste Disposal Facilities~~,~~" ~~EPA-530/SW-611, August 1977~~ and "Methods for Chemical Analysis of Water and Wastes~~,~~", ~~EPA-600/4-79-020, March 1979~~incorporated by reference in 35 Ill. Adm. Code 720.111, for discussions of sampling and analysis procedures.

b) The owner or operator ~~must~~shall determine the concentration or value of the following parameters in groundwater samples in accordance with ~~paragraphs~~subsections (c) and (d) ~~of this section~~below:

1) Parameters characterizing the suitability of the groundwater as a drinking water supply, as specified in Section 725.Appendix ~~III~~C.

2) Parameters establishing groundwater quality~~:~~:

A) Chloride,

B) Iron,

C) Manganese,

D) Phenols,

E) Sodium, and

F) Sulfate.

~~Comment~~BOARD NOTE: These parameters are to be used as a basis for comparison in the event a groundwater quality assessment is required under Section 725.193(d).

3) Parameters used as indicators of groundwater contamination:

A) pH,

B) Specific Conductance,

C) Total Organic Carbon, and

D) Total Organic Halogen.

c) Establishing background concentrations:

1) For all monitoring wells, the owner or operator ~~must~~shall establish initial background concentrations or values of all parameters specified in ~~paragraph~~subsection (b) ~~of this section~~above. ~~He~~The owner or operator ~~must~~shall do this quarterly for one year.

2) For each of the indicator parameters specified in ~~paragraph~~subsection (b)(3) above, the owner or operator shall obtain at least four replicate measurements ~~must be obtained~~ for each sample and determine the initial background arithmetic mean and variance ~~must be determined~~ by pooling the replicate measurements for the respective parameter concentrations or values in samples obtained from upgradient wells during the first year.

d) After the first year, the owner or operator shall sample all monitoring wells ~~must be sampled~~ and analyze the samples ~~analyzed~~ with the following frequencies:

1) Samples collected to establish groundwater quality must be obtained and analyzed for the parameters specified in ~~paragraph~~subsection (b)(2) ~~of this section~~above at least annually.

2) Samples collected to indicate groundwater contamination must be obtained and analyzed for the parameters specified in ~~paragraph~~subsection (b)(3) ~~of this section~~above at least semi-annually.

e) The owner or operator shall determine the e~~E~~levation of the groundwater surface at each monitoring well ~~must be determined~~ each time a sample is obtained.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.194 Recordkeeping and Reporting

a) Unless the groundwater is monitored to satisfy the requirements of Section 725.193(d)(4), the owner or operator ~~must~~shall:

1) Keep records of the analyses required in Section 725.192(c) and (d), the associated groundwater surface elevations required in Section 725.192(e), and the evaluations required in Section 725.193(b) throughout the active life of the facility and, for disposal facilities, also throughout the post-closure care period ~~as well~~; and

2) Report the following groundwater monitoring information to the ~~Director~~Agency:

A) During the first year when initial background concentrations are being established for the facility: concentrations or values of the parameters listed in Section 725.192(b)(1) for each groundwater monitoring well, within 15 days after completing each quarterly analysis. The owner or operator ~~must~~shall separately identify for each monitoring well any parameters whose concentration or value has been found to exceed the maximum contaminant levels listed in Section 725.Appendix ~~III~~C.

B) Annually: concentrations or values of the parameters listed in Section 725.192(b)(3) for each groundwater monitoring well, along with the required evaluations for these parameters under Section 725.193(b). The owner or operator ~~must~~shall separately identify any significant differences from initial background found in the upgradient wells, in accordance with Section 725.193(c)(1). During the active life of the facility, the owner or operator shall submit this information ~~must be submitted~~ as part of the annual report required under Section 725.175.

C) As part of the annual report required under Section 725.175: results of the evaluation of groundwater surface elevations under Section 725.193(f) and a description of the response to the evaluation, where applicable.

b) If the groundwater is monitored to satisfy the requirements of Section 725.193(d)(4), the owner or operator ~~must~~shall:

1) Keep records of the analyses and evaluations specified in the plan~~,~~ ~~which~~that satisf~~ies~~y the requirements of Section 725.193(d)(3) throughout the active life of the facility and, for disposal facilities, also throughout the post-closure care period ~~as well~~; and

2) Annually, until final closure of the facility, submit to the ~~Director~~Agency a report containing the results of ~~his~~the groundwater quality assessment program ~~which~~that includes, but is not limited to, the calculated (or measured) rate of migration of hazardous waste or hazardous waste constituents in the groundwater during the reporting period. The owner or operator shall submit t~~T~~his report ~~must be submitted as part of the annual report~~ required under Section 725.175.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 725.271 Condition of Containers

If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator ~~must~~shall transfer the hazardous waste from this container to a container that is in good condition or manage the waste in some other way that it complies with the requirements of this Part.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.272 Compatibility of Waste with Container

The owner or operator ~~must~~shall use a container made of or lined with materials ~~which~~that will not react with and are otherwise compatible with the hazardous waste to be stored, so that the ability of the container to contain

the waste is not impaired.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.274 Inspections

The owner or operator ~~must~~shall inspect areas where containers are stored at least weekly, looking for leaks and for deterioration caused by corrosion or other factors.

~~Comment~~BOARD NOTE: See Section 725.271 for remedial action required if deterioration or leaks are detected.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.278 Air Emission Standards

The owner or operator shall manage all hazardous waste placed in a container in accordance with the requirements of 724.Subpart CC.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART J: TANK SYSTEMS

Section 725.301 Generators of 100 to 1000 kg/mo~~r~~

a) The requirements of this Section apply to small quantity generators ~~of~~that generate more than 100 kg but less than 1000 kg of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than 180 days (or 270 days if the generator must ship the waste greater than 200 miles), and that do not accumulate over 6,000 kg on-site at any time.

b) A ~~g~~Generators of between 100 and 1000 kg/mo hazardous waste shall comply with the following general operating requirements:

1) Treatment or storage of hazardous waste in tanks must comply with Section 725.117(b)~~;~~.

2) Hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life~~;~~.

3) Uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard~~,~~ unless the tank is equipped with a containment structure (e.g. dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank~~;~~ and

4) Where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).

BOARD NOTE: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).

c) A ~~g~~Generators of between 100 and 1000 kg/mo accumulating hazardous waste in tanks shall inspect, where present:

1) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that it is in good working order;

2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to its design;

3) The level of waste in the tank at least once each operating day to ensure compliance with subsection (b)(3) above;

4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams; and

5) The construction materials of~~,~~ and the area immediately surrounding~~,~~ discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

BOARD NOTE: As required by Section 725.115(c), the owner or operator must remedy any deterioration or malfunction the owner or operator finds.

d) A ~~g~~Generators of between 100 and 1000 kg/mo accumulating hazardous waste in tanks shall, upon closure of the facility, remove all hazardous waste from tanks, discharge control equipment and discharge confinement structures.

BOARD NOTE: At closure, as throughout the operating period, unless the owner or operator demonstrates, in accordance with 35 Ill. Adm. Code 721.103(~~e~~d) or (~~d~~e), that any solid waste removed from the tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

e) A ~~g~~Generators of between 100 and 1000 kg/mo shall comply with the following special requirements for ignitable or reactive waste:

1) Ignitable or reactive waste must not be placed in a tank~~,~~ unless:

A) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that;

i) The resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable or reactive waste under 35 Ill. Adm. Code 721.121 or 721.123, and

ii) Section 725.117(b) is complied with;~~ or~~

B) The waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react; or

C) The tank is used solely for emergencies.

2) The owner or operator of a facility ~~which~~that treats or stores ignitable or reactive waste in covered tanks shall comply with the buffer zone requirements for tanks contained in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," incorporated by reference in 35 Ill. Adm. Code 720.111.

f) A ~~g~~Generators of between 100 and 1000 kg/mo shall comply with the following ~~special~~ requirements for incompatible wastes:

1) Incompatible ~~wastes~~, or incompatible wastes and materials (see Appendix E for examples) must not be placed in the same tank, unless Section 725.117(b) is complied with.

2) Hazardous waste must not be placed in an unwashed tank ~~which~~that previously held an incompatible waste or material, unless Section 725.117(b) is complied with.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.302 Air Emission Standards

The owner or operator shall manage all hazardous waste placed in a tank in accordance with the requirements of 724.Subparts AA, BB, and CC.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART K: SURFACE IMPOUNDMENTS

Section 725.325 Waste Analysis and Trial Tests

In addition to the waste analyses required by Section 725.113, whenever a surface impoundment is to be used to:

a) Chemically treat a hazardous waste ~~which~~that is substantially different from waste previously treated in that impoundment; or

b) Chemically treat hazardous waste with a substantially different process than and previously used in that impoundment, the owner or operator must, before treating the different waste or using the different process:

1) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests); or

2) Obtain written, documented information ~~or~~on similar treatment of similar waste under similar operating conditions, to show that this treatment will comply with Section 725.117(b).

~~Comment~~BOARD NOTE: As required by Section 725.113, the waste analyses plan must include analyses needed to comply with Sections 725.329 and 725.330. As required by Section 725.173, the owner or operator ~~must~~shall place the results from each waste analysis and trial test, or the documented information in the operating record of the facility.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.331 Air Emission Standards

The owner or operator shall manage all hazardous waste placed in a surface impoundment in accordance with the requirements of 724.Subpart CC.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART L: WASTE PILES

Section 725.352 Waste Analysis

a) In addition to the waste analyses required by Section 725.113, the owner or operator ~~must~~shall analyze a representative sample of waste from each incoming movement before adding the waste to any existing pile unless:

1) The only wastes the facility receives ~~which~~that are amenable to piling are compatible with each other, or

2) The waste received is compatible with the waste in the pile to which it is to be added.

b) The analysis conducted must be capable of differentiating between the types of hazardous waste the owner or operator places in piles, so that mixing of incompatible waste does not inadvertently occur. The analysis must include a visual comparison of color and texture.

~~Comment~~BOARD NOTE: As required by Section 725.113, the waste analysis plan must include analyses needed to comply with Sections 725.356 and 725.357. As required by Section 725.173, the owner or operator must place the results of this analysis in the operating record of the facility.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART M: LAND TREATMENT

Section 725.378 Unsaturated Zone (Zone of Aeration) Monitoring

a) The owner or operator ~~must~~shall have in writing, and ~~must~~shall implement, an unsaturated zone monitoring plan ~~which~~that is designed to:

1) Detect the vertical migration of hazardous waste and hazardous waste constituents under the active portion of the land treatment facility, and

2) Provide information on the background concentrations of the hazardous waste and hazardous waste constitients in similar but untreated soil nearby. ~~t~~This background monitoring must be conducted before or in conjunction with the monitoring required under ~~paragraph~~subsection (a)(1) ~~of this section~~above.

b) The unsaturated zone monitoring plan must include, at a minimum:

1) Soil monitoring using soil cores, and

2) Soil-pore water monitoring using devices, such as lysimeters.

c) To comply with ~~paragraph~~subsection (a)(1) ~~of this section~~above, the owner or operator must demonstrate in his unsaturated zone monitoring plan that:

1) The depth at which soil and soil-pore water samples are to be taken is below the depth to which the waste is incorporated into the soil;

2) The number of soil and soil-pore water samples to be taken is based on the variability of:

A) The hazardous waste constituents (as identified in Section 725.373(a) and(b)) in the waste and in the soil~~;~~, and

B) The soil type~~(s)~~; and

3) The frequency and timing of soil and soil-pore water sampling is based on the frequency, time, and rate of waste application, proximity to ground water, and soil permeability.

d) The owner or operator ~~must~~shall keep at the facility ~~his~~its unsaturated zone monitoring plan and the rationale used in developing this plan.

e) The owner or operator ~~must~~shall analyze the soil and soil-pore water samples for the hazardous waste constituents that were found in the waste during the waste analysis under Section 725.373(a) and (b).

~~Comment~~BOARD NOTE: As required by Section 725.173, the owner or operator must place all data and information developed ~~by the owner or operator~~ under this ~~s~~Section ~~must be placed~~ in the operating record of the facility.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART P: THERMAL TREATMENT

Section 725.477 Monitoring and Inspections

The owner or operator ~~must~~shall conduct, as a minimum, the following monitoring and inspections when thermally treating hazardous waste:

a) Existing instruments ~~which~~that relate to temperature and emission control (if an emission control device is present) must be monitored at least every 15 minutes. Appropriate corrections to maintain steady state or other appropriate thermal treatment conditions must be made immediately either automatically or by the operator. Instruments ~~which~~that relate to temperature and emission control would normally include those measuring waste feed, auxiliary fuel feed, treatment process temperature and relevant process flow and level controls.

b) The stack plume (emissions), where present, must be observed visually at least hourly for normal appearance (color and opacity). The operator must immediately make any indicated operating corrections necessary to return any visible emissions to their normal appearance.

c) The complete thermal treatment process and associated equipment (pumps, valves, conveyors, pipes, etc.) must be inspected at least daily for leaks, spills and fugitive emissions, and all emergency shutdown controls and system alarms must be checked to assure proper operation.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART Q: CHEMICAL, PHYSICAL AND BIOLOGICAL TREATMENT

Section 725.501 General Operating Requirements

a) Chemical, physical or biological treatment of hazardous waste must comply with Section 725.117(b).

b) Hazardous waste or treatment reagents must not be placed in the treatment process or equipment if they could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of its intended life.

c) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment must be equipped with a means to stop this inflow (e.g., a waste feed cutoff system or bypass system to a standby containment device).

~~Comment~~BOARD NOTE: These systems are intended to be used in the event of a malfunction in the treatment process or equipment.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.502 Waste Analysis and Trial Tests

a) In addition to the waste analysis required by Section 725.113, ~~paragraph~~subsection (b) above applies whenever:

1) A hazardous waste ~~which~~that is substantially different from waste previously treated in a treatment process or equipment at the facility is to be treated in that process or equipment, or

2) A substantially different process from any previously used at the facility is to be used to chemically treat hazardous waste.

b) To show that this proposed treatment will meet all applicable requirements of Section 725.501(a) and (b), the owner or operator must, before treating the different waste or using the different process or equipment:

1) Conduct waste analyses and trial treatment tests (e.g., bench scale or pilot plant scale tests), or

2) Obtain written, documented information on similar treatment of similar waste under similar operating conditions.

~~Comment~~BOARD NOTE: As required by Section 725.113, the waste analysis plan must include analyses needed to comply with Sections 725.505 and 725.506. As required by Section 725.173, the owner or operator ~~must~~shall place the results from each waste analysis and trial test, or the documented information, in the operating record of the facility.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.503 Inspections

The owner operator of a treatment facility ~~must~~shall inspect, where present:

a) Discharge control and safety equipment (e.g., waste feed cutoff systems, bypass systems, drainage systems, and pressure relief systems) at least once each operating day to ensure that it is in good working order;

b) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the treatment process or equipment is being operated according to its design;

c) The construction materials of the treatment process or equipment at least weekly to detect corrosion or leaking of fixtures or seams; and

d) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

~~Comment~~BOARD NOTE: As required by Section 725.115(c), the owner or operator must remedy any deterioration or malfunction ~~he~~it finds.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.504 Closure

At closure, all hazardous waste and hazardous waste residues must be removed from treatment processes or equipment, discharge control equipment, and discharge confinement structures.

~~Comment~~BOARD NOTE: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with ~~Section~~35 Ill. Adm. Code 721.103(c) or (d), that any solid waste removed from his treatment process or equipment is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of ~~Parts~~35 Ill. Adm. Code 722, 723, and 725.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.505 Special Requirements for Ignitable or Reactive Waste

Ignitable or reactive waste must not be placed in a treatment process or equipment unless:

a) The waste is treated, rendered or mixed before or immediately after placement in the treatment process or equipment so that

1) The resulting waste, mixture or dissolution of material no longer meets the definition of ignitable or reactive waste under Section 721.121 or 721.123, and

2) Section 725.117(b) is complied with; or

b) The waste is treated in such a way that it is protected from any material or conditions ~~which~~that may cause the waste to ignite or

react.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 725.506 Special Requirements for Incompatible Wastes

a) An owner or operator shall not place i~~I~~ncompatible wastes or incompatible wastes and materials (see Section 725.Appendix ~~V~~E for examples) ~~must not be placed~~ in the same treatment process or equipment unless it complies with Section 725.117(b) ~~is complied with~~.

b) An owner or operator shall not place h~~H~~azardous waste ~~must not be placed~~ in unwashed treatment equipment ~~which~~that previously held an incompatible waste or material, unless it complies with Section 725.117(b) ~~is complied with~~.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 725.933 Standards: Closed-vent Systems and Control Devices

a) Compliance Required.

1) Owners or operators of closed-vent systems and control devices used to comply with provisions of this Part shall comply with the provisions of this Section.

2) The owner or operator of an existing facility ~~who~~that cannot install a closed-vent system and control device to comply with the provisions of this Subpart on the effective date that the facility becomes subject to the provisions of this Subpart shall prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 18 months after the effective date that the facility becomes subject to this Subpart for installation and startup. All units that begin operation after December 21, 1990, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 2-year implementation schedule does not apply to these units.

b) A control device involving vapor recovery (e.g., a condenser or adsorber) must be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Section 725.932(a)(1) for all affected process vents is attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to 3 percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° C. If a boiler or process heater is used as the control device, then the vent stream must be introduced into

the flame combustion zone of the boiler or process heater.

d) Flares

1) A flare must be designed for and operated with no visible emissions as determined by the methods specified in subsection (e)(1) below except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

2) A flare must be operated with a flame present at all times, as determined by the methods specified in subsection (f)(2)(c) below.

3) A flare must be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted~~,~~ or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2) below.

4) Exit Velocity.

A) A steam-assisted or nonassisted flare must be designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (d)(4)(C) below.

B) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1000 Btu/scf).

C) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3) below, less than the velocity, V as determined by the method specified in subsection (e)(4) and less than 122 m/s (400 ft/s) is allowed.

5) An air-assisted flare must be designed and operated with an exit velocity less than the velocity, V as determined by the method specified in subsection (e)(5) below.

6) A flare used to comply with this Section must be steam-assisted, air-assisted~~,~~ or nonassisted.

e) 1) Reference Method 22 in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, must be used to determine the compliance of a flare with the visible emission provisions of this Subpart. The observation period is 2 hours and must be used according to Method 22.

2) The net heating value of the gas being combusted in a flare must be calculated using the following equation:

~~H = K * SUM(Ci * Hi)~~

$$H_T = K \times \sum_{i=1}^{n} C_i \times H_i$$

Where:

H_T is the net heating value of the sample in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25° C and 760 mm Hg, but the standard temperature for determining the volume corresponding to 1 mole is 20° C.

K = 1.74×10^{-7} ~~E-7~~ (1/ppm)(g mol/scm)(MJ/kcal) where standard temperature for (g mol/scm) 20° C.

~~SUM(Xi)~~ΣX_i means the sum of the values of X for each component i, from i=1 to n.

~~Ci~~C_i is the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 in 40 CFR 60, and for carbon monoxide, by ASTM D_1946-90, incorporated by reference in 35 Ill. Adm. Code 720.111.

~~Hi~~H_i is the net heat of combustion of sample component i, kcal/gmol at 25° C and 760 mm Hg. The heats of combustion must be determined using ASTM D_2382-88, incorporated by reference in 35 Ill. Adm. Code 720.111, if published values are not available or cannot be calculated.

3) The actual exit velocity of a flare must be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

4) The maximum allowed velocity in m/s, V for a flare complying with subsection (d)(4)(C) above must be determined by the following equation:

$$Log_{10} V_{max} = \frac{H_T + 28.8}{31.7}$$

~~LOG(V) = (H + 28.8) / 31.7~~

Where:

~~LOG~~Log_{10} means logarithm to the base 10

H_T is the net heating value as determined in subsection (e)(2) above.

5) The maximum allowed velocity in m/s, V for an air-assisted flare must be determined by the following equation:

$$V=8.706+0.7084H_T$$

~~V = 8.706 + 0.7084H~~

Where:

H_T is the net heating value as determined in subsection (e)(2) above.

f) The owner or operator shall monitor and inspect each control device required to comply with this Section to ensure proper operation and maintenance of the control device by implementing the following requirements:

1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor must be installed in the vent stream at the nearest feasible point to the control device inlet but before being combined with other vent streams.

2) Install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor control device operation as specified below:

A) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must have accuracy of +± 1 percent of the temperature being monitored in ° C or +± 0.5° C, whichever is greater. ~~t~~The temperature sensor must be installed at a location in the combustion chamber downstream of the combustion zone.

B) For a catalytic vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of +± 1 percent of the temperature being monitored in C or +± 0.5° C, whichever is greater. One temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed inlet and a second temperature sensor must be installed in the vent stream at the nearest feasible point to the catalyst bed outlet.

C) For a flare, a heat sensing monitoring device equipped with a continuous recorder that indicates the continuous ignition of the pilot flame.

D) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of +± 1 percent of the temperature being monitored in ° C or +± 0.5° C, whichever is greater. The temperature sensor must be installed at a location in the furnace downstream of the combustion zone.

E) For a boiler or process heater having a design heat

input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure ~~a~~ parameter~~(s)~~ that indicates good combustion operating practices are being used.

F) For a condenser, either:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or

ii) A temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature at two locations and have an accuracy of +± 1 percent of the temperature being monitored in ° C or +± 0.5° C, whichever is greater. One temperature sensor must be installed at a location in the exhaust vent stream from the condenser, and a second temperature sensor must be installed at a location in the coolant fluid exiting the condenser.

G) For a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly in the control device, either:

i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed; or

ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.

3) Inspect the readings from each monitoring device required by subsection (f)(1) and (f)(2) above at least once each operating day to check control device operation and, if necessary, immediately implement the corrective measures necessary to ensure the control device operates in compliance with the requirements of this Section.

g) An owner or operator using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 725.935(b)(4)(C)(vi).

h) An owner or operator using a carbon adsorption system, such as a carbon canister, that does not regenerate the carbon bed directly onsite in the control device shall replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is

indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Section 725.935(b)(4)(C)(vii), whichever is longer.

2) Replace the existing carbon with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of Section 725.935(b)(4)(C)(vii).

i) An owner or operator of an affected facility seeking to comply with the provisions of this Part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

j) Closed vent systems.

1) Closed-vent systems must be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the methods specified at Section 725.934(b).

2) Closed-vent systems must be monitored to determine compliance with this Section during the initial leak detection monitoring, which must be conducted by the date that the facility becomes subject to the provisions of this Section annually, and at other times as specified by the Agency pursuant to Section 725.930(c). For the annual leak detection monitoring after the initial leak detection monitoring, the owner or operator is not required to monitor those closed-vent system components that continuously operate in vacuum service or those closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed pipe flange).

3) Detectable emissions, as indicated by an instrument reading greater than 500 ppm and visual inspections, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected.

4) A first attempt at repair must be made no later than 5 calendar days after the emission is detected.

k) Closed-vent systems and control devices used to comply with provisions of this Subpart must be operated at all times when emissions may be vented to them.

l) The owner or operator using a carbon adsorption system shall document that all carbon removed from the control device is managed in one of the following manners:

1) It is regenerated or reactivated in a thermal treatment unit that is permitted under 35 Ill. Adm. Code 724.Subpart X or 725.Subpart P;

2) It is incinerated by a process that is permitted under 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O; or

3) It is burned in a boiler or industrial furnace that is permitted under 35 Ill. Adm. Code 726.Subpart H.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 725.963 Test Methods and Procedures

a) Each owner or operator subject to the provisions of this Subpart shall comply with the test methods and procedures requirements provided in this Section.

b) Leak detection monitoring, as required in Sections 725.952 through 725.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 in 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be:

A) Zero air (less than 10 ppm of hydrocarbon in air).

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 725.952(e), 725.953(i), 725.954, and 725.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) above apply.

2) The background level must be determined as set forth in Reference Method 21.

3) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

4) This arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) In accordance with the waste analysis plan required by Section 725.113(b), an owner or operator of a facility shall determine,

for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267-88, E 168-88, E 169-87, ~~E 168,~~ or E 26085, incorporated by reference in 35 Ill. Adm. Code 720.111;

2) Method 9060 or 8240 of SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111; or

3) Application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that must be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to have a total organic content less than 10 percent, or prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since that analysis that could affect the waste total organic concentration.

e) If an owner or operator determines that a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the determination can be revised only after following the procedures in subsection (d)(1) or (d)(2) above.

f) When an owner or operator and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous waste with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) above must be used to resolve the dispute.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous waste that is expected to be contained in or contact the equipment.

h) To determine if pumps or valves are in light liquid service, the vapor pressures of constituents must either be obtained from standard reference texts or be determined by ASTM D-2879-86, incorporated by reference in 35 Ill. Adm. Code 720.111.

i) Performance tests to determine if a control device achieves 95 weight percent organic emission reduction must comply with the procedures of Section 725.934(c)(1) through (c)(4).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section 725.980 Applicability

a) The requirements of this Subpart apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in

tanks, surface impoundments, or containers subject to either 725.Subparts I, J, or K, except as Section 725.1 and subsection (b) below provide otherwise.

b) The requirements of this Subpart do not apply to the following waste management units at the facility:

1) A waste management unit that holds hazardous waste placed in the unit before June 5, 1995 and in which no hazardous waste is added to the unit on or after June 5, 1995.

2) A container that has a design capacity less than or equal to 0.1 m^3 (3.5 ft^3 or 26.4 gal).

3) A tank in which an owner or operator has stopped adding hazardous waste and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

4) A surface impoundment in which an owner or operator has stopped adding hazardous waste (except to implement an approved closure plan) and the owner or operator has begun implementing or completed closure pursuant to an approved closure plan.

5) A waste management unit that is used solely for on-site treatment or storage of hazardous waste that is generated as the result of implementing remedial activities required pursuant to the Act or Board regulations or under the corrective action authorities of RCRA sections 3004(u), 3004(v) or 3008(h); CERCLA authorities; or similar federal or state authorities.

6) A waste management unit that is used solely for the management of radioactive mixed waste in accordance with all applicable regulations under the authority of the Atomic Energy Act (42 U.S.C. 2011 et seq.) and the Nuclear Waste Policy Act.

c) For the owner and operator of a facility subject to this Subpart who has received a final RCRA permit prior to June 5, 1995, the following requirements apply:

1) The requirements of 35 Ill. Adm. Code 724.Subpart CC must be incorporated into the permit when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705.

2) Until the date when the permit is reissued, renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code 703 and 705, the owner and operator is subject to the requirements of this Subpart.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.981 Definitions

As used in this Subpart and in 35 Ill. Adm. Code 724, all terms not defined herein shall have the meaning given to them in the Act and 35 Ill. Adm. Code 720 through 726.

"Average volatile organic concentration" or "average VO

concentration" means the mass-weighted average volatile organic concentration of a hazardous waste, as determined in accordance with the requirements of Section 725.984.

"Cover" means a device or system that is placed on or over a hazardous waste such that the entire hazardous waste surface area is enclosed and sealed to reduce air emissions to the atmosphere. A cover may have openings such as access hatches, sampling ports, and gauge wells that are necessary for operation, inspection, maintenance, or repair of the unit on which the cover is installed provided that each opening is closed and sealed when not in use. Examples of covers include a fixed roof installed on a tank, a floating membrane cover installed on a surface impoundment, a lid installed on a drum, or an enclosure in which an open container is placed during waste treatment.

"External floating roof" means a pontoon or double-deck type floating roof that rests on the surface of a hazardous waste being managed in a tank that has no fixed roof.

"Fixed roof" means a rigid cover that is installed in a stationary position so that it does not move with fluctuations in the level of the hazardous waste placed in a tank.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

"Floating roof" means a pontoon-type or double-deck-type cover that rests upon and is supported by the hazardous waste being managed in a tank, and is equipped with a closure seal or seals to close the space between the cover edge and the tank wall.

"Internal floating roof" means a floating roof that rests or floats on the surface (but not necessarily in complete contact with it) of a hazardous waste being managed in a tank that has a fixed roof.

"Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof, continuously around the circumference of the tank.

"Maximum organic vapor pressure" means the equilibrium partial pressure exerted by the hazardous waste contained in a tank, determined at the temperature equal to either:

The local maximum monthly average temperature as reported by the National Weather Service, when the hazardous waste is stored or treated at ambient temperature, or

The highest calendar-month average temperature of the hazardous waste, when the hazardous waste is stored at temperatures above the ambient temperature or when the hazardous waste is stored or treated at temperatures below the ambient temperature.

"No detectable organic emissions" means no escape of organics from a device or system to the atmosphere, as determined:

By an instrument reading less than 500 parts per million by volume (ppmv) above the background level at each joint,

fitting, and seal, when measured in accordance with the requirements of Method 21 in 40 CFR part 60, appendix A, and

By no visible openings or defects in the device or system such as rips, tears, or gaps.

"Point of waste origination" means as follows:

When the facility owner or operator is the generator of the hazardous waste, the "point of waste origination" means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste, as defined in 40 CFR part 261.

BOARD NOTE: In this case, this term is being used in a manner similar to the use of the term "point of generation" in air standards established for waste management operations under authority of the federal Clean Air Act in 40 CFR parts 60, 61, and 63.

When the facility owner and operator are not the generator of the hazardous waste, "point of waste origination" means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

"Point of waste treatment" means the point where a hazardous waste exits a waste management unit used to destroy, degrade, or remove organics in the hazardous waste.

"Vapor-mounted seal" means a foam-filled primary seal mounted continuously around the circumference of the tank so that there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the hazardous waste surface, and the floating roof.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of organic compounds in a hazardous waste expressed in terms of parts per million (ppmw), as determined by direct measurement, using Method 25D, or by knowledge of the waste, in accordance with the requirements of Section 725.984.

"Waste determination" means performing all applicable procedures in accordance with the requirements of Section 725.984 to determine whether a hazardous waste meets standards specified in this Subpart. Examples of a waste determination include performing the procedures in accordance with the requirements of Section 725.984 to determine the average VO concentration of a hazardous waste at the point of waste origination, determining the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste, determining the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards, or determining the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

"Waste stabilization process" means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095 (Paint Filter Liquids Test) in

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in Section 720.111. A waste stabilization process includes mixing the hazardous waste with binders or other materials and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification".

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.982 Schedule for Implementation of Air Emission Standards

a) Owners or operators of facilities existing on June 5, 1995 and subject to 725.Subparts I, J, and K shall meet the following requirements:

1) The owner or operator shall install and begin operation of all control equipment required by this Subpart by June 5, 1995, except as provided in subsection (a)(2) below.

2) When control equipment required by this Subpart cannot be installed and in operation by June 5, 1995, the owner or operator shall:

A) Install and begin operation of the control equipment as soon as possible, but in no case later than December 8, 1997.

B) Prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this Subpart.

C) For facilities subject to the recordkeeping requirements of Section 725.173, the owner or operator shall enter the implementation schedule specified in subsection (a)(2)(B) above in the operating record no later than June 5, 1995.

D) For facilities not subject to Section 725.173 above, the owner or operator shall enter the implementation schedule specified in subsection (a)(2)(B) of this section in a permanent, readily available file located at the facility no later than June 5, 1995.

b) An owner or operator of facilities in existence on the effective date of statutory or regulatory amendments under the Act that render the facility subject to 725.Subparts I, J, or K shall meet the following requirements:

1) The owner or operator shall install and begin operation of all control equipment required by this Subpart by the effective date of the amendment, except as provided in subsection (b)(2) below.

2) When control equipment required by this Subpart cannot be installed and begin operation by the effective date of the

amendment, the owner or operator shall:

A) Install and operate the control equipment as soon as possible, but in no case later than 30 months after the effective date of the amendment.

B) For facilities subject to the recordkeeping requirements of Section 725.173, enter and maintain the implementation schedule specified in subsection (a)(2)(B) above in the operating record no later than the effective date of the amendment, or

C) For facilities not subject to Section 725.173, the owner or operator shall enter and maintain the implementation schedule specified in subsection (a)(2)(B) above in a permanent, readily available file, located at the facility site, no later than the effective date of the amendment.

c) The Agency may elect to extend the implementation date for control equipment at a facility, on a case by case basis, to a date later than December 8, 1997:

1) When special circumstances that are beyond the facility owner's or operator's control delay installation or operation of control equipment, and

2) The owner or operator has made all reasonable and prudent attempts to comply with the requirements of this Subpart.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.983 Standards: General

a) This Section applies to the management of hazardous waste in tanks, surface impoundments, and containers subject to this Subpart.

b) The owner or operator shall control air emissions from each waste management unit in accordance with standards specified in Sections 725.985 through Section 725.988, as applicable to the waste management unit, except as provided for in subsection (c) below.

c) A waste management unit is exempted from standards specified in Section 725.985 through Section 725.988, provided that all hazardous waste placed in the waste management unit is determined by the owner or operator to meet either of the following conditions:

1) The average VO concentration of the hazardous waste at the point of waste origination is less than 100 parts per million by weight (ppmw). The average VO concentration must be determined by the procedures specified in Section 725.984(a).

2) The organic content of the hazardous waste has been reduced by an organic destruction or removal process that achieves any one of the following conditions:

A) The process removes or destroys the organics contained in the hazardous waste to such a level that the average VO concentration of the hazardous waste at the point of waste treatment is less than the exit

concentration limit (C_t) established for the process. The average VO concentration of the hazardous waste at the point of waste treatment and the exit concentration limit for the process must be determined using the procedures specified in Section 725.984(b).

B) The process removes or destroys the organics contained in the hazardous waste to such a level that the organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the average VO concentration of the hazardous waste at the point of waste treatment is less than 50 ppmw. The organic reduction efficiency for the process and the average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedures specified in Section 725.984(b).

C) The process removes or destroys the organics contained in the hazardous waste to such a level that the actual organic mass removal rate (MR) for the process is greater than the required organic mass removal rate (RMR) established for the process. The required organic mass removal rate and the actual organic mass removal rate for the process must be determined using the procedures specified in Section 725.984(b).

D) The process is a biological process that destroys or degrades the organics contained in the hazardous waste so that either of the following conditions is met:

i) The organic reduction efficiency (R) for the process is equal to or greater than 95 percent, and the organic biodegradation efficiency (R_{bio}) for the process is equal to or greater than 95 percent. The organic reduction efficiency and the organic biodegradation efficiency for the process must be determined in accordance with the procedures specified in Section 725.984(b).

ii) The total actual organic mass biodegradation rate (MR_{bio}) for all hazardous waste treated by the process is equal to or greater than the required organic mass removal rate (RMR). The required organic mass removal rate and the actual organic mass biodegradation rate for the process must be determined using the procedures specified in Section 725.984(b).

E) The process is one that removes or destroys the organics contained in the hazardous waste and meets all of the following conditions:

i) All of the materials entering the process are hazardous wastes.

ii) From the point of waste origination through the point where the hazardous waste enters the process, the hazardous waste is continuously managed in waste management units that use air emission controls in accordance with the standards specified in Section 725.985 through Section 725.988, as applicable to the waste

management unit.

iii) The average VO concentration of the hazardous waste at the point of waste treatment is less than the lowest average VO concentration at the point of waste origination determined for each of the individual hazardous waste streams entering the process or 100 ppmw, whichever value is lower. The average VO concentration of each individual hazardous waste stream at the point of waste origination must be determined using the procedure specified in Section 725.984(a). The average VO concentration of the hazardous waste at the point of waste treatment must be determined using the procedure specified in Section 725.984(b).

F) A hazardous waste incinerator for which the owner or operator has either:

i) Been issued a final permit under 35 Ill. Adm. Code 703 and 705, and the owner or operator designs and operates the unit in accordance with the requirements of 35 Ill. Adm. Code 724.Subpart O; or

ii) The owner or operator has certified compliance for the unit with the interim status requirements of 725.Subpart O.

G) A boiler or industrial furnace for which the owner or operator has either:

i) Been issued a final permit under 35 Ill. Adm. Code 703 and 705, and the owner or operator designs and operates the unit in accordance with the requirements of 35 Ill. Adm. Code 726.Subpart H, or

ii) The owner or operator has certified compliance for the unit with the interim status requirements of 35 Ill. Adm. Code 726.Subpart H.

d) When a process is used for the purpose of treating a hazardous waste to meet one of the sets of conditions specified in subsections (c)(2)(A) through (c)(2)(E) above, each material removed from or exiting the process that is not a hazardous waste but which has an average VO concentration equal to or greater than 100 ppmw must be managed in a waste management unit in accordance with the requirements of subsection (b) above.

e) The Agency may at any time perform or request that the owner or operator perform a waste determination for a hazardous waste managed in a tank, surface impoundment, or container that is exempted from using air emission controls under the provisions of this Section as follows:

1) The waste determination for average VO concentration of a hazardous waste at the point of waste origination must be performed using direct measurement in accordance with the applicable requirements of Section 725.984(a). The waste determination for a hazardous waste at the point of waste

treatment must be performed in accordance with the applicable requirements of Section 725.984(b).

2) Where the owner or operator is requested to perform the waste determination, the Agency may elect to have an authorized representative observe the collection of the hazardous waste samples used for the analysis.

3) Where the results of the waste determination performed or requested by the Agency do not agree with the results of a waste determination performed by the owner or operator using knowledge of the waste, then the results of the waste determination performed in accordance with the requirements of subsection (e)(1) above must be used to establish compliance with the requirements of this Subpart.

4) Where the owner or operator has used an averaging period greater than one hour for determining the average VO concentration of a hazardous waste at the point of waste origination, the Agency may elect to establish compliance with this Subpart by performing or requesting that the owner or operator perform a waste determination using direct measurement, based on waste samples collected within a 1-hour period as follows:

A) The average VO concentration of the hazardous waste at the point of waste origination must be determined by direct measurement in accordance with the requirements of Section 725.984(a).

B) Results of the waste determination performed or requested by the Agency showing that the average VO concentration of the hazardous waste at the point of waste origination is equal to or greater than 100 ppmw shall constitute noncompliance with this Subpart, except in a case as provided for in subsection (e)(4)(C) below.

C) Where the average VO concentration of the hazardous waste at the point of waste origination previously has been determined by the owner or operator using an averaging period greater than one hour to be less than 100 ppmw but because of normal operating process variations the VO concentration of the hazardous waste determined by direct measurement for any given 1-hour period may be equal to or greater than 100 ppmw, information that was used by the owner or operator to determine the average VO concentration of the hazardous waste (e.g., test results, measurements, calculations, and other documentation) and recorded in the facility records in accordance with the requirements of Sections 725.984(a) and 725.990 must be considered by the Agency together with the results of the waste determination performed or requested by the Agency in establishing compliance with this Subpart.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.984 Waste Determination Procedures

a) Waste determination procedure for volatile organic (VO)

concentration of a hazardous waste at the point of waste origination.

1) An owner or operator shall determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Section 725.983(c)(1) from using air emission controls in accordance with standards specified in Section 725.985 through Section 725.988, as applicable to the waste management unit.

2) When the facility owner or operator is the generator of the hazardous waste, the owner or operator shall determine the average VO concentration of the hazardous waste using either direct measurement, as specified in subsection (a)(5) below, or knowledge of the waste, as specified in subsection (a)(6) below, for each hazardous waste generated as follows:

A) When the hazardous waste is generated as part of a continuous process, the owner or operator shall:

i) Perform an initial waste determination of the average VO concentration of the waste stream before the first time any portion of the material in the waste stream is placed in a waste management unit subject to this Subpart and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

ii) Perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 725.983.

B) When the hazardous waste is generated as part of a batch process that is performed repeatedly but not necessarily continuously, the owner or operator shall:

i) Perform an initial waste determination of the average VO concentration for one or more representative waste batches generated by the process, before the first time any portion of the material in the batches is placed in a waste management unit subject to this Subpart, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

ii) Perform a new waste determination whenever changes to the process generating the waste batches are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 725.983.

3) When the facility owner and operator is not the generator of the hazardous waste, the owner or operator shall determine the average VO concentration of the hazardous waste using either direct measurement, as specified in subsection (a)(5) below, or knowledge of the waste, as specified in subsection (a)(6) below, for each hazardous waste entering the facility as follows:

A) When the hazardous waste enters the facility as a continuous flow of material through a pipeline or other means (e.g., wastewater stream), the owner or operator shall:

i) Perform an initial waste determination of the waste stream before the first time any portion of the material in the waste stream is placed in a waste management unit subject to this Subpart, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

ii) Perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 725.983.

B) When the hazardous waste enters the facility in a container, the owner or operator shall perform a waste determination for the material held in each container.

4) Where the average VO concentration of the hazardous waste is determined by the owner or operator to be less than 100 ppmw, but because of normal operating variations in the source or process generating the hazardous waste the VO concentration of the hazardous waste may be equal to or greater than 100 ppmw at any given time during the averaging period, the owner or operator shall prepare and enter in the facility operating record information that specifies the following:

A) The maximum and minimum VO concentration values for the hazardous waste that occur during that averaging period used for the waste determination;

B) The operating conditions or circumstances under which the VO concentration of the hazardous waste will be equal to or greater than 100 ppmw; and

C) The information and calculations used by the owner or operator to determine the average VO concentration of the hazardous waste.

5) Procedure for using direct measurement to determine average VO concentration of a hazardous waste at the point of waste origination.

A) The owner or operator shall identify and record the point of waste origination for the hazardous waste.

All waste samples used to determine the average VO concentration of the hazardous waste must be collected at this point.

B) The owner or operator shall designate and record the averaging period to be used for determining the average VO concentration for the hazardous waste. The averaging period must not exceed one year. An initial waste determination must be performed for each averaging period.

C) The owner or operator shall identify each discrete quantity of the material composing the hazardous waste represented by the averaging period designated in subsection (a)(5)(B) above. An example of a discrete quantity of material composing a hazardous waste generated as part of a continuous process is the quantity of material generated during a process operating mode defined by a specific set of operating conditions that are normal for the process. An example of a discrete quantity of material composing a hazardous waste generated as part of a batch process that is performed repeatedly but not necessarily continuously is the total quantity of material composing a single batch generated by the process. An example of a discrete quantity of material composing a hazardous waste delivered to a facility in a container is the total quantity of material held in the container.

D) The following procedure must be used measure the VO concentration for each discrete quantity of material identified in subsection (a)(5)(C) above:

i) A sufficient number of samples, but in no case fewer than four, must be collected to represent the organic composition for the entire discrete quantity of hazardous waste being tested. All of the samples must be collected within a 1-hour period. Sufficient information must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

ii) Each sample must be collected in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in Section 720.111.

iii) Each collected sample must be prepared and analyzed in accordance with the requirements of Method 25D in 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111.

iv) The measured VO concentration for the discrete quantity of hazardous waste must be determined by using the results for all samples analyzed in accordance with subsection (a)(5)(D)(iii) above

and the following equation:

$$C = \frac{1}{n} \times \sum_{i=1}^{n} C_i$$

Where:

C = Measured VO concentration of the discrete quantity of hazardous waste, in ppmw.

i = Individual sample "i" of the hazardous waste collected in accordance with the requirements of SW-846.

n = Total number of samples of hazardous waste collected (at least 4) within a 1-hour period.

C_i = VO concentration measured by Method 25D for sample "i", in ppmw.

E) The average VO concentration of the hazardous waste must be determined using the following procedure:

i) When the facility owner or operator is the generator of the hazardous waste, a sufficient number of VO concentration measurements for the hazardous waste must be performed in accordance with the requirements of subsection (a)(5)(D) above to represent the complete range of hazardous waste organic compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for each process operating mode identified for the source or process generating the hazardous waste.

ii) When the facility owner or operator is not the generator of the hazardous waste, a sufficient number of VO concentration measurements for the hazardous waste must be performed in accordance with the requirements of subsection (a)(5)(D) above to represent the complete range of hazardous waste organic compositions and quantities that occur in the hazardous waste as received at the facility during the entire averaging period.

iii) The average VO concentration of the hazardous waste at the point of waste origination must be calculated by using the results for all VO measurements performed in accordance with subsection (a)(5)(D) above and the following equation:

$$C_{ave} = \frac{1}{Q_T} \times \sum_{j=1}^{m} (Q_j \times C_j)$$

Where:

C_{ave} = Average VO concentration of the hazardous waste at the point of waste origination, in ppmw.

i = Individual discrete quantity "i" of the hazardous waste for which a VO concentration measurement is determined in accordance with the requirements of subsection (a)(5)(D) above.

m = Total number of VO concentration measurements determined in accordance with the requirements of subsection (a)(5)(D) above for the averaging period.

Q_j = Mass of the discrete quantity of the hazardous waste represented by C_j, in kg.

Q_T = Total mass of the hazardous waste for the averaging period, in kg.

C_j = Measured VO concentration of discrete quantity "j" for the hazardous waste determined in accordance with the requirements of subsection (a)(5)(D) above, in ppmw.

6) Procedure for using knowledge of the waste to determine the average VO concentration of a hazardous waste at the point of waste origination.

A) The owner or operator shall identify and record the point of waste origination for the hazardous waste. All information used to determine the average VO concentration of the hazardous waste must be based on the hazardous waste composition at this point.

B) The owner or operator shall designate and record the averaging period to be used for determining the average VO concentration for the hazardous waste. The averaging period must not exceed one year. An initial waste determination must be performed for each averaging period.

C) The owner or operator shall prepare and record sufficient information that documents the average VO concentration for the hazardous waste. Information may be used that is prepared by either the facility owner or operator or by the generator of the hazardous waste. Examples of information that may be used as the basis for knowledge of the waste include: organic

material balances for the source or process generating the waste; VO concentration measurements for the same type of waste performed in accordance with the procedure specified in subsection (a)(5)(D) above; previous individual organic constituent test data for the waste that are still applicable to the current waste management practices; documentation that the waste is generated by a process for which no organics-containing materials are used; previous test data for other locations managing the same type of waste; or other knowledge based on manifests, shipping papers, or waste certification notices.

D) If test data other than VO concentration measurements performed in accordance with the procedure specified in subsection (a)(5)(D) above are used as the basis for knowledge of the waste, then the owner or operator shall document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use individual organic constituent concentration test data that are validated in accordance with Method 301 in 40 CFR part 63, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111, as the basis for knowledge of the waste.

b) Waste determination procedures for treated hazardous waste.

1) An owner or operator shall perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of Section 725.983(c)(2) from using air emission controls in accordance with standards specified in Section 725.985 through Section 725.988, as applicable to the waste management unit.

2) The owner or operator shall perform a waste determination for each discrete quantity of treated hazardous waste as follows:

A) When the hazardous waste is treated by a continuous process, the owner or operator shall:

i) Perform an initial waste determination for the treated waste stream before the first time any portion of the material in the waste stream is placed in a waste management unit subject to this Subpart, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

ii) Perform a new waste determination whenever changes to the hazardous waste streams fed to the process are reasonably likely to cause the characteristics of the hazardous waste at the point of waste treatment to change to levels that fail to achieve the applicable conditions specified in Section 725.983(c)(2).

B) When the hazardous waste is treated by a batch process that is performed repeatedly but not necessarily

continuously, the owner or operator shall:

i) Perform an initial waste determination for the treated hazardous waste in one or more representative batches treated by the process, and thereafter update the information used for the waste determination at least once every 12 months following the date of the initial waste determination; and

ii) Perform a new waste determination whenever changes to the hazardous waste treated by the process are reasonably likely to cause the characteristics of the hazardous waste at the point of waste treatment to change to levels that fail to achieve the applicable conditions specified in Section 725.983(c)(2).

3) The owner or operator shall designate and record the specific provision in Section 725.983(c)(2) for which the waste determination is being performed. The waste determination for the treated hazardous waste must be performed using the applicable procedures specified in subsections (b)(4) through (b)(10) below.

4) Procedure to determine the average VO concentration of a hazardous waste at the point of waste treatment.

A) The owner or operator shall identify and record the point of waste treatment for the hazardous waste. All waste samples used to determine the average VO concentration of the hazardous waste must be collected at this point.

B) The owner or operator shall designate and record the averaging period to be used for determining the average VO concentration for the hazardous waste. The averaging period must not exceed one year. An initial waste determination must be performed for each averaging period.

C) The owner or operator shall identify each discrete quantity of the material composing the hazardous waste represented by the averaging period designated in subsection (b)(4)(B) above.

D) The following procedure shall be used measure the VO concentration for each discrete quantity of material identified in subsection (b)(4)(C) above:

i) A sufficient number of samples, but in no case fewer than four samples, must be collected to represent the organic composition for the entire discrete quantity of hazardous waste being tested. All of the samples must be collected within a 1-hour period. Sufficient information must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.

ii) Each sample must be collected in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in 35 Ill. Adm. Code 720.111.

iii) Each collected sample must be prepared and analyzed in accordance with the requirements of Method 25D in 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111.

iv) The measured VO concentration for the discrete quantity of hazardous waste must be determined by using the results for all samples analyzed in accordance with subsection (b)(4)(E)(iii) above and the following equation:

$$C = \frac{1}{n} \times \sum_{i=1}^{n} C_i$$

Where:

C = Measured VO concentration of the discrete quantity of hazardous waste, in ppmw.

i = Individual sample "i" of the hazardous waste collected in accordance with the requirements of SW-846.

n = Total number of samples of hazardous waste collected (at least 4) within a 1-hour period.

C_i = VO concentration measured by Method 25D for sample "i", in ppmw.

E) The average VO concentration of the hazardous waste at the point of waste treatment must be determined using the following procedure:

i) When the facility owner or operator is the generator of the hazardous waste, a sufficient number of VO concentration measurements for the hazardous waste must be performed in accordance with the requirements of subsection (b)(4)(D) above to represent the complete range of hazardous waste organic compositions and quantities treated by the process during the entire averaging period.

ii) The average VO concentration of the hazardous waste at the point of waste treatment must be calculated by using the results for all VO measurements performed in accordance with subsection (b)(4)(D) above and the following equation:

$$C_{ave} = \frac{1}{Q_T} \times \sum_{j=1}^{m} (Q_j \times C_j)$$

Where:

C_{ave} = Average VO concentration of the hazardous waste at the point of waste origination, in ppmw.

j = Individual discrete quantity "j" of the hazardous waste for which a VO concentration measurement is determined in accordance with the requirements of subsection (b)(4)(D) above.

m = Total number of VO concentration measurements determined in accordance with the requirements of subsection (b)(4)(D) above for the averaging period.

Q_j = Mass of the discrete quantity of the hazardous waste represented by C_j, in kg.

Q_T = Total mass of the hazardous waste for the averaging period, in kg.

C_j = Measured VO concentration of discrete quantity "j" for the hazardous waste determined in accordance with the requirements of subsection (b)(4)(D) above, in ppmw.

5) Procedure to determine the exit concentration limit (C_t) for a treated hazardous waste.

A) The point of waste origination for each hazardous waste treated by the process at the same time must be identified.

B) If a single hazardous waste stream is identified in subsection (b)(5)(A) above, then the exit concentration limit (C_t) must be 100 ppmw.

C) If more than one hazardous waste stream is identified in subsection (b)(5)(A) above, then the VO concentration of each hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a) above. The exit concentration limit (C_t) must be calculated by using the results determined for each individual hazardous waste stream and the following equation:

$$C_t = \frac{\sum_{x=1}^{m} (Q_x \times \bar{C}_x) + \sum_{y=1}^{n} (Q_y \times 100 ppmw)}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

Where:

C_t = Exit concentration limit for treated hazardous waste, in ppmw.

x = Individual hazardous waste stream "x" that has a VO concentration less than 100 ppmw at the point of waste origination, as determined in accordance with the requirements of Section 725.984(a).

y = Individual hazardous waste stream "y" that has a VO concentration equal to or greater than 100 ppmw at the point of waste origination, as determined in accordance with the requirements of Section 725.984(a).

m = Total number of "x" hazardous waste streams treated by process.

n = Total number of "y" hazardous waste streams treated by process.

Q_x = Annual mass quantity of hazardous waste stream "x", in kg/yr.

Q_y = Annual mass quantity of hazardous waste stream "y", in kg/yr.

$\bar{C}_x$ = Average VO concentration of hazardous waste stream "x" at the point of waste origination, as determined in accordance with the requirements of Section 725.984(a), in ppmw.

6) Procedure to determine the organic reduction efficiency (R) for a treated hazardous waste.

A) The organic reduction efficiency for a treatment process must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The point of each hazardous waste stream entering the process and each hazardous waste stream exiting the process that is to be included in the calculation of the organic reduction efficiency for the process must be identified.

C) For each run, the following information must be determined for each hazardous waste stream identified in subsection (b)(6)(B) above, using the following

procedures:

i) The mass quantity of each hazardous waste stream entering the process (Q_x) and the mass quantity of each hazardous waste stream exiting the process (Q_y) must be determined.

ii) The VO concentration of each hazardous waste stream entering the process ($\bar{C}_x$) during the run must be measured in accordance with the requirements of subsections (a)(5)(D)(i) through (a)(5)(D)(iv) below. The VO concentration of each hazardous waste stream exiting the process ($\bar{C}_y$) during the run must be determined in accordance with the requirements of subsection (b)(4)(D) below. Samples must be collected as follows: For a continuous process, the samples of the hazardous waste entering and samples of the hazardous waste exiting the process must be collected concurrently. For a batch process, the samples of the hazardous waste entering the process must be collected at the time that the hazardous waste is placed in the process. The samples of the hazardous waste exiting the process must be collected as soon as practicable after the time when the process stops operation or the final treatment cycle ends.

D) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) must be calculated by using the results determined in accordance with subsection (b)(6)(C) above and the following equations:

$$E_b = \frac{1}{10^6} \sum_{j=1}^{m} (Q_{bj} \times C_{bj})$$

$$E_a = \frac{1}{10^6} \sum_{j=1}^{m} (Q_{aj} \times C_{aj})$$

Where:

E_a = Waste volatile organic mass flow exiting process, in kg/hr.

E_b = Waste volatile organic mass flow entering process, in kg/hr.

m = Total number of runs (at least 3)

i = Individual run "i"

Q_{bj} = Mass quantity of hazardous waste entering process during run "j", in kg/hr.

Q_{aj} = Average mass quantity of waste exiting

process during run "j", in kg/hr.

C_{aj} = Measured VO concentration of hazardous waste exiting process during run "j", as determined in accordance with the requirements of Section 725.984(b)(4)(D), in ppmw.

C_{bj} = Measured VO concentration of hazardous waste entering process during run "j", as determined in accordance with the requirements of Section 725.984 (a)(5)(D)(i) through (a)(5)(D)(iv), in ppmw.

E) The organic reduction efficiency of the process must be calculated by using the results determined in accordance with subsection (b)(6)(D) above and the following equation:

$$R=\frac{E_b-E_a}{E_b}\times 100\%$$

Where:

R = Organic reduction efficiency, percent.

E_b = Waste volatile organic mass flow entering process as determined in accordance with the requirements of subsection (b)(6)(D) above, in kg/hr.

E_a = Waste volatile organic mass flow exiting process as determined in accordance with the requirements of subsection (b)(6)(D) above, in kg/hr.

7) Procedure to determine the organic biodegradation efficiency (R_{bio}) for a treated hazardous waste.

A) The fraction of organics biodegraded (F_{bio}) must be determined using the procedure specified in 40 CFR part 63, Appendix C, incorporated by reference in 35 Ill. Adm. Code 70.111.

B) The organic biodegradation efficiency must be calculated by using the following equation:

$$R_{bio}=F_{bio}\times 100\%$$

Where

R_{bio} = Organic biodegradation efficiency, in percent.

F_{bio} = Fraction of organic biodegraded as determined in accordance with the

requirements of subsection (b)(7)(A) above.

8) Procedure to determine the required organic mass removal rate (RMR) for a treated hazardous waste.

A) The point of waste origination for each hazardous waste treated by the process at the same time must be identified.

B) For each hazardous waste stream identified in subsection (b)(8)(A) above, the VO concentration of the hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a) above.

C) For each individual hazardous waste stream that has a volatile organic concentration equal to or greater than 100 ppmw at the point of waste origination as determined in accordance with the requirements of subsection (b)(8)(B) above, the average volumetric flow rate of hazardous waste at the point of waste origination and the density of the hazardous waste stream must be determined.

D) The required organic mass removal rate for the hazardous waste must be calculated by using the results determined for each individual hazardous waste stream in accordance with the requirements of subsections (b)(8)(B) and (b)(8)(C) above and the following equation:

$$RMR=\sum_{y=1}^{n}\left[V_y\times k_y\times\frac{(\bar{C}_y-100ppmw)}{10^6}\right]$$

Where:

RMR = Required organic mass removal rate, in kg/hr.

y = Individual hazardous waste stream "y" that has a volatile organic concentration equal to or greater than 100 ppmw at the point of waste origination, as determined in accordance with the requirements of Section 725.984(a).

n = Total number of "y" hazardous waste streams treated by process.

V_y = Average volumetric flow rate of hazardous waste stream "y" at the point of waste origination, in m^3/hr.

k_y = Density of hazardous waste stream "y", in kg/m^3

$\bar{C}_y$ = Average VO concentration of hazardous waste stream "y" at the point of waste origination as determined in accordance with the requirements of Section 725.984(a), in ppmw.

9) Procedure to determine the actual organic mass removal rate (MR) for a treated hazardous waste.

A) The actual organic mass removal rate must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste volatile organic mass flow entering the process (E_a) and the waste volatile organic mass flow exiting the process (E_b) must be determined in accordance with the requirements of subsection (b)(6)(D) above.

C) The actual organic mass removal rate must be calculated by using the results determined in accordance with the requirements of subsection (b)(9)(B) above and the following equation:

$$MR = E_b - E_a$$

Where:

MR = Actual organic mass removal rate, in kg/hr.

E_b = Waste volatile organic mass flow entering process, as determined in accordance with the requirements of subsection (b)(6)(D) above, in kg/hr.

E_a = Waste volatile organic mass flow exiting process, as determined in accordance with the requirements of subsection (b)(6)(D) above, in kg/hr.

10) Procedure to determine the actual organic mass biodegradation rate (MR_{bio}) for a treated hazardous waste.

A) The actual organic mass biodegradation rate must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste organic mass flow entering the process (E_b) must be determined in accordance with the requirements of subsection (b)(6)(D) above.

C) The fraction of organic biodegraded (F_{bio}) must be determined using the procedure specified in 40 CFR part 63, Appendix C, incorporated by reference in 35 Ill. Adm. Code 720.111.

D) The actual organic mass biodegradation rate must be calculated by using the mass flow rates and fraction of organic biodegraded determined in accordance with the requirements of subsections (b)(10)(B) and (b)(10)(C) above and the following equation:

$$MR_{bio} = E_b \times F_{bio}$$

Where:

MR_{bio} = Actual organic mass biodegradation rate, in kg/hr.

E_b = Waste organic mass flow entering process, as determined in accordance with the requirements of subsection (b)(6)(D) above, in kg/hr.

F_{bio} = Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(10)(C) above.

c) Procedure to determine the maximum organic vapor pressure of a hazardous waste in a tank.

1) An owner or operator shall determine the maximum organic vapor pressure for each hazardous waste placed in a tank using air emission controls in accordance with standards specified in Section 725.985(c).

2) An owner or operator shall use either direct measurement, as specified in subsection (c)(3) above, or knowledge of the waste, as specified by subsection (c)(4) above, to determine the maximum organic vapor pressure that is representative of the hazardous waste composition stored or treated in the tank.

3) To determine the maximum organic vapor pressure of the hazardous waste by direct measurement, the following procedure must be used:

A) Representative samples of the waste contained in the tank must be collected. Sampling must be conducted in accordance with the requirements specified in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", incorporated by reference in 35 Ill. Adm. Code 720.111.

B) Any of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure, as appropriate:

i) Method 25E in 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111;

ii) Methods described in American Petroleum Institute Publication 2517, incorporated by reference in 35 Ill. Adm. Code 720.111;

iii) Methods obtained from standard reference texts;

iv) ASTM Method D 2879-92, incorporated by reference in 35 Ill. Adm. Code 720.11); or

v) Any other method approved by the Agency for this use by the owner or operator.

4) To determine the maximum organic vapor pressure of the hazardous waste by knowledge, sufficient information must be prepared and recorded that documents the maximum organic vapor pressure of the hazardous waste in the tank. Examples of information that may be used include: documentation that the waste is generated by a process for which no organics-containing materials are used or that the waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate design capacity category specified for the tank.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.985 Standards: Tanks

a) This Section applies to owners and operators of tanks subject to this Subpart into which any hazardous waste is placed except for the following tanks:

1) A tank in which all hazardous waste entering the tank meets the conditions specified in Section 725.983(c); or

2) A tank used for biological treatment of hazardous waste in accordance with the requirements of Section 725.983(c)(2)(D).

b) The owner or operator shall place the hazardous waste into one of the following tanks:

1) A tank equipped with a cover (e.g., a fixed roof) that is vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (d) below;

2) A tank equipped with a fixed roof and internal floating roof in accordance with the requirements of Section 725.991;

3) A tank equipped with an external floating roof in accordance with the requirements of Section 725.991; or

4) A pressure tank that is designed to operate as a closed system such that the tank operates with no detectable organic emissions at all times that hazardous waste is in the tank except as provided for in subsection (g) below.

c) As an alternative to complying with subsection (b) above, an owner or operator may place hazardous waste in a tank equipped with a cover (e.g., a fixed roof) meeting the requirements specified in subsection (d)(1) below when the hazardous waste is determined to meet all of the following conditions:

1) The hazardous waste is neither mixed, stirred, agitated, nor circulated within the tank by the owner or operator using a process that results in splashing, frothing, or visible turbulent flow on the waste surface during normal process operations;

2) The hazardous waste in the tank is not heated by the owner or operator except during conditions requiring that the waste be heated to prevent the waste from freezing or to maintain adequate waste flow conditions for continuing normal process operations;

3) The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process or a process that produces an exothermic reaction; and

4) The maximum organic vapor pressure of the hazardous waste in the tank as determined using the procedure specified in Section 725.984(c) is less than the following applicable value:

A) If the tank design capacity is equal to or greater than 151 m^3 (5333 ft^3 or 39,887 gal), then the maximum organic vapor pressure must be less than 5.2 kPa (0.75 psia or 39 mm Hg);

B) If the tank design capacity is equal to or greater than 75 m^3 but less than 151 m^3 (5333 ft^3 or 39,887 gal), then the maximum organic vapor pressure must be less than 27.6 kPa (4.0 psia or 207 mm Hg); or

C) If the tank design capacity is less than 75 m^3 (2649 ft^3 or 19,810 gal), then the maximum organic vapor pressure must be less than 76.6 kPa (11.1 psia or 574 mm Hg).

d) To comply with subsection (b)(1) above, the owner or operator shall design, install, operate, and maintain a cover that vents the organic vapors emitted from hazardous waste in the tank through a closed-vent system connected to a control device.

1) The cover must be designed and operated to meet the following requirements:

A) The cover and all cover openings (e.g., access hatches, sampling ports, and gauge wells) must be designed to operate with no detectable organic emissions when all cover openings are secured in a closed, sealed position.

B) Each cover opening must be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the tank except as provided for in subsection (f) below.

2) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 725.988.

e) The owner and operator shall install, operate, and maintain enclosed pipes or other closed systems for the transfer of hazardous waste as described in subsection (e)(1) or (e)(2) below.

BOARD NOTE: U.S. EPA considers a drain system that meets the requirements of 40 CFR 61.346(a)(1) or (b)(1) through (b)(3) to be a "closed-system". The Board intends that this meaning be included in the use of that term for the purposes of this Subpart.

1) Transfer all hazardous waste to the tank from another tank, surface impoundment, or container subject to this Subpart, except for those hazardous wastes that meet the conditions specified in Section 725.983(c); and

2) Transfer all hazardous waste from the tank to another tank, surface impoundment, or container subject to this Subpart, except for those hazardous wastes that meet the conditions specified in Section 725.983(c).

f) Each cover opening must be secured in a closed, sealed position (e.g., covered by a gasketed lid) at all times that hazardous waste is in the tank except when it is necessary to use the cover opening to:

1) Add, remove, inspect, or sample the material in the tank;

2) Inspect, maintain, repair, or replace equipment located inside the tank; or

3) Vent gases or vapors from the tank to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 725.988.

g) One or more safety devices that vent directly to the atmosphere may be used on the tank, cover, closed-vent system, or control device provided each safety device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the tank or the closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the tank, cover, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.986 Standards: Surface Impoundments

a) This Section applies to owners and operators of surface impoundments subject to this Subpart into which any hazardous waste is placed except for the following surface impoundments:

1) A surface impoundment in which all hazardous waste entering the surface impoundment meets the conditions specified in Section 725.983(c); or

2) A surface impoundment used for biological treatment of hazardous waste in accordance with the requirements of Section 725.983(c)(2)(iv).

b) The owner or operator shall place the hazardous waste into a surface impoundment equipped with a cover (e.g., an air-supported structure or a rigid cover) that is vented through a closed-vent system to a control device meeting the requirements specified in

subsection (d) below.

c) As an alternative to complying with subsection (b) above, an owner or operator may place hazardous waste in a surface impoundment equipped with a floating membrane cover meeting the requirements specified in subsection (e) below when the hazardous waste is determined to meet all of the following conditions:

1) The hazardous waste is neither mixed, stirred, agitated, nor circulated within the surface impoundment by the owner or operator using a process that results in splashing, frothing, or visible turbulent flow on the waste surface during normal process operations;

2) The hazardous waste in the surface impoundment is not heated by the owner or operator; and

3) The hazardous waste in the surface impoundment is not treated by the owner or operator using a waste stabilization process or a process that produces an exothermic reaction.

d) To comply with subsection (b)(1) above, the owner or operator shall design, install, operate, and maintain a cover that vents the organic vapors emitted from hazardous waste in the surface impoundment through a closed-vent system connected to a control device.

1) The cover must be designed, installed, operated, and maintained to meet the following requirements:

A) The cover and all cover openings (e.g., access hatches, sampling ports, and gauge wells) must be designed to operate with no detectable organic emissions when all cover openings are secured in a closed, sealed position.

B) Each cover opening must be secured in the closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the surface impoundment, except as provided for in subsection (g) below.

C) The closed-vent system and control device must be designed and operated in accordance with Section 725.988.

e) To comply with subsection (c) above, the owner or operator shall design, install, operate, and maintain a floating membrane cover that meets all of the following requirements:

1) The floating membrane cover must be designed, installed, and operated such that at all times when hazardous waste is in the surface impoundment, the entire surface area of the hazardous waste is enclosed by the cover, and any air spaces underneath the cover are not vented to the atmosphere except during conditions specified in subsection (h) below.

2) The floating membrane cover and all cover openings (e.g., access hatches, sampling ports, and gauge wells) must be designed to operate with no detectable organic emissions when all cover openings are secured in a closed, sealed position.

3) Each cover opening must be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the surface impoundment except as provided for in subsections (g)(1) through (g)(3) below; and

4) The synthetic membrane material used for the floating membrane cover must be either:

A) High density polyethylene with a thickness no less than 2.5 mm; or

B) A material or a composite of different materials determined to have the following properties:

i) Organic permeability properties that are equivalent to those of the material specified in subsection (e)(4)(A) above; and

ii) Chemical and physical properties that maintain the material integrity for as long as the cover is in use. Factors that must be considered in selecting the material include: the effects of contact with the waste managed in the impoundment, weather exposure, and cover installation and operation practices.

f) The owner or operator shall install, operate, and maintain enclosed pipes or other closed systems for the transfer of hazardous waste as described in subsection (f)(1) or (f)(2) below.

BOARD NOTE: U.S. EPA considers a drain system that meets the requirements of 40 CFR 61.346(a)(1) or (b)(1) through (b)(3) to be a "closed-system". The Board intends that this meaning be included in the use of that term for the purposes of this Subpart.

1) Transfer all hazardous waste to the surface impoundment from another tank, surface impoundment, or container subject to this Subpart, except for those hazardous wastes that meet the conditions specified in Section 725.983(c); and

2) Transfer all hazardous waste from the surface impoundment to another tank, surface impoundment, or container subject to this Subpart, except for those hazardous wastes that meet the conditions specified in Section 725.983(c).

g) Each cover opening must be secured in the closed, sealed position (e.g., covered by a gasketed lid or cap) at all times that hazardous waste is in the surface impoundment except when it is necessary to use the cover opening to:

1) Add, remove, inspect, or sample the material in the surface impoundment;

2) Inspect, maintain, repair, or replace equipment located underneath the cover;

3) Remove treatment residues from the surface impoundment in accordance with the requirements of 35 Ill. Adm. Code 728.104; or

4) Vent gases or vapors from the surface impoundment to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 725.988.

h) One or more safety devices that vent directly to the atmosphere may be installed on the cover, closed-vent system, or control device provided each device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the surface impoundment or the closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the cover, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.987 Standards: Containers

a) This Section applies to the owners and operators of containers having design capacities greater than 0.1 m^3 (3.5 ft^3 or 26.4 gal) subject to this Subpart into which any hazardous waste is placed, except for a container in which all hazardous waste entering the container meets the conditions specified in Section 725.983(c).

b) An owner or operator shall manage hazardous waste in containers using the following procedures:

1) The owner or operator shall place the hazardous waste into one of the following containers, except when a container is used for hazardous waste treatment as required by subsection (b)(2) below:

A) A container that is equipped with a cover that operates with no detectable organic emissions when all container openings (e.g., lids, bungs, hatches, and sampling ports) are secured in a closed, sealed position. The owner or operator shall determine that a container operates with no detectable emissions by testing each opening on the container for leaks in accordance with Method 21 in 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111, the first time any portion of the hazardous waste is placed into the container. If a leak is detected and cannot be repaired immediately, the hazardous waste must be removed from the container and the container not used to meet the requirements of this subsection until the leak is repaired and the container is retested.

B) A container having a design capacity less than or equal to 0.46 m^3 (16.2 ft^3 or 121.5 gal) that is equipped with a cover and complies with all applicable U.S. Department of Transportation regulations on packaging hazardous waste for transport under 49 CFR part 178, incorporated by reference in 35 Ill. Adm.

Code 720.111.

i) A container that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this Subpart is not subject to any exceptions to the 49 CFR part 178 regulations, except as noted in subsection (b)(1)(B)(ii) above.

ii) A lab pack that is managed in accordance with the requirements of 49 CFR part 178 for the purpose of complying with this Subpart may comply with the exceptions for combination packagings specified in 49 CFR 173.12(b).

C) A container that is attached to or forms a part of any truck, trailer, or railcar and that has been demonstrated within the preceding 12 months to be organic vapor tight when all container openings are in a closed, sealed position (e.g., the container hatches or lids are gasketed and latched). For the purpose of meeting the requirements of this subsection, a container is organic vapor tight if the container sustains a pressure change of not more than 0.75 kPa (0.11 psig or 5.6 mm Hg) within 5 minutes after it is pressurized to a minimum of 4.5 kPa (0.65 psig or 33.7 mm Hg). This condition is to be demonstrated using the pressure test specified in Method 27 of 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111, and a pressure measurement device that has a precision of ± 2.5 mm water and that is capable of measuring above the pressure at which the container is to be tested for vapor tightness.

2) An owner or operator treating hazardous waste in a container by either a waste stabilization process, any process that requires the addition of heat to the waste, or any process that produces an exothermic reaction must meet the following requirements:

A) Whenever it is necessary for the container to be open during the treatment process, the container must be located inside an enclosure that is vented through a closed-vent system to a control device.

B) The enclosure must be a structure that is designed and operated in accordance with the following requirements:

i) The enclosure must be a structure that is designed and operated with sufficient airflow into the structure to capture the organic vapors emitted from the hazardous waste in the container and vent the vapors through the closed-vent system to the control device.

ii) The enclosure may have permanent or temporary openings to allow worker access, passage of containers through the enclosure by conveyor or other mechanical means, entry of permanent mechanical or electrical equipment, or to direct airflow into the enclosure. The pressure drop

across each opening in the enclosure must be maintained at a pressure below atmospheric pressure such that whenever an open container is placed inside the enclosure no organic vapors released from the container exit the enclosure through the opening. The owner or operator shall determine that an enclosure achieves this condition by measuring the pressure drop across each opening in the enclosure. If the pressure within the enclosure is equal to or greater than atmospheric pressure then the enclosure does not meet the requirements of this Section.

C) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 725.988.

3) An owner or operator transferring hazardous waste into a container having a design capacity greater than 0.46 m^3 (16.2 ft^3 or 121.5 gal) shall meet the following requirements:

A) Hazardous waste transfer by pumping must be performed using a conveyance system that uses a tube (e.g., pipe, hose) to add the waste into the container. During transfer of the waste into the container, the cover must remain in place and all container openings must be maintained in a closed, sealed position except for those openings through which the tube enters the container and as provided for in subsection (c) below. The tube must be positioned in a manner such that either the:

i) Tube outlet continuously remains submerged below the waste surface at all times waste is flowing through the tube;

ii) Lower bottom edge of the tube outlet is located at a distance no greater than two inside diameters of the tube or 15.25 cm (0.50 ft or 6.0 in), whichever distance is greater, from the bottom of the container at all times waste is flowing through the tube; or

iii) Tube is connected to a permanent port mounted on the bottom of the container so that the lower edge of the port opening inside the container is located at a distance equal to or less than 15.25 cm (0.50 ft or 6.0 in) from the container bottom.

B) Hazardous waste transferred by a means other than pumping must be performed such that during transfer of the waste into the container, the cover remains in place and all container openings are maintained in a closed, sealed position except for those openings through which the hazardous waste is added and as provided for in subsection (d) below.

c) Each container opening must be maintained in a closed, sealed position (e.g., covered by a gasketed lid) at all times that hazardous waste is in the container except when it is necessary to

use the opening to:

1) Add, remove, inspect, or sample the material in the container;

2) Inspect, maintain, repair, or replace equipment located inside the container; or

3) Vent gases or vapors from a cover located over or enclosing an open container to a closed-vent system connected to a control device that is designed and operated in accordance with the requirements of Section 725.988.

d) One or more safety devices that vent directly to the atmosphere may be used on the container, cover, enclosure, closed-vent system, or control device provided each device meets all of the following conditions:

1) The safety device is not used for planned or routine venting of organic vapors from the container, cover, enclosure, or closed-vent system connected to a control device; and

2) The safety device remains in a closed, sealed position at all times except when an unplanned event requires that the device open for the purpose of preventing physical damage or permanent deformation of the container, cover, enclosure, closed-vent system, or control device in accordance with good engineering and safety practices for handling flammable, combustible, explosive, or other hazardous materials. An example of an unplanned event is a sudden power outage.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.988 Standards: Closed-vent Systems and Control Devices

a) This Section applies to each closed-vent system and control device installed and operated by the owner or operator to control air emissions in accordance with standards of this Subpart.

b) The closed-vent system must meet the following requirements:

1) The closed-vent system must route the gases, vapors, and fumes emitted from the hazardous waste in the waste management unit to a control device that meets the requirements specified in subsection (c) below.

2) The closed-vent system must be designed and operated in accordance with the requirements specified in Section 725.933(j).

3) If the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device, the owner or operator shall meet the following requirements:

A) For each bypass device except as provided for in subsection (b)(3)(B) below, the owner or operator shall either:

i) Install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device that

indicates at least once every 15 minutes whether gas, vapor, or fume flow is present in the bypass device; or

ii) Secure the valve installed at the inlet to the bypass device in the closed position using a car-seal or a lock-and-key type configuration. The owner or operator shall visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the closed position.

B) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of subsection (b)(3)(A) above.

c) The control device must meet the following requirements:

1) The control device must be one of the following devices:

A) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

B) An enclosed combustion device designed and operated in accordance with the requirements of Section 725.933(c); or

C) ~~A flare designed and operated in accordance with the~~ requirements of Section 725.933(d).

2) The control device must be operating at all times when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device.

3) The owner or operator using a carbon adsorption system to comply with subsection (c)(1) above shall operate and maintain the control device in accordance with the following requirements:

A) Following the initial startup of the control device, all activated carbon in the control device must be replaced with fresh carbon on a regular basis in accordance with the requirements of Section 725.933(g) or 725.933(h).

B) All carbon removed from the control device must be managed in accordance with the requirements of Section 725.933(i).

4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with subsection (c)(1) above shall operate and maintain the control device in accordance with the requirements of Section 725.933(i).

5) The owner or operator shall demonstrate that a control device achieves the performance requirements of subsection (c)(1) above as follows:

A) An owner or operator shall demonstrate using either a performance test, as specified in subsection (c)(5)(C) below, or a design analysis, as specified in subsection (c)(5)(D) below, the performance of each control device except for the following:

i) A flare;

ii) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;

iii) A boiler or process heater into which the vent stream is introduced with the primary fuel;

iv) A boiler or process heater burning hazardous waste for which the owner or operator has been issued a final permit 35 Ill. Adm. Code 703 and 705 and that is designed and operated in accordance with the requirements of 35 Ill. Adm. Code 726.Subpart H; or

v) A boiler or process heater burning hazardous waste for which the owner or operator has certified compliance with the interim status requirements of 35 Ill. Adm. Code 726.Subpart H.

B) An owner or operator shall demonstrate the performance of each flare in accordance with the requirements specified in Section 725.933(e).

C) For a performance test conducted to meet the requirements of subsection (c)(5)(A) above, the owner or operator shall use the test methods and procedures specified in Section 725.934(c)(1) through (c)(4).

D) For a design analysis conducted to meet the requirements of subsection (c)(5)(A) above, the design analysis must meet the requirements specified in Section 725.935(b)(4)(C).

E) The owner or operator shall demonstrate that a carbon adsorption system achieves the performance requirements of subsection (c)(1) above based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.

6) If the owner or operator and the Agency do not agree on a demonstration of control device performance using a design analysis, then the disagreement must be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of subsection (c)(5)(C) above. The Agency may choose to have an authorized representative observe the performance test.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.989 Inspection and Monitoring Requirements

a) This Section applies to an owner or operator using air emission controls in accordance with the requirements of Sections 725.985 through 725.988.

b) Each cover used in accordance with requirements of Sections 725.985 through 725.987 must be visually inspected and monitored for detectable organic emissions by the owner or operator using the procedure specified in subsection (f) below, except as follows:

1) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in subsection (f) below for the following tank covers:

A) A tank internal floating roof that is inspected and monitored in accordance with the requirements of Section 725.991; or

B) A tank external floating roof that is inspected and monitored in accordance with the requirements of Section 725.991.

2) If a tank is buried partially or entirely underground, an owner or operator is required to perform the cover inspection and monitoring requirements specified in subsection (f) below only for those portions of the tank cover and those connections to the tank cover or tank body (e.g. fill ports, access hatches, gauge wells, etc.) that extend to or above the ground surface and can be opened to the atmosphere.

3) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in subsection (f) below for a container that meets all requirements specified in either Section 725.987(b)(1)(B) or 725.987(b)(1)(C).

4) An owner or operator is exempted from performing the cover inspection and monitoring requirements specified in subsection (f) below for an enclosure used to control air emissions from containers in accordance with the requirements of Section 725.987(b)(2).

c) Each closed-vent system used in accordance with the requirements of Section 725.988 must be inspected and monitored by the owner or operator in accordance with the procedure specified in Section 725.933(j).

d) Each control device used in accordance with the requirements of Section 725.988 must be inspected and monitored by the owner or operator in accordance with the procedure specified in Section 725.933(f).

e) The owner or operator shall develop and implement a written plan and schedule to perform all inspection and monitoring requirements of this section. The owner or operator shall incorporate this plan and schedule into the facility inspection plan required under 35 Ill. Adm. Code 725.115.

f) Inspection and monitoring of a cover in accordance with the requirements of subsection (b) above must be performed as follows:

1) The cover and all cover openings must be initially visually

inspected and monitored for detectable organic emissions on or before the date that the tank, surface impoundment, or container using the cover becomes subject to the provisions of this Subpart and at other times as requested by the Agency.

2) At least once every 6 months following the initial visual inspection and monitoring for detectable organic emissions required under subsection (f)(1) above, the owner and operator shall visually inspect and monitor the cover and each cover opening except for following cover openings:

A) A cover opening that has continuously remained in a closed, sealed position for the entire period since the last time the cover opening was visually inspected and monitored for detectable emissions;

B) A cover opening that is designated as unsafe to inspect and monitor in accordance with subsection (f)(5) below;

C) A cover opening on a cover installed and placed in operation before December 6, 1994 that is designated as difficult to inspect and monitor in accordance with subsection (f)(6) below.

3) To visually inspect a cover, the owner or operator shall view the entire cover surface and each cover opening in a closed, sealed position for evidence of any defect that may affect the ability of the cover or cover opening to continue to operate with no detectable organic emissions. A visible hole, gap, tear, or split in the cover surface or a cover opening is defined as a leak that must be repaired in accordance with subsection (f)(7) below.

4) To monitor a cover for detectable organic emissions, the owner or operator shall use the following procedure:

A) Method 21 in 40 CFR part 60, appendix A, incorporated by reference in 35 Ill. Adm. Code 720.111, to test each cover seal and cover connection for detectable organic emissions. Seals on floating membrane covers must be monitored around the entire perimeter of the cover at locations spaced no greater than 3 meters apart.

B) For all cover connections and seals except for the seals around a rotating shaft that passes through a cover opening, if the monitoring instrument indicates detectable organic emissions (i.e., an instrument concentration reading greater than 500 ppmv plus the background level), then a leak is detected. Each detected leak must be repaired in accordance with subsection (f)(7) below.

C) For the seals around a rotating shaft that passes through a cover opening, if the monitoring instrument indicates a concentration reading greater than 10,000 ppmv, then a leak is detected. Each detected leak must be repaired in accordance with subsection (f)(7) below.

5) An owner or operator may designate a cover as an unsafe to inspect and monitor cover if all of the following conditions are met:

A) The owner or operator determines that inspection or monitoring of the cover would expose a worker to dangerous, hazardous, or other unsafe conditions.

B) The owner or operator develops and implements a written plan and schedule to inspect the cover using the procedure specified in subsection (f)(3) above and monitor the cover using the procedure specified in subsection (f)(4) below as frequently as practicable during those times when a worker can safely access the cover.

6) An owner or operator may designate a cover installed and placed in operation before December 6, 1994, as a difficult to inspect and monitor cover if all of the following conditions are met:

A) The owner or operator determines that inspection or monitoring the cover requires elevating a worker to a height greater than 2 meters (6.6 ft) above a support surface; and

B) The owner and operator develops and implements a written plan and schedule to inspect the cover using the procedure specified in subsection (f)(3) above, and to monitor the cover using the procedure specified in subsection (f)(4) above at least once per calendar year.

7) When a leak is detected by either of the methods specified in subsection (f)(3) or (f)(4) above, the owner or operator shall repair the leak in the following manner:

A) The owner or operator shall make a first attempt at repairing the leak no later than 5 calendar days after the leak is detected. Repair of the leak must be completed as soon as practicable, but no later than 15 calendar days after the leak is detected. If repair of the leak cannot be completed within the 15-day period, except as provided in subsection (f)(7)(B) below, then the owner or operator shall not add hazardous waste to the tank, surface impoundment, or container on which the cover is installed until the repair of the leak is completed.

B) Repair of a leak detected on a cover installed on a tank or surface impoundment may be delayed beyond 15 calendar days if the owner or operator determines that both of the following conditions occur:

i) Repair of the leak requires first emptying the contents of the tank or surface impoundment; and

ii) Temporary removal of the tank or surface impoundment from service will result in the unscheduled cessation of production from the process unit or operation of the waste management unit that is generating the hazardous

waste managed in the tank or surface impoundment.

C) Repair of a leak determined by the owner or operator to meet the conditions specified in subsection (f)(7)(B) above must be performed at the next time the process, system, or waste management unit that is generating the hazardous waste managed in the tank or surface impoundment stops operation for any reason.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.990 Recordkeeping Requirements

a) Each owner or operator of a facility subject to requirements in this Subpart shall record and maintain the following information as applicable:

1) Documentation for each cover installed on a tank in accordance with the requirements of Section 725.985(b)(2) or 725.985(b)(3) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the applicable design specifications as listed in Section 725.991(c).

2) Documentation for each floating membrane cover installed on a surface impoundment in accordance with the requirements of Section 725.986(c) that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Section 725.986(e).

3) Documentation for each enclosure used to control air emissions from containers in accordance with the requirements of Section 725.987(b)(2)(A) that includes information prepared by the owner or operator or provided by the manufacturer or vendor describing the enclosure design, and certification by the owner or operator that the enclosure meets the specifications listed in Section 725.987(b)(2)(B).

4) Documentation for each closed-vent system and control device installed in accordance with the requirements of Section 725.988 that includes:

A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis, as specified in subsection (a)(4)(B) below, or by performance tests, as specified in subsection (a)(4)(C) below, when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.

B) If a design analysis is used, then design documentation as specified in Section 725.935(b)(4). The documentation must include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the

control device design in accordance with Section 725.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications.

C) If performance tests are used, then a performance test plan as specified in Section 725.935(b)(3) and all test results.

D) Information as required by Sections 725.935(c)(1) and 725.935(c)(2).

5) Records for all Method 27 tests performed by the owner or operator for each container used to meet the requirements of Section 725.987(b)(1)(C).

6) Records for all visual inspections conducted in accordance with the requirements of Section 725.989.

7) Records for all monitoring for detectable organic emissions conducted in accordance with the requirements of Section 725.989.

8) Records of the date of each attempt to repair a leak, repair methods applied, and the date of successful repair.

9) Records for all continuous monitoring conducted in accordance with the requirements of Section 725.989.

10) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 725.988(c)(3)(B).

11) Records for all inspections of each cover installed on a tank in accordance with the requirements of Section 725.985(b)(2) or Section 725.985(b)(3) that includes information as listed in Section 725.991(c).

b) An owner or operator electing to use air emission controls for a tank in accordance with the conditions specified in Section 725.985(c) shall record the following information:

1) The date and time each waste sample is collected for direct measurement of maximum organic vapor pressure in accordance with Section 725.984(c).

2) The results of each determination for the maximum organic vapor pressure of the waste in the tank performed in accordance with Section 725.984(c).

3) The records specifying the tank dimensions and design capacity.

c) An owner or operator electing to use air emission controls for a tank in accordance with the requirements of Section 725.991 shall record the information required by Section 725.991(c).

d) An owner or operator electing not to use air emission controls for a particular tank, surface impoundment, or container subject to this subpart in accordance with the conditions specified in Section 725.983(c) shall record the information used by the owner or operator for each waste determination (e.g., test results,

measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator shall record the date, time, and location that each waste sample is collected in accordance with applicable requirements of Section 725.984.

e) An owner or operator electing to comply with requirements in accordance with Section 725.983(c)(2)(F) or 725.983(c)(2)(E) shall record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.

f) An owner or operator designating a cover as unsafe to inspect and monitor pursuant to Section 725.989(f)(5) or difficult to inspect and monitor pursuant to Section 725.989(f)(6) shall record in a log that is kept in the facility operating record the following information:

1) A list of identification numbers for tanks with covers that are designated as unsafe to inspect and monitor in accordance with the requirements of Section 725.989(f)(5), an explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

2) A list of identification numbers for tanks with covers that are designated as difficult to inspect and monitor in accordance with the requirements of Section 725.989(f)(6), an explanation for each cover stating why the cover is difficult to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

g) All records required by subsections (a) through (f) above, except as required in subsections (a)(1) through (a)(4) above, must be maintained in the operating record for a minimum of 3 years. All records required by subsections (a)(1) through (a)(4) above must be maintained in the operating record until the air emission control equipment is replaced or otherwise no longer in service.

h) The owner or operator of a facility that is subject to this Subpart and to the control device standards in 40 CFR part 60, Subpart VV, or 40 CFR part 61, Subpart V, incorporated by reference in 35 Ill. Adm. Code 270.111, may elect to demonstrate compliance with the applicable sections of this Subpart by documentation either pursuant to this Subpart, or pursuant to the provisions of 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, to the extent that the documentation required by 40 CFR parts 60 or 61 duplicates the documentation required by this Section.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 725.991 Alternative Tank Emission Control Requirements

a) This Section applies to owners and operators of tanks electing to comply with Section 725.985(b)(2) or (b)(3).

1) The owner or operator electing to comply with Section 725.985(b)(2) shall design, install, operate, and maintain a fixed roof and internal floating roof that meet the following requirements.

A) The fixed roof must comply with the requirements of Section 725.985(d)(1). The internal floating roof must rest or float on the waste surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof. The internal floating roof must be floating on the waste surface at all times, except during initial fill and during those intervals when the tank is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be accomplished as rapidly as possible.

B) Each internal floating roof must be equipped with one of the following closure devices between the wall of the tank and the edge of the internal floating roof:

i) A foam- or liquid-filled seal mounted in contact with the waste (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the waste between the wall of the tank and the floating roof continuously around the circumference of the tank.

ii) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the tank and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the tank by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

C) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the waste surface.

D) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. The cover or lid must be equipped with a gasket. Covers on each access hatch and automatic gauge float well must be bolted, except when they are in use.

E) Automatic bleeder vents must be equipped with a gasket and are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports.

F) Rim space vents must be equipped with a gasket and are

to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

G) Each penetration of the internal floating roof for the purpose of sampling must be a sample well. The sample well must have a slit fabric cover that covers at least 90 percent of the opening.

H) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.

I) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.

2) The owner or operator electing to comply with Section 725.985(b)(3) shall design, install, operate, and maintain an external floating roof that meets the following requirements:

A) Each external floating roof must be equipped with a closure device between the wall of the tank and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) The primary seal must be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in subsection (b)(2)(D) below, the seal must completely cover the annular space between the edge of the floating roof and tank wall.

ii) The secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except as allowed in subsection (b)(2)(D) below.

B) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof must provide a projection below the waste surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

C) The roof must be floating on the waste at all times

(i.e., off the roof leg supports), except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports must be continuous and must be accomplished as rapidly as possible.

3) The owner or operator may elect to comply with Section 725.985(b)(2) or (b)(3) using an alternative means of emission limitation for which U.S. EPA has published a Federal Register notice in accordance with the requirements of 40 CFR 60.114b permitting its use as an alternative means for the purpose of compliance with 40 CFR 60.112b.

b) Monitoring and inspection of the control equipment described in subsection (a) above must be conducted as follows:

1) After installation, owners and operators of internal floating roofs shall:

A) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the tank with waste. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the tank.

B) For tanks equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the waste inside the tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the tank from service within 45 days. If a failure that is detected during inspections required in this subsection cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, the Agency may grant the owner or operator a provisional variance pursuant to Section 35(b) of the Act that extends this time for up to 30 days. Such a request for an extension must comply with 35 Ill. Adm. Code 180, and it must document that alternate capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the control equipment will be repaired or the tank will be emptied as soon as possible.

C) For tanks equipped with a double-seal system as specified in subsection (a)(1)(A)(ii) above:

i) Visually inspect the tank, as specified in subsection (b)(1)(D) below, at least every 5 years; or

ii) Visually inspect the tank as specified in subsection (b)(1)(B) above.

D) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed. If the internal floating roof has defects; the primary seal has holes, tears, or other openings in the seal or the seal fabric; the secondary seal has holes, tears, or other openings in the seal or the seal fabric; the gaskets no longer close off the waste surfaces from the atmosphere; or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary, so that none of the conditions specified in this subsection exist before refilling the tank with waste. In no event may inspections conducted in accordance with this provision occur at intervals greater than 10 years, in the case of tanks conducting the annual visual inspection as specified in subsection (b)(1)(B) above, or at intervals no greater than 5 years, in the case of tanks specified in subsection (b)(1)(C) above.

E) Notify the Agency in writing at least 30 days prior to the filling or refilling of each tank for which an inspection is required by subsections (b)(1)(A) and (b)(1)(D) above, to afford the Agency the opportunity to have an observer present. If the inspection required by subsection (b)(1)(D) above is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Agency at least 7 days prior to the refilling of the tank. Notification must be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification, including the written documentation, may be made in writing and sent by express mail so that it is received by the Agency at least 7 days prior to the refilling.

2) After installation, the owner or operator of an external floating roof shall:

A) Determine the gap areas and maximum gap widths between the primary seal and the wall of the tank and between the secondary seal and the wall of the tank according to the following frequency:

i) Measurements of gaps between the tank wall and the primary seal (seal gaps) must be performed during the hydrostatic testing of the tank or within 60 days of the initial fill with waste and at least once every five years thereafter.

ii) Measurements of gaps between the tank wall and the secondary seal must be performed within 60 days of the initial fill with waste and at least once per year thereafter.

iii) If any tank ceases to hold waste for a period of one year or more, subsequent introduction of waste into the tank must be considered an initial fill for the purposes of subsections (b)(2)(A)(i) and (b)(2)(A)(ii) above.

B) Determine the gap widths and areas in the primary and secondary seals individually by the following procedures:

i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.

ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

iii) Determine the total surface area of each gap described in subsection (b)(2)(B)(ii) above by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

C) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in subsection (b)(2)(D) below.

D) Make necessary repairs or empty the tank within 45 days of identification in any inspection for seals not meeting the following requirements:

i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal must not exceed 212 cm^2 per meter (10.0 in^2 per foot) of tank diameter, and the width of any portion of any gap must not exceed 3.81 cm (1.50 in). One end of the mechanical shoe is to extend into the waste contained in the tank, and the other end is to extend a minimum vertical distance of 61 cm (24.0 in) above the waste surface. There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

ii) The secondary seal is to meet the following requirements: The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in subsection (b)(2)(B)(iii) above. The accumulated area of gaps between the tank wall and the secondary seal must not exceed 21.2 cm^2 per meter (1.00 in^2 per foot) of tank diameter, and the width of any portion of any gap must not exceed 1.27 cm (0.500 in). There are to be no

holes, tears, or other openings in the seal or seal fabric.

E) If a failure that is detected during inspections required in subsection (b)(2)(A) above cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, the Agency may grant the owner or operator a provisional variance pursuant to Section 35(b) of the Act that extends this time for up to 30 days. Such a request for an extension must comply with 35 Ill. Adm. Code 180, and it must include a demonstration of the unavailability of alternate capacity and a specification of a schedule that will assure that the control equipment will be repaired or the tank will be emptied as soon as possible.

F) Notify the Agency 30 days in advance of any gap measurements required by subsection (b)(2)(A) above, to afford the Agency the opportunity to have an observer present.

G) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

i) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subsection exist before filling or refilling the tank with waste.

ii) For all the inspections required by this subsection, the owner or operator shall notify the Agency in writing at least 30 days prior to the filling or refilling of each tank to afford the Agency the opportunity to inspect the tank prior to refilling. If the inspection required by this subsection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Agency at least seven days prior to the refilling of the tank. Notification must be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification, including the written documentation, may be made in writing and sent by express mail so that it is received by the Agency at least seven days prior to the refilling.

c) Owners and operators that elect to install and operate the control equipment in subsection (a) above shall include the following information in the operating record in accordance with the requirements of Section 725.990(a)(1) and (a)(11):

1) Internal floating roof.

A) Documentation that describes the control equipment design and certifies that the control equipment meets the specifications of subsections (a)(1) and (b)(1) above.

B) Records of each inspection performed as required by subsections (b)(1)(A) through (b)(1)(D) above. Each record must identify the tank on which the inspection was performed and must contain the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

C) If any of the conditions described in subsection (b)(1)(B) above are detected during the annual visual inspection required by subsection (b)(1)(B) above, the records must identify the tank, the nature of the defects, and the date the tank was emptied or the nature of and date the repair was made.

D) After each inspection required by subsection (b)(1)(C) above that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in subsection (b)(1)(B) above, the records must identify the tank and the reason it did not meet the specifications of subsection (a)(1) or (b)(1)(C) above and describe each repair made.

2) External floating roof.

A) Documentation that describes the control equipment design and certifies that the control equipment meets the specifications of subsections (a)(2) and (b)(2)(B) through (b)(2)(D) above.

B) Records of each gap measurement performed as required by subsection (b)(2) above. Each record must identify the tank in which the measurement was performed, the date of measurement, the raw data obtained in the measurement, and the calculations described in subsections (b)(2)(B) and (b)(2)(C) above.

C) Records for each seal gap measurement that detects gaps exceeding the limitations specified by subsection (b)(2)(D) above that identifies the tank, the date the tank was emptied or the repairs made, and the nature of the repair.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART DD: CONTAINMENT BUILDINGS

Section 725.1102 Closure and ~~p~~Post ~~c~~Closure ~~c~~Care

a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate, and manage them as hazardous waste unless 35 Ill. Adm. Code 721.103(~~e~~e) applies. The closure plan, closure activities,

cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in 725.Subparts G and H.

b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment as required in subsection (a) above, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (35 Ill. Adm. Code 725.310). In addition, for the purposes of closure, post-closure, and financial responsibility, such a containment building is then considered to be a landfill, and the owner or operator must meet all the requirements for landfills specified in 725.Subparts G and H.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 726
STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTE AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section
726.120 Applicability
726.121 Standards applicable to generators and transporters of materials used in a manner that constitutes disposal
726.122 Standards applicable to storers, who are not the ultimate users, of materials that are to be used in a manner that constitutes disposal
726.123 Standards ~~a~~Applicable to ~~u~~Users of ~~m~~Materials that are ~~u~~Used in a ~~m~~Manner that ~~c~~Constitutes ~~d~~Disposal

SUBPART D: HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY

Section
726.130 Applicability (Repealed)
726.131 Prohibitions (Repealed)
726.132 Standards applicable to generators of hazardous waste fuel (Repealed)
726.133 Standards applicable to transporters of hazardous waste fuel (Repealed)
726.134 Standards applicable to marketers of hazardous waste fuel (Repealed)
726.135 Standards applicable to burners of hazardous waste fuel (Repealed)
726.136 Conditional exemption for spent materials and by-products exhibiting a characteristic of hazardous waste (Repealed)

SUBPART E: USED OIL BURNED FOR ENERGY RECOVERY (Repealed)

Section
726.140 Applicability (Repealed)
726.141 Prohibitions (Repealed)
726.142 Standards applicable to generators of used oil burned for energy recovery (Repealed)

726.143 Standards applicable to marketers of used oil burned for energy recovery (Repealed)
726.144 Standards applicable to burners of used oil burned for energy recovery (Repealed)

SUBPART F: RECYCLABLE MATERIALS UTILIZED FOR PRECIOUS METAL RECOVERY

Section
726.170 Applicability and requirements

SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED

Section
726.180 Applicability and requirements

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

Section
726.200 Applicability
726.201 Management prior to Burning
726.202 Permit standards for Burners
726.203 Interim Status Standards for Burners
726.204 Standards to Control Organic Emissions
726.205 Standards to control PM
726.206 Standards to Control Metals Emissions
726.207 Standards to control HCl and Chlorine Gas Emissions
726.208 Small quantity On-site Burner Exemption
726.209 Low risk waste Exemption
726.210 Waiver of DRE trial burn for Boilers
726.211 Standards for direct Transfer
726.212 Regulation of Residues
726.219 Extensions of Time

726.Appendix A Tier I and Tier II Feed Rate and Emissions Screening Limits for Metals
726.Appendix B Tier I Feed Rate Screening Limits for Total Chlorine
726.Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride
726.Appendix D Reference Air Concentrations
726.Appendix E Risk Specific Doses
726.Appendix F Stack Plume Rise
726.Appendix G Health-Based Limits for Exclusion of Waste-Derived Residues
726.Appendix H Potential PICs for Determination of Exclusion of Waste-Derived Residues
726.Appendix I Methods Manual for Compliance with BIF Regulations
726.Appendix J Guideline on Air Quality Models
726.Appendix K Lead-Bearing Materials That May be Processed in Exempt Lead Smelters
726.Appendix L Nickel or Chromium-Bearing Materials that may be Processed in Exempt Nickel-Chromium Recovery Furnaces
726.Appendix M Mercury-Bearing Wastes That May Be Processed in Exempt Mercury Recovery Units
726.Table A Exempt Quantities for Small Quantity Burner Exemption

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

SOURCE: Adopted in R85-22 at 10 Ill. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 Ill. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 Ill. Reg. 18606, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14533, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9727, effective June 17, 1991; amended in R91-13 at 16 Ill. Reg. 9858, effective

June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20904, effective November 22, 1993; amended in R94-7 at 18 Ill. Reg. 12500, effective July 29, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL

Section 726.120 Applicability

a) The regulations of this Subpart apply to recyclable materials that are applied to or placed on the land~~:~~:

1) Without mixing with any other substance(s); or

2) After mixing or combination with any other substance(s). These materials will be referred to throughout this Subpart as "materials used in a manner that constitutes disposal."

b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation under this Subpart 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 35 Ill. Adm. Code 728.Subpart D (or applicable prohibition levels in 35 Ill. 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. 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 are not covered by the exemption in subsection (b) above, and such uses of these materials remain subject to regulation.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 726.123 Standards ~~a~~Applicable to ~~u~~Users of ~~m~~Materials that are ~~u~~Used in a ~~m~~Manner that ~~c~~Constitutes ~~d~~Disposal

a) Owners or operators of facilities that use recyclable materials in a manner that constitutes disposal are regulated under all applicable provisions of 35 Ill. Adm. Code 702, 703, and 705; 35 Ill. Adm. Code 724.Subparts A through N; ~~and~~ 35 Ill. Adm. Code 725.Subparts A ~~through N~~~~;~~; 35 Ill. Adm. Code 728; ~~and 35 Ill. Adm. Code 702, 702 and 705, and~~ the notification requirement under Section 3010 of the Resource Conservation and Recovery Act. (These requirements do not apply to products ~~which~~that contain these recyclable materials under the provisions of Section 726.120(b)).

b) The use of waste or used oil or other material~~,~~ ~~which~~that is contaminated with dioxin or any other hazardous waste (other than

a waste identified solely on the basis of ignitability)~~,~~ for dust suppression or road treatment is prohibited.~~.~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS AND INDUSTRIAL FURNACES

Section 726.200 Applicability

a) The regulations of this Subpart apply to hazardous waste burned or processed in a boiler or industrial furnace (BIF) (as defined in 35 Ill. Adm. Code 720.110) irrespective of the purpose of burning or processing, except as provided by subsections (b), (c), (d)~~,~~ and (f)~~,~~ below. In this Subpart, the term "burn" means burning for energy recovery or destruction~~,~~ or processing for materials recovery or as an ingredient. The emissions standards of Sections 726.204, 726.205, 726.206~~,~~ and 726.207 apply to facilities operating under interim status or under a RCRA permit~~,~~ as specified in Sections 726.202 and 726.203.

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

1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C. Such used oil is subject to regulation under 35 Ill. Adm. Code 739~~,~~ rather than this Subpart;

2) Gas recovered from hazardous or solid waste landfills~~,~~ when such gas is burned for energy recovery;

3) Hazardous wastes that are exempt from regulation under 35 Ill. Adm. Code 721.104 and 721.106(a)(3)(~~SD~~) through (a)(3)(~~HF~~)~~,~~ 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 U.S. EPA ~~H~~hazardous ~~W~~waste ~~N~~no. K087~~,~~ decanter tank tar sludge from coking operations.

c) Owners and operators of smelting, melting~~,~~ and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters and foundry furnaces, but not including cement kilns, aggregate kilns~~,~~ or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation under this Subpart, except for Sections 726.201 and 726.212.

1) To be exempt from Sections 726.202 through 726.211, an owner or operator of a metal recovery furnace or mercury recovery furnace shall comply with the following requirements, ~~except~~ that an owner or operator of a lead or a nickel-chromium recovery furnace~~,~~ or a metal recovery furnace that burns baghouse bags used to capture metallic dust emitted by steel manufacturing, shall comply with the requirements of subsection (c)(3)~~,~~ below:

A) Provide a one-time written notice to the Agency

indicating the following:

i) The owner or operator claims exemption under this subsection;

ii) The hazardous waste is burned solely for metal recovery consistent with the provisions of subsection (c)(2)~~,~~ below;

iii) The hazardous waste contains recoverable levels of metals; and

iv) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this subsection;

B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection under procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method; and

C) Maintain at the facility for at least three years records to document compliance with the provisions of this subsection including limits on levels of toxic organic constituents and Btu value of the waste, and levels of recoverable metals in the hazardous waste compared to normal nonhazardous waste feedstocks.

2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

A) The hazardous waste has a total concentration of organic compounds listed in 35 Ill. Adm. Code 721.Appendix H~~,~~ exceeding 500 ppm by weight, as fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited, and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (c)(1)(C)~~,~~ above; or

B) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and is so considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (c)(1)(C)~~,~~ above.

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

A) The hazardous wastes listed in Sections 726.Appendices K, ~~and~~ L, and M and baghouse bags used to capture ~~metallic dusts~~ emitted by steel manufacturing are exempt from the requirements of subsection (c)(1)~~,~~ above, provided that:

i) A waste listed in Section 726.Appendix K must contain recoverable levels of lead~~;~~ ~~A~~a waste listed in Section 726.Appendix L must contain recoverable levels of nickel or chromium, a waste listed in Section 726.Appendix M must contain recoverable levels of mercury and contain less that 500 ppm of 35 Ill. Adm. Code 261.Appendix H organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;~~ and~~

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

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

iv) The owner or operator certifies in the one-time notice that hazardous waste is burned under the provisions of subsection (c)(3)~~,~~ above~~,~~ and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis must be conducted according to subsection (C)(1)(B)~~,~~ above, and records to document compliance with subsection (c)(3)~~,~~ above~~,~~ 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 Section 726.Appendix K, ~~or Section~~ 726.Appendix L, or 726.Appendix M that contains a total concentration of more than 500 ppm toxic organic compounds listed in 35 Ill. Adm. Code 721.Appendix H may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart. ~~In that situation~~Under these

circumstances, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart when burning that material. In making the hazard determination, the Agency shall consider the following factors:

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

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

iii) Whether the acceptable ambient levels established in Appendices D or E will be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

d) The standards for direct transfer operations under Section 726.211 apply only to facilities subject to the permit standards of Section 726.202 or the interim status standards of Section 726.203.

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

f) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, ~~or~~ ruthenium, or any combination of these metals ~~,~~ are conditionally exempt from reg ulation under this Subpart, except for Section 726.212. To be exempt from Sections 726.202 through 726.211, an owner or operator shall:

1) Provide a one-time written notice to the Agency indicating the following:

A) The owner or operator claims exemption under this Section ~~;~~ ,

B) The hazardous waste is burned for legitimate recovery of precious metal ~~;~~ , and

C) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this Section ~~;~~ ;

2) Sample and analyze the hazardous waste, as necessary, to document that the waste is burned for recovery of economically significant amounts of precious metal, using procedures specified by Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or alternative methods that meet or exceed the SW-846 method performance capabilities. If SW-846 does not prescribe a method for a particular determination, the owner or operator shall use the best available method; and

3) Maintain, at the facility for at least three years, records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.

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

"APCS" means air pollution control system.

"BIF" means boiler or industrial furnace.

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

"CO" means carbon monoxide.

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

"DRE" means destruction or removal efficiency.

"cu m" or "m^3" means cubic meters.

"E" means "ten to the power". For example, "XE-Y" means "X times ten to the -Y power".

"Feed rates" are measured as specified in Section 726.202(e)(6).

"Good engineering practice stack height" is as defined by 40 CFR 51.100(ii), incorporated by reference in 35 Ill. Adm. Code 720.111.

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

"Hourly rolling average" means the arithmetic mean of the 60 most recent ~~1~~ 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 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 Section 726.Appendix D.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Section 726.Appendix E.

"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" in Section 726.Appendix I ~~("eye")~~.

"~~u~~µg" means microgram.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

I-A

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

[Values for urban areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	60.E+01	1.0000.E+04	1.8.E+01	6.0.E+01	6.00.E+02	6.0.E+01
6	6.8.E+01	1.1000.E+04	2.0.E+01	6.8.E+01	6.80.E+02	6.8.E+01

8	7.6.E+01	1.3000.E+04	2.3.E+01	7.6.E+01	7.60.E+02	7.6.E+01
10	8.6.E+01	1.4000.E+04	2.6.E+01	8.6.E+01	8.60.E+02	8.6.E+01
12	9.6.E+01	1.7000.E+04	3.0.E+01	9.6.E+01	9.60.E+02	9.6.E+01
14	1.10.E+02	1.8000.E+04	3.4.E+01	1.10.E+02	1.100.E+03	1.10.E+02
16	1.30.E+02	2.1000.E+04	3.6.E+01	1.30.E+02	1.300.E+03	1.30.E+02
18	1.40.E+02	2.4000.E+04	4.3.E+01	1.40.E+02	1.400.E+03	1.40.E+02
20	1.60.E+02	2.7000.E+04	4.6.E+01	1.60.E+02	1.600.E+03	1.60.E+02
22	1.80.E+02	3.0000.E+04	5.4.E+01	1.80.E+02	1.800.E+03	1.80.E+02
24	2.00.E+02	3.4000.E+04	6.0.E+01	2.00.E+02	2.000.E+03	2.00.E+02
26	2.30.E+03	3.9000.E+04	6.8.E+01	2.30.E+02	2.300.E+03	2.30.E+02
28	2.60.E+02	4.3000.E+04	7.8.E+01	2.60.E+02	2.600.E+03	2.60.E+02
30	3.00.E+02	5.0000.E+04	9.0.E+01	3.00.E+02	3.000.E+03	3.00.E+02
35	4.00.E+02	6.6000.E+04	1.10.E+02	4.00.E+02	4.000.E+03	4.00.E+02
40	4.60.E+02	7.8000.E+04	1.40.E+02	4.60.E+02	4.600.E+03	4.60.E+01
45	6.00.E+02	1.00000.E+05	1.80.E+02	6.00.E+02	6.000.E+03	6.00.E+02
50	7.80.E+02	1.30000.E+05	2.30.E+02	7.80.E+02	7.800.E+03	7.80.E+02
55	9.60.E+02	1.70000.E+05	3.00.E+02	9.60.E+02	9.600.E+03	9.60.E+02
60	1.200.E+03	2.00000.E+05	3.60.E+02	1.200.E+03	1.2000.E+04	1.200.E+03
65	1.500.E+03	2.50000.E+05	4.30.E+02	1.500.E+03	1.5000.E+04	1.500.E+03
70	1.700.E+03	2.80000.E+05	5.00.E+02	1.700.E+03	1.7000.E+04	1.700.E+03
75	1.900.E+03	3.20000.E+05	5.80.E+02	1.900.E+03	1.9000.E+04	1.900.E+03
80	2.200.E+03	3.60000.E+05	6.40.E+02	2.200.E+03	2.2000.E+04	2.200.E+03
85	2.500.E+03	4.00000.E+05	7.60.E+02	2.500.E+03	2.5000.E+04	2.500.E+03
90	2.800.E+03	4.60000.E+05	8.20.E+02	2.800.E+03	2.8000.E+04	2.800.E+03
95	3.200.E+03	5.40000.E+05	9.60.E+02	3.200.E+03	3.2000.E+04	3.200.E+03
100	3.600.E+03	6.00000.E+05	1.100.E+03	3.600.E+03	3.6000.E+04	3.600.E+03
105	4.000.E+03	6.80000.E+05	1.200.E+03	4.000.E+03	4.0000.E+04	4.000.E+03
110	4.600.E+03	7.80000.E+05	1.400.E+03	4.600.E+03	4.6000.E+04	4.600.E+03
115	5.400.E+03	8.60000.E+05	1.600.E+03	5.400.E+03	5.4000.E+04	5.400.E+03
120	6.000.E+03	1.000000.E+06	1.800.E+03	6.000.E+03	6.0000.E+04	6.000.E+03

I-B

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

[Values for rural areas]

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	3.1E+01	5.200E+03	9.4E+00	3.1E+01	3.10E+02	3.1E+01
6	3.6E+01	6.000E+03	1.1E+01	3.6E+01	3.60E+02	3.6E+01
8	4.0E+01	6.800E+03	1.2E+01	4.0E+01	4.00E+02	4.0E+01
10	4.6E+01	7.800E+03	1.4E+01	4.6E+01	4.60E+02	4.6E+01
12	5.8E+01	9.600E+03	1.7E+01	5.8E+01	5.80E+02	5.8E+01
14	6.8E+01	1.1000E+04	2.1E+01	6.8E+01	6.80E+02	6.8E+01
16	8.6E+01	1.4000E+04	2.6E+01	8.6E+01	8.60E+02	8.6E+01
18	1.10E+02	1.8000E+04	3.2E+01	1.10E+02	1.100E+03	1.10E+02
20	1.30E+02	2.2000E+04	4.0E+01	1.30E+02	1.300E+03	1.30E+02
22	1.70E+02	2.8000E+04	5.0E+01	1.70E+02	1.700E+03	1.70E+02
24	2.20E+02	3.6000E+04	6.4E+01	2.20E+02	2.200E+03	2.20E+02
26	2.80E+02	4.6000E+04	8.2E+01	2.80E+02	2.800E+03	2.80E+02
28	3.50E+02	5.8000E+04	1.00E+02	3.50E+02	3.500E+03	3.50E+02
30	4.30E+02	7.6000E+04	1.30E+02	4.30E+02	4.300E+03	4.30E+02
35	7.20E+02	1.20000E+05	2.10E+02	7.20E+02	7.200E+03	7.20E+02
40	1.100E+03	1.80000E+05	3.20E+02	1.100E+03	1.1000E+04	1.100E+03
45	1.500E+03	2.50000E+05	4.60E+02	1.500E+03	1.5000E+04	1.500E+03
50	2.000E+03	3.30000E+05	6.00E+02	2.000E+03	2.0000E+04	2.000E+03
55	2.600E+03	4.40000E+05	7.80E+02	2.600E+03	2.6000E+04	2.600E+03
60	3.400E+03	5.80000E+05	1.000E+03	3.400E+03	3.4000E+04	3.400E+03
65	4.600E+03	7.60000E+05	1.400E+03	4.600E+03	4.6000E+04	4.600E+03
70	5.400E+03	9.00000E+05	1.600E+03	5.400E+03	5.4000E+04	5.400E+03
75	6.400E+03	1.100000E+06	1.900E+03	6.400E+03	6.4000E+04	6.400E+03
80	7.600E+03	1.300000E+06	2.300E+03	7.600E+03	7.6000E+04	7.600E+03
85	9.400E+03	1.500000E+06	2.800E+03	9.400E+03	9.4000E+04	9.400E+03
90	1.1000E+04	1.800000E+06	3.300E+03	1.1000E+04	1.10000E+05	1.1000E+04
95	1.3000E+04	2.200000E+06	3.900E+03	1.3000E+04	1.30000E+05	1.3000E+04
100	1.5000E+04	2.600000E+06	4.600E+03	1.5000E+04	1.50000E+05	1.5000E+04
105	1.8000E+04	3.000000E+06	5.400E+03	1.8000E+04	1.80000E+05	1.8000E+04
110	2.2000E+04	3.600000E+06	6.600E+03	2.2000E+04	2.20000E+05	2.2000E+04

115	2.6000E+04	4.400000E+06	7.800E+03	2.6000E+04	2.60000E+05	2.6000E+04
120	3.1000E+04	5.000000E+06	9.200E+03	3.1000E+04	3.10000E+05	3.1000E+04

I-C

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

Values for urban and rural areas

TESH (m)	Antimony (g/hr)	Barium (g/hr)	Lead (g/hr)	Mercury (g/hr)	Silver (g/hr)	Thallium (g/hr)
4	1.4E+01	2.400E+03	4.3E+00	1.4E+01	1.40E+02	1.4E+01
6	2.1E+01	3.500E+03	6.2E+00	2.1E+01	2.10E+02	2.1E+01
8	3.0E+01	5.000E+03	9.2E+00	3.0E+01	3.00E+02	3.0E+01
10	4.3E+01	7.600E+03	1.3E+01	4.3E+01	4.30E+02	4.3E+01
12	5.4E+01	9.000E+03	1.7E+01	5.4E+01	5.40E+02	5.4E+01
14	6.8E+01	1.1000E+04	2.0E+01	6.8E+01	6.80E+02	6.8E+01
16	7.8E+01	1.3000E+04	2.4E+01	7.8E+01	7.80E+02	7.8E+01
18	8.6E+01	1.4000E+04	2.6E+01	8.6E+01	8.60E+02	8.6E+01
20	9.6E+01	1.6000E+04	2.9E+01	9.6E+01	9.60E+02	9.6E+01
22	1.00E+02	1.8000E+04	3.2E+01	1.00E+02	1.000E+03	1.00E+02
24	1.20E+02	1.9000E+04	3.5E+01	1.20E+02	1.200E+03	1.20E+02
26	1.30E+02	2.2000E+04	3.6E+01	1.30E+02	1.300E+03	1.30E+02
28	1.40E+02	2.4000E+04	4.3E+01	1.40E+02	1.400E+03	1.40E+02
30	1.60E+02	2.7000E+04	4.6E+01	1.60E+02	1.600E+03	1.60E+02
35	2.00E+02	3.3000E+04	5.8E+01	2.00E+02	2.000E+03	2.00E+02
40	2.40E+02	4.0000E+04	7.2E+01	2.40E+02	2.400E+03	2.40E+02
45	3.00E+02	5.0000E+04	9.0E+01	3.00E+02	3.000E+03	3.00E+02
50	3.60E+02	6.0000E+04	1.10E+02	3.60E+02	3.600E+03	3.60E+02
55	4.60E+02	7.6000E+04	1.40E+02	4.60E+02	4.600E+03	4.60E+02
60	5.80E+02	9.4000E+04	1.70E+02	5.80E+02	5.800E+03	5.80E+02
65	6.80E+02	1.10000E+05	2.10E+02	6.80E+02	6.800E+03	6.80E+02
70	7.80E+02	1.30000E+05	2.40E+02	7.80E+02	7.800E+03	7.80E+02
75	8.60E+02	1.40000E+05	2.60E+02	8.60E+02	8.600E+03	8.60E+02
80	9.60E+02	1.60000E+05	2.90E+02	9.60E+02	9.600E+03	9.60E+02
85	1.100E+03	1.80000E+05	3.30E+02	1.100E+03	1.1000E+04	1.100E+03
90	1.200E+03	2.00000E+05	3.60E+02	1.200E+03	1.2000E+04	1.200E+03

95	1.400.E+03	2.30000.E+05	4.00.E+02	1.400.E+03	1.4000.E+04	1.400.E+03
100	1.500.E+03	2.60000.E+05	4.60.E+02	1.500.E+03	1.5000.E+04	1.500.E+03
105	1.700.E+03	2.80000.E+05	5.00.E+02	1.700.E+03	1.7000.E+04	1.700.E+03
110	1.900.E+03	3.20000.E+05	5.80.E+02	1.900.E+03	1.9000.E+04	1.900.E+03
115	2.100.E+03	3.60000.E+05	6.40.E+02	2.100.E+03	2.1000.E+04	2.100.E+03
120	2.400.E+03	4.00000.E+05	7.20.E+02	2.400.E+03	2.4000.E+04	2.400.E+03

I-D

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

	Values for use in urban areas				Values for use in rural areas			
TESH (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	0.4.6E-01	1.1E+00	0.1.7E-01	0.8.2E-01	0.2.4E-01	0.5.8E-01	0.08.6E-02	0.4.3E-01
6	0.5.4E-01	1.3E+00	0.1.9E-01	0.9.4E-01	0.2.8E-01	0.6.6E-01	0.1.0E-01	0.5.0E-01
8	0.6.0E-01	1.4E+00	0.2.2E-01	1.1E+00	0.3.2E-01	0.7.6E-01	0.1.1E-01	0.5.6E-01
10	0.6.8E-01	1.6E+00	0.2.4E-01	1.2E+00	0.3.6E-01	0.8.6E-01	0.1.3E-01	0.6.4E-01
12	0.7.6E-01	1.8E+00	0.2.7E-01	1.4E+00	0.4.3E-01	1.1E+00	0.1.6E-01	0.7.8E-01
14	0.8.6E-01	2.1E+00	0.3.1E-01	1.5E+00	0.5.4E-01	1.3E+00	0.2.0E-01	0.9.6E-01
16	0.9.6E-01	2.3E+00	0.3.5E-01	1.7E+00	0.6.8E-01	1.6E+00	0.2.4E-01	1.2E+00
18	1.1E+00	2.6E+00	0.4.0E-01	2.0E+00	0.8.2E-01	2.0E+00	0.3.0E-01	1.5E+00
20	1.2E+00	3.0E+00	0.4.4E-01	2.2E+00	1.0E+00	2.5E+00	0.3.7E-01	1.9E+00
22	1.4E+00	3.4E+00	0.5.0E-01	2.5E+00	1.3E+00	3.2E+00	0.4.8E-01	2.4E+00
24	1.6E+00	3.9E+00	0.5.8E-01	2.8E+00	1.7E+00	4.0E+00	0.6.0E-01	3.0E+00
26	1.8E+00	4.3E+00	0.6.4E-01	3.2E+00	2.1E+00	5.0E+00	0.7.6E-01	3.9E+00
28	2.0E+00	4.8E+00	0.7.2E-01	3.6E+00	2.7E+00	6.4E+00	0.9.8E-01	5.0E+00
30	2.3E+00	5.4E+00	0.8.2E-01	4.0E+00	3.5E+00	8.2E+00	1.2E+00	6.2E+00
35	3.0E+00	6.8E+00	1.0E+00	5.4E+00	5.4E+00	1.3.E+01	1.9E+00	9.6E+00
40	3.6E+00	9.0E+00	1.3E+00	6.8E+00	8.2E+00	2.0.E+01	3.0E+00	1.5.E+01
45	4.6E+00	1.1.E+01	1.7E+00	8.6E+00	1.1.E+01	2.8.E+01	4.2E+00	2.1.E+01
50	6.0E+00	1.4.E+01	2.2E+00	1.1.E+01	1.5.E+01	3.7.E+01	5.4E+00	2.8.E+01
55	7.6E+00	1.8.E+01	2.7E+00	1.4.E+01	2.0.E+01	5.0.E+01	7.2E+00	3.6.E+01

60	9.4E+00	2.2.E+01	3.4E+00	1.7.E+01	2.7.E+01	6.4.E+01	9.6E+00	4.8.E+01
65	1.1.E+01	2.8.E+01	4.2E+00	2.1.E+01	3.6.E+01	8.6.E+01	1.3.E+01	6.4.E+01
70	1.3.E+01	3.1.E+01	4.6E+00	2.4.E+01	4.3.E+01	1.0Q.E+02	1.5.E+01	7.6.E+01
75	1.5.E+01	3.6.E+01	5.4E+00	2.7.E+01	5.0.E+01	1.20.E+02	1.8.E+01	9.0.E+01
80	1.7.E+01	4.0.E+01	6.0E+00	3.0.E+01	6.0.E+01	1.40.E+02	2.2.E+01	1.10.E+02
85	1.9.E+01	4.6.E+01	6.8E+00	3.4.E+01	7.2.E+01	1.70.E+02	2.6.E+01	1.30.E+02
90	2.2.E+01	5.0.E+01	7.8E+00	3.9.E+01	8.6.E+01	2.00.E+02	3.0.E+01	1.50.E+02
95	2.5.E+01	5.8.E+01	9.0E+00	4.4.E+01	1.00.E+02	2.40.E+02	3.6.E+01	1.80.E+02
100	2.8.E+01	6.8.E+01	1.0.E+01	5.0.E+01	1.20.E+02	2.90.E+02	4.3.E+01	2.20.E+02
105	3.2.E+01	7.6.E+01	1.1.E+01	5.6.E+01	1.40.E+02	3.40.E+02	5.0.E+01	2.60.E+02
110	3.6.E+01	8.6.E+01	1.3.E+01	6.4.E+01	1.70.E+02	4.00.E+02	6.0.E+01	3.00.E+02
115	4.0.E+01	9.6.E+01	1.5.E+01	7.2.E+01	2.00.E+02	4.80.E+02	7.2.E+01	3.60.E+02
120	4.6.E+01	1.10.E+02	1.7.E+01	8.2.E+01	2.40.E+02	5.80.E+02	8.6.E+01	4.30.E+02

I-E

Tier I and Tier II Feed Rate and Emissions Screening Limits for Carcinogenic Metals for Facilities in Complex Terrain
Values for use in urban and rural areas

TESH (m)	Arsenic (g/hr)	Cadmium (g/hr)	Chromium (g/hr)	Beryllium (g/hr)
4	0.1.1E-01	0.2.6E-01	0.04.0E-02	0.2.0E-01
6	0.1.6E-01	0.3.9E-01	0.05.8E-02	0.2.9E-01
8	0.2.4E-01	0.5.8E-01	0.08.6E-02	0.4.3E-01
10	0.3.5E-01	0.8.2E-01	0.1.3E-01	0.6.2E-01
12	0.4.3E-01	1.0E+00	0.1.5E-01	0.7.6E-01
14	0.5.0E-01	1.3E+00	0.1.9E-01	0.9.4E-01
16	0.6.0E-01	1.4E+00	0.2.2E-01	1.1E+00
18	0.6.8E-01	1.6E+00	0.2.4E-01	1.2E+00
20	0.7.6E-01	1.8E+00	0.2.7E-01	1.3E+00
22	0.8.2E-01	1.9E+00	0.3.0E-01	1.5E+00
24	0.9.0E-01	2.1E+00	0.3.3E-01	1.6E+00
26	1.0E+00	2.4E+00	0.3.6E-01	1.8E+00
28	1.1E+00	2.7E+00	0.4.0E-01	2.0E+00
30	1.2E+00	3.0E+00	0.4.4E-01	2.2E+00
35	1.5E+00	3.7E+00	0.5.4E-01	2.7E+00
40	1.9E+00	4.6E+00	0.6.8E-01	3.4E+00
45	2.4E+00	5.4E+00	0.8.4E-01	4.2E+00
50	2.9E+00	6.8E+00	1.0E+00	5.0E+00
55	3.5E+00	8.4E+00	1.3E+00	6.4E+00
60	4.3E+00	1.0.E+01	1.5E+00	7.8E+00
65	5.4E+00	1.3.E+01	1.9E+00	9.6E+00
70	6.0E+00	1.4.E+01	2.2E+00	1.1.E+01
75	6.8E+00	1.6.E+01	2.4E+00	1.2.E+01
80	7.6E+00	1.8.E+01	2.7E+00	1.3.E+01
85	8.2E+00	2.0.E+01	3.0E+00	1.5.E+01
90	9.4E+00	2.3.E+01	3.4E+00	1.7.E+01
95	1.0.E+01	2.5.E+01	4.0E+00	1.9.E+01

100	1.2E+01	2.8E+01	4.3E+00	2.1E+01
105	1.3E+01	3.2E+01	4.8E+00	2.4E+01
110	1.5E+01	3.5E+01	5.4E+00	2.7E+01
115	1.7E+01	4.0E+01	6.0E+00	3.0E+01
120	1.9E+01	4.4E+01	6.4E+00	3.3E+01

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 726.Appendix B Tier I Feed Rate Screening Limits for Total Chlorine

Tier I Feed Rate Screening Limits for Total Chlorine

TESH (m)	Noncomplex Terrain Urban (g/hr)	Noncomplex Terrain Rural (g/hr)	Complex Terrain (g/hr)
4	8.2E+01	4.2E+01	1.9E+01
6	9.1E+01	4.8E+01	2.8E+01
8	1.00E+02	5.3E+01	4.1E+01
10	1.20E+02	6.2E+01	5.8E+01
12	1.30E+02	7.7E+01	7.2E+01
14	1.50E+02	9.1E+01	9.1E+01
16	1.70E+02	1.20E+02	1.10E+02
18	1.90E+02	1.40E+02	1.20E+02
20	2.10E+02	1.80E+02	1.30E+02
22	2.40E+02	2.30E+02	1.40E+02
24	2.70E+02	2.90E+02	1.60E+02
26	3.10E+02	3.70E+02	1.70E+02
28	3.50E+02	4.70E+02	1.90E+02
30	3.90E+02	5.80E+02	2.10E+02
35	5.30E+02	9.60E+02	2.60E+02
40	6.20E+02	1.40E+03	3.30E+02
45	8.20E+02	2.00E+03	4.00E+02
50	1.10E+03	2.60E+03	4.80E+02
55	1.30E+03	3.50E+03	6.20E+02
60	1.60E+03	4.60E+03	7.70E+02
65	2.00E+03	6.20E+03	9.10E+02
70	2.30E+03	7.20E+03	1.10E+03
75	2.50E+03	8.60E+03	1.20E+03
80	2.90E+03	1.0000E+04	1.30E+03
85	3.30E+03	1.2000E+04	1.40E+03
90	3.70E+03	1.4000E+04	1.60E+03
95	4.20E+03	1.7000E+04	1.80E+03
100	4.80E+03	2.1000E+04	2.00E+03
105	5.30E+03	2.4000E+04	2.30E+03
110	6.20E+03	2.9000E+04	2.50E+03
115	7.20E+03	3.5000E+04	2.80E+03
120	8.20E+03	4.1000E+04	3.20E+03

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 726.Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride

	Noncomplex Terrain Urban areas		Noncomplex Terrain Rural areas		Complex Terrain Urban and rural areas	
TESH (m)	Chlorine Gas (g/hr)	HCl (g/hr)	Chlorine Gas (g/hr)	HCl (g/hr)	Chlorine gas (g/hr)	HCl (g/hr)
	8.2E+01	1.400.E+0	4.2E+01	7.30.E+02	1.9E+01	3.30.E+02

6	9.1E+01	1.600.E+03	4.8E+01	8.30.E+02	2.8E+01	4.90.E+02
8	1.00E+02	1.800.E+03	5.3E+01	9.20.E+02	4.1E+01	7.10.E+02
10	1.20E+02	2.000.E+03	6.2E+01	1.100.E+03	5.8E+01	1.000.E+03
12	1.30E+02	2.300.E+03	7.7E+01	1.300.E+03	7.2E+01	1.300.E+03
14	1.50E+02	2.600.E+03	9.1E+01	1.600.E+03	9.1E+01	1.600.E+03
16	1.70E+02	2.900.E+03	1.20E+02	2.000.E+03	1.10E+02	1.800.E+03
18	1.90E+02	3.300.E+03	1.40E+02	2.500.E+03	1.20E+02	2.000.E+03
20	2.10E+02	3.700.E+03	1.80E+02	3.100.E+03	1.30E+02	2.300.E+03
22	2.40E+02	4.200.E+03	2.30E+02	3.900.E+03	1.40E+02	2.400.E+03
24	2.70E+02	4.800.E+03	2.90E+02	5.000.E+03	1.60E+02	2.800.E+03
26	3.10E+02	5.400.E+03	3.70E+02	6.500.E+03	1.70E+02	3.000.E+03
28	3.50E+02	6.000.E+03	4.70E+03	8.100.E+03	1.90E+02	3.400.E+03
30	3.90E+02	6.900.E+03	5.80E+02	1.0000.E+04	2.10E+02	3.700.E+03
35	5.30E+02	9.200.E+03	9.60E+02	1.7000.E+04	2.60E+02	4.600.E+03
40	6.20E+02	1.1000.E+04	1.400.E+03	2.5000.E+04	3.30E+02	5.700.E+03
45	8.20E+02	1.4000.E+04	2.000.E+03	3.5000.E+04	4.00E+02	7.000.E+03
50	1.10E+03	1.8000.E+04	2.600.E+03	4.6000.E+04	4.80E+02	8.400.E+03
55	1.30E+03	2.3000.E+04	3.500.E+03	6.1000.E+04	6.20E+02	1.1000.E+04
60	1.60E+03	2.9000.E+04	4.600.E+03	8.1000.E+04	7.70E+02	1.3000.E+04
65	2.00E+03	3.4000.E+04	6.200.E+03	1.10000.E+05	9.10.E+02	1.6000.E+04
70	2.30E+03	3.9000.E+04	7.200.E+03	1.30000.E+05	1.100.E+03	1.8000.E+04
75	2.50E+03	4.5000.E+04	8.600.E+03	1.50000.E+05	1.200.E+03	2.0000.E+04
80	2.90E+03	5.0000.E+04	1.0000.E+04	1.80000.E+05	1.300.E+03	2.3000.E+04
85	3.30E+03	5.8000.E+04	1.2000.E+04	2.20000.E+05	1.400.E+03	2.5000.E+04
90	3.70E+03	6.6000.E+04	1.4000.E+04	2.50000.E+05	1.600.E+03	2.9000.E+04
95	4.20E+03	7.4000.E+04	1.7000.E+04	3.00000.E+05	1.800.E+03	3.2000.E+04
100	4.80E+03	8.4000.E+04	2.1000.E+04	3.60000.E+05	2.000.E+03	3.5000.E+04
105	5.30E+03	9.2000.E+04	2.4000.E+04	4.30000.E+05	2.300.E+03	3.9000.E+04
110	6.20E+03	1.10000.E+05	2.9000.E+04	5.10000.E+05	2.500.E+03	4.5000.E+04
115	7.20E+03	1.30000.E+05	3.5000.E+04	6.10000.E+05	2.800.E+03	5.0000.E+04
120	8.20E+03	1.40000.E	4.1000.E+	7.20000.E	3.200.E+03	5.6000.E+

~~3 +05 04 +05 3 04~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 726.Appendix E Risk Specific Doses

BOARD NOTE: These are risk specific doses (RSDs) based on a risk of ~~1E-05~~ in 10,000 (1×10^{-4}).

Constituent	CAS No.	Unit risk (~~eu~~ m^3/~~u~~µg)	RSD (~~u~~µg/~~eu~~ m^3)
Acrylamide	79-06-1	0.001~~+3E-03~~	0.007~~+7E-03~~
Acrylonitrile	107-13-1	0.00006~~+8E-05~~	0.1~~+5E-01~~
Aldrin	309-00-2	0.004~~+9E-03~~	0.002~~+0E-03~~
Aniline	62-53-3	0.000007~~+4E-06~~	1.4E+00
Arsenic	7440-38-2	0.004~~+3E-03~~	0.002~~+3E-03~~
Benz(a)anthracene	56-55-3	0.0008~~+9E-04~~	0.01~~+1E-02~~
Benzene	71-43-2	0.000008~~+3E-06~~	1.2E+00
Benzidine	92-87-5	0.06~~+7E-02~~	0.0001~~+5E-04~~
Benzo(a)pyrene	50-32-8	0.003~~+3E-03~~	0.003~~+0E-03~~
Beryllium	7440-41-7	0.002~~+4E-03~~	0.004~~+2E-03~~
Bis(2-chloro-ethyl)ether	111-44-4	0.0003~~+3E-04~~	0.03~~+0E-02~~
Bis(chloromethyl)-ether	542-88-1	0.06~~+2E-02~~	0.0001~~+6E-04~~
Bis(2-ethylhexyl)-phthalate	117-81-7	0.0000002~~+4E-07~~	4~~+2.E+01~~
1,3-Butadiene	106-99-0	0.0002~~+8E-04~~	0.03~~+6E-02~~
Cadmium	7440-43-9	0.001~~+8E-03~~	0.005~~+6E-03~~
Carbon Tetra-chloride	56-23-5	0.00001~~+5E-05~~	0.6~~+7E-01~~
Chlordane	57-74-9	0.0003~~+7E-04~~	0.02~~+7E-02~~
Chloroform	67-66-3	0.00002~~+3E-05~~	0.4~~+3E-01~~
Chloromethane	74-87-3	0.000003~~+6E-06~~	2.8E+00
Chromium VI	7440-47-3	0.01~~+2E-02~~	0.0008~~+3E-04~~
DDT	50-29-3	0.00009~~+7E-05~~	0.1~~+0E-01~~
Dibenz(a,h)anthra-cene	53-70-3	0.01~~+4E-02~~	0.0007~~+1E-04~~
1,2-Dibromo-3-chloropropane	96-12-8	0.006~~+3E-03~~	0.001~~+6E-03~~
1,2-Dibromoethane	106-93-4	0.0002~~+2E-04~~	0.04~~+5E-02~~
1,1-Dichloroethane	75-34-3	0.00002~~+6E-05~~	0.3~~+8E-01~~
1,2-Dichloroethane	107-06-2	0.00002~~+6E-05~~	0.3~~+8E-01~~
1,1-Dichloro-ethylene	75-35-4	0.00005~~+0E-05~~	0.2~~+0E-01~~
1,3-Dichloro-propene	542-75-6	0.3~~+5E-01~~	0.00002~~+9E-05~~
Dieldrin	60-57-1	0.004~~+6E-03~~	0.002~~+2E-03~~
Diethylstilbestrol	56-53-1	0.1~~+4E-01~~	0.00007~~+1E-05~~
Dimethylnitros-amine	62-75-9	0.01~~+4E-02~~	0.0007~~+1E-04~~
2,4-Dinitrotoluene	121-14-2	0.00008~~+8E-05~~	0.1~~+1E-01~~
1,2-Diphenyl-hydrazine	122-66-7	0.0002~~+2E-04~~	0.04~~+5E-02~~
1,4-Dioxane	123-91-1	0.000001~~+4E-06~~	7.1E+00
Epichlorohydrin	106-89-8	0.000001~~+2E-06~~	8.3E+00
Ethylene Oxide	75-21-8	0.0001~~+0E-04~~	0.1~~+0E-01~~
Ethylene Dibromide	106-93-4	0.0002~~+2E-04~~	0.04~~+5E-02~~
Formaldehyde	50-00-0	0.00001~~+3E-05~~	0.7~~+7E-01~~
Heptachlor	76-44-8	0.001~~+3E-03~~	0.007~~+7E-03~~
Heptachlor Epoxide	1024-57-3	0.002~~+6E-03~~	0.003~~+8E-03~~

Hexachlorobenzene	118-74-1	0.0004~~+9E-04~~	0.02~~+0E-02~~
Hexachlorobuta-diene	87-68-3	0.00002~~+0E-05~~	0.5~~+0E-01~~
Alpha-hexachloro-cyclohexane	319-84-6	0.001~~+8E-03~~	0.005~~+6E-03~~
Beta-hexachloro-cyclohexane	319-85-7	0.0005~~+3E-04~~	0.01~~+9E-02~~
Gamma-hexachloro-cyclohexane	58-89-9	0.0003~~+8E-04~~	0.02~~+6E-02~~
Hexachlorocyclo-hexane, Technical		0.0005~~+1E-04~~	0.02~~+0E-02~~
Hexachlorodibenzo-p-dioxin(1,2 Mixture)		1.3E+0	0.000007~~+7E-06~~
Hexachloroethane	67-72-1	0.000004~~+0E-06~~	2.5E+00
Hydrazine	302-01-2	0.002~~+9E-03~~	0.003~~+4E-03~~
Hydrazine Sulfate	302-01-2	0.002~~+9E-03~~	0.003~~+4E-03~~
3-Methylchol-anthrene	56-49-5	0.002~~+7E-03~~	0.003~~+7E-03~~
Methyl Hydrazine	60-34-4	0.0003~~+1E-04~~	0.03~~+2E-02~~
Methylene Chloride	75-09-2	0.000004~~+1E-06~~	2.4E+00
4,4'-Methylene-bis-2-chloro-aniline	101-14-4	0.00004~~+7E-05~~	0.2~~+1E-01~~
Nickel	7440-02-0	0.0002~~+4E-04~~	0.04~~+2E-02~~
Nickel Refinery Dust	7440-02-0	0.0002~~+4E-04~~	0.04~~+2E-02~~
Nickel Subsulfide	12035-72-2	0.0004~~+8E-04~~	0.02~~+1E-02~~
2-Nitropropane	79-46-9	0.02~~+7E-02~~	0.0003~~+7E-04~~
N-Nitroso-n-butyl-amine	924-16-3	0.001~~+6E-03~~	0.006~~+3E-03~~
N-Nitroso-n-methylurea	684-93-5	0.08~~+6E-02~~	0.0001~~+2E-04~~
N-Nitrosodiethyl-amine	55-18-5	0.04~~+3E-02~~	0.0002~~+3E-04~~
N-Nitroso-pyrrolidine	930-55-2	0.0006~~+1E-04~~	0.01~~+6E-02~~
Pentachloronitro-benzene	82-68-8	0.00007~~+3E-05~~	0.1~~+4E-01~~
PCBs	1336-36-3	0.001~~+2E-03~~	0.008~~+3E-03~~
Pronamide	23950-58-5	0.000004~~+6E-06~~	2.2E+00
Reserpine	50-55-5	0.003~~+0E-03~~	0.003~~+3E-03~~
2,3,7,8-Tetra-chlorodibenzo-p-dioxin	1746-01-6	4~~+5.E+01~~	0.0000002~~+2E-07~~
1,1,2,2-Tetra-chloroethane	79-34-5	0.00005~~+8E-05~~	0.1~~+7E-01~~
Tetrachloro-ethylene	127-18-4	0.0000004~~+8E-07~~	2~~+1.E+01~~
Thiourea	62-56-6	0.0005~~+5E-04~~	0.01~~+8E-02~~
1,1,2-Trichloroethane	79-00-5	0.00001~~+6E-05~~	0.6~~+3E-01~~
Trichloroethylene	79-01-6	0.000001~~+3E-06~~	7.7E+00
2,4,6-Trichloro-phenol	88-06-2	0.000005~~+7E-06~~	1.8E+00
Toxaphene	8001-35-2	0.0003~~+2E-04~~	0.03~~+1E-02~~
Vinyl Chloride	75-01-4	0.000007~~+1E-06~~	1.4E+00

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

The following materials are exempt mercury-bearing materials containing less than 500 ppm of 35 Ill. 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 or mercury contained in soil

(Source: Added at 19 Ill. Reg. _____, effective _____)

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

PART 728
LAND DISPOSAL RESTRICTIONS

SUBPART A: GENERAL

SUBPART B: SCHEDULE FOR LAND DISPOSAL PROHIBITION AND ESTABLISHMENT OF TREATMENT STANDARDS

SUBPART C: PROHIBITION ON LAND DISPOSAL

SUBPART D: TREATMENT STANDARDS

SUBPART E: PROHIBITIONS ON STORAGE

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

SOURCE: Adopted in R87-5 at 11 Ill. Reg. 19354, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13046, effective July 29, 1988; amended in R89-1 at 13 Ill. Reg. 18403, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6232, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14470, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16508, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9462, effective June 17, 1991; amended in R92-10 at 17 Ill. Reg. 5727, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20692, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6799, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12203, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17563, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

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 Ill. Adm. Code 721, the requirements of this Part apply to persons ~~who~~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 persons have been granted an extension to the effective date of a prohibition under Subpart C or pursuant to Section 728.105, with respect to those wastes covered by the extension;

2) Where persons have been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) Wastes that are hazardous only because they exhibit a hazardous characteristic, and ~~which~~that are otherwise prohibited from land disposal under this Part, are not prohibited from land disposal if the wastes:

A) Are disposed into a nonhazardous or hazardous waste injection well, as defined in 35 Ill. Adm. Code 704.106(a); ~~and~~

B) Do not exhibit any prohibited characteristic of hazardous waste at the point of injection; and

C) If, at the point of generation, the injected wastes include D001 High TOC subcategory wastes or D012-D017 pesticide wastes that are prohibited under Section 728.117(c), those wastes have been treated to meet the treatment standards of Section 728.140 prior to injection.

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 U.S.C. §§ 9601 et seq).

e) The following hazardous wastes are not subject to any provision of this Part:

1) Wastes 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 pesticides that a farmer disposes of pursuant to 35 Ill. Adm. Code 722.170;

3) Wastes identified or listed as hazardous after November 8,

1984, for which U.S. EPA has not promulgated land disposal prohibitions or treatment standards.

4) De minimis losses to wastewater treatment systems of commercial chemical product or chemical intermediates that are ignitable (D001), or corrosive (D002), or that are organic constituents that exhibit the characteristic of toxicity (D012-D043) and that contain underlying hazardous constituents, as defined in Section 728.102 of this Part, are not considered to be prohibited wastes. "De minimis" is 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 purging; ~~and~~ 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.

5) Land disposal prohibitions for hazardous characteristic wastes do not apply to laboratory wastes displaying the characteristic of ignitab~~le~~ility (D001), ~~and~~ corrosive~~ity~~ (D002), or organic toxicity (D012 through D043) ~~laboratory wastes containing underlying hazardous constituents from laboratory operations,~~ that are mixed with other plant wastewaters at facilities whose ultimate discharge is subject to regulations under the CWA (including wastewaters at facilities ~~which~~that have eliminated the discharge of wastewater), provided that the annualized flow of laboratory wastewater into the facility's headwork does not exceed one percent, or ~~provided~~ that the laboratory wastes' combined annualized average concentration does not exceed one part per million in the facility's headwork~~s~~.

f) This Part is cumulative with the land disposal restrictions of 35 Ill. Adm. Code 729. The Environmental Protection Agency (Agency) shall not issue a wastestream authorization pursuant to 35 Ill. Adm. Code 709 or Sections 22.6 or 39(h) of the Environmental Protection Act ~~(Ill. Rev. Stat. 1987, ch. 111, para. 1022.6 or 1039(h))~~ [415 ILCS 5/22.6 or 39.6] unless the waste meets the ~~requirements of this Part as well~~ as 35 Ill. Adm. Code 729.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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, 720.102, or 721.103.

"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 U.S.C. 9601 et seq.)

"Debris" means solid material exceeding a 60 mm particle size that is intended for disposal and that is: A~~a~~ manufactured object; ~~or~~ plant or animal matter; or natural geologic material. However,

the following materials are not debris: ~~A~~any material for which a specific treatment standard is provided in 728.Subpart D, namely lead acid batteries, cadmium batteries, and radioactive lead solids; ~~P~~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% 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.

"Halogenated organic compounds" or "HOCs" means those compounds having a carbon-halogen bond ~~which~~that are listed under Section 728.Appendix C.

"Hazardous constituent or constituents" means those constituents listed in 35 Ill. Adm. Code 721.Appendix H.

"Hazardous debris" means debris that contains a hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D~~,~~ or that exhibits a characteristic of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C.

Inorganic Solid Debris are nonfriable inorganic solids that are incapable of passing through a 9.5 mm standard sieve~~,~~ and that require cutting~~,~~ or crushing and grinding~~,~~ in mechanical sizing equipment prior to stabilization, limited to the following inorganic or metal materials:

Metal slags (either dross or scoria).

Glassified slag.

Glass.

Concrete (excluding cementitious or pozzolanic stabilized hazardous wastes).

Masonry and refractory bricks.

Metal cans, containers, drums, or tanks.

Metal nuts, bolts, pipes, pumps, valves, appliances, or industrial equipment.

Scrap metal, as defined in 35 Ill. Adm. Code 721.101(c)(6).

"Land disposal" means placement in or on the land, except in a corrective action management unit, and 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 (1992~~3~~4), or similar regulations in other States with RCRA program authorized by U.S. EPA pursuant to 40 CFR 271 (1992~~3~~4).

"Underlying hazardous constituent" means any regulated constituen listed in Section 728.Table U, "Universal Treatment Standards (UTS)", ~~except vanadium and zinc,~~ that can reasonably be expected to be present, at the point of generation of the hazardous waste, at ~~levels~~a concentration above the ~~F039~~ constituent-specific UTS treatment standard ~~at the point of generation of the hazardous waste~~.

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

"Wastewaters" are wastes that contain less than 1% by weight tota organic carbon (TOC) and less than 1% by weight total suspended solids (TSS), with the following exceptions:

F001, F002, F003, F004, and F005 solvent-water mixtures tha contain less than 1% by weight TOC or less than 1% by weigh total F001, F002, F003, F004, and F005 solvent constituents listed in Table A.

K011, K013, and K014 wastewaters (as generated) that contai less than 5% by weight TOC and less than 1% by weight TSS.

K103 and K104 wastewaters that contain less than 4% by weight TOC and less than 1% by weight TSS.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.107 Waste Analysis and Recordkeeping

a) Except as specified in Section 728.132, where a generator's waste is listed in 35 Ill. Adm. Code 721.Subpart D or if the waste exhibits one or more of the characteristics set out at 35 Ill. Adm. Code 721.Subpart C, the generator shall test its waste, or test an extract using the Toxicity Characteristic Leaching Procedure, Method 1311, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", U.S. EPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or use knowledge of the waste~~,~~ to determine if the waste is restricted from land disposal under this Part. ~~Except as specified in Section 728.132, if a generator's waste exhibits one or more of the characteristics set out at 35 Ill. Adm. Code 721.Subpart C, the generator shall test an extract using the EP Toxicity Test, Method 1310, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", U.S. EPA Publication SW-846, as incorporated by reference in 35 Ill. Adm. Code 720.111, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this Part.~~ If the generator determines that its waste displays the characteristic of ignitability (D001) (and is not in the High TOC Ignitable Liquids Subcategory or is not treated by ~~INCIN, FSUBS,~~CMBST or RORGS of Section 728.Table C of this Part), ~~or~~ the waste displays the characteristic o~~f~~ corrosivity (D002)~~,~~ and is prohibited under Section 728.137, or the waste displays the characteristic of organic toxicity (D012-D043) and is prohibited under Section 728.138, the generator sha

determine what underlying hazardous constituents (as defined in Section 728.102 ~~of this Part~~), are reasonably expected to be present in the D001, ~~or~~ D002, or D012 through D043 waste.

1) If a generator determines that ~~the generator~~it is managing a restricted waste under this Part and ~~determines that~~ the waste does not meet the applicable treatment standards set forth in 728.Subpart D ~~of this Part~~ or exceeds the applicable prohibition ~~levels set~~ forth in Section 728.132 or 728.139, ~~with each shipment of waste~~ the generator shall notify the treatment or storage facility in writing ~~of the appropriate treatment standard set forth in Subpart D of this Part and any applicable prohibition levels set forth in Section 728.132 or 728.139~~ with each shipment of waste. The notice must include the following information:

A) U.S. EPA hazardous waste number;

B) The ~~corresponding treatment standards~~waste constituents that the treater will monitor, if monitoring will not include all regulated constituents, for wastes F001 through F005, F039, D001, D002, D012 through D043, and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. ~~Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable wastewater (as defined in Section 728.102(f)) or nonwastewater (as defined in Section 728.102(d)) category, the applicable subcategory made within a waste code based on waste-specific criteria (such as D003 reactive cyanides), and the Sections and subsections where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Section 728.Table C (e.g., INCIN, WETOX) also must be listed on the notification.~~ The generator must also include whether the waste is a nonwastewater or wastewater (as defined in Section 728.102 (d) and (f)) and indicate the subcategory of the waste (such as "D003 reactive cyanide") if applicable;

C) The manifest number associated with the shipment of waste; ~~and~~

D) For hazardous debris, the contaminants subject to treatment, as provided by Section 728.145(b), and the following statement: "This hazardous debris is subject to the alternative treatment standards of 35 Ill. Adm. Code 728.145; ~~and~~

E) Waste analysis data, where available.; and

F) The date on which the waste is subject to the prohibitions.

2) If a generator determines that ~~the generator~~it is managing a restricted waste under this Part, and determines that the waste can be land disposed without further treatment, with each shipment of waste the generator shall submit ~~to the~~

~~treatment, storage, or land disposal facility,~~ a notice and a certification to the treatment, storage, or land disposal facility stating ~~that the waste meets the applicable~~ treatment standards set forth in 728.Subpart D ~~of this Part~~ and setting forth the applicable prohibition levels set forth in Section 728.132 or RCRA Section 3004(d), referenced in Section 728.139. A g~~G~~enerators of hazardous debris that is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(~~e~~)(2), 35 Ill. Adm. Code 728.103(f)(2), ~~and~~or 35 Ill. Adm. Code 720.122 (i.e. debris that is delisted), however, ~~are~~is not subject to these notification and certififcation requirements.

A) The notice must include the following information:

i) U.S. EPA hazardous waste number;

ii) The ~~corresponding treatment standards~~waste constituents that the treater will monitor, if monitoring will not include all regulated constituents, for wastes F001 through F005, F039, D001, D002, D012 through D043, and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. ~~Treatment standards for all other restricted wastes must either be included or referenced by including on the notification the applicable~~The generator must also include whether the waste is a wastewater or nonwastewater (as defined in Section 728.102(d) and (f)) ~~category~~, and indicate the subcategory of the waste~~applicable subdivisions made within a waste code based on waste-specific criteria~~ (such as D003, reactive cyanides), ~~and the Section and subsection where the applicable treatment standard appears~~if applicable~~. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Section 728.Table C (e.g., INCIN, WETOX) also must be listed on the notification.~~;

iii) The manifest number associated with the shipment of waste; and

iv) Waste analysis data, where available.

B) The certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132, 728.139, or Section 3004(d) of the Resource Conservation and Recovery Act. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a

false certification, including the possibility of a fine and imprisonment.

3) If a generator's waste is subject to an exemption from a prohibition on the type of land disposal method utilized for the waste (such as, but not limited to, a case-by-case extension under Section 728.105, an exemption under Section 728.106, an extension under Section 728.101(c)(3), or a nationwide capacity variance under 40 CFR 268.Subpart C (1992~~4~~)), ~~with each shipment of waste,~~ the generator shall submit a notice with with each shipment of the waste to the facility receiving the generator's waste~~,~~ stating that the waste is not prohibited from land disposal. The notice must include the following information:

A) U.S. EPA hazardous waste number;

B) The ~~corresponding treatment standards~~waste constituents that the treater will monitor, if monitoring will not include all regulated constituents, for wastes F001 through F005, F039, D001, D002, and D012-D043~~and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139. Treatment standards for all other restricted wastes must either be included or be referenced by including on the notification the , and the Section and subsection where the applicable treatment standard appears. Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Section 728.Table G (e.g., INCIN, WETOX) also must be listed on the notification~~. The generator must also include whether the waste is a nonwastewater or wastewater (as defined in Section 728.102(d) and (f)), and indicate the subcategory of the waste (such as "D003 reactive cyanide"), if applicable;

C) The manifest number associated with the shipment of waste;

D) Waste analysis data, where available;

E) For hazardous debris, ~~t~~when using the alternative treatment technologies provided by Section 728.145:

i) The contamine~~a~~nets subject to treatment, as provided by Section 728.145(b);

ii) An indication that these contaminants are being treated to comply with Section 728.145, ~~and the following statement: "This hazardous debris is subject to the alternative treatment standards of 35 Ill. Adm. Code 728.145"; and~~

F) For hazardous debris when using the treatment standards for the contaminating waste(s) in Section 728.140: the requirements described in subsections (a)(3)(A) through (a)(3)(D) above and subsection (a)(3)(G) below; and,

~~F~~G) The date on which the waste is subject to the prohibitions.

4) If a generator is managing a prohibited waste in tanks, ~~or~~ containers, or containment buildings regulated under 35 Ill. Adm. Code 722.134~~,~~ and is treating such waste in ~~such~~ tanks, containers, or containment buildings to meet applicable treatment standards under 728.Subpart D ~~of this Part~~, the generator shall develop and follow a written waste analysis plan that describes the procedures the generator will carry out to comply with the treatment standards. (A generator treating hazardous debris under the alternative treatment standards of Section 728.Table F, however, is 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 it must 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 filed with the Agency a minimum of 30 days prior to the treatment activity, with delivery verified.

C) Wastes shipped off-site pursuant to this subsection must comply with the notification requirements of Section 728.107(a)(2).

5) If a generator determines whether the waste is restricted based solely on the generator's knowledge of the waste, the generator shall retain all supporting data used to make this determination on-site in the generator's files. If a generator determines whether the waste is restricted based on testing the waste or an extract developed using the test method described in Section 728.Appendix A, the generator shall retain all waste analysis data on site in the ~~generator's~~its files.

6) If a generator determines, subsequent to the time of generation, that ~~the generator~~it is managing a restricted waste that is excluded from the definition of hazardous or solid waste or exempt from regulation as a RCRA hazardous waste under 35 Ill. Adm. Code 721.102 through 721.106, the generator shall place, in the facility's file, a one-time notice stating such generation, the subsequent exclusion from the definition of hazardous or solid waste or exemption from regulation as a RCRA hazardous waste, and the disposition of the waste.

7) A gGenerators shall retain on-site a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to this Section for at least five years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The five year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the Agency. The

requirements of this subsection apply to solid wastes even when the hazardous characteristic is removed prior to disposal, ~~or~~ when the waste is excluded from the definition of hazardous or solid waste under 35 Ill. Adm. Code 721.102 through 721.106, or when the waste is exempted from regulation as a RCRA hazardous waste subsequent to the point of generation.

8) If a generator is managing a lab pack that contains wastes identified in Section 728.Appendix D and wishes to use the alternative treatment standard under Section 728.142(c), with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with subsection (a)(1) above, except that underlying hazardous constituents need not be determined. The generator shall also comply with the requirements in subsections (a)(5) and (a)(6) above and shall submit the following certification, which must be signed by an authorized representative:

I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack does not contains ~~only~~any of the wastes ~~specified~~identified in 35 Ill. Adm. Code 728.Appendix D ~~or Solid wastes not subject to regulation under 35 Ill. Adm. Code 721~~. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.

9) ~~If a generator is managing a lab pack that contains organic wastes specified in Section 728.Appendix E and wishes to use the alternate treatment standards under Section 728.142, with each shipment of waste the generator shall submit a notice to the treatment facility in accordance with subsection (a)(1) above. The generator also shall comply with the requirements in subsections (a)(5) and (a)(6) above and shall submit the following certification that must be signed by an authorized representative:~~This subsection corresponds with 40 CFR 268.7(a)(9), marked "reserved" by U.S. EPA at 59 Fed. Reg. 48045 (Sept. 19, 1994). This statement maintains structural consistency with federal regulations.

~~I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste and that the lab pack contains only organic waste specified in 35 Ill. Adm. Code 728.Appendix E or solid wastes not subject to regulation under 35 Ill. Adm. Code 721. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment.~~

10) Small quantity generators with tolling agreements pursuant to 35 Ill. Adm. Code 722.120(e) shall comply with the applicable notification and certification requirements of subsection (a) above for the initial shipment of the waste subject to the agreement. Such generators shall retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended following notification pursuant to Section 31(d) of the Environmental

Protection Act~~,~~ until either any subsequent enforcement action is resolved~~,~~ or until the Agency notifies the generator documents need not be retained.

b) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans, as required by 35 Ill. Adm. Code 724.113 or 725.113. Such testing must be performed as provided in subsections (b)(1), (b)(2), and (b)(3) below.

1) For wastes with treatment standards expressed as concentrations in the waste extract (Section 728.141), the owner or operator of the treatment facility shall test the treatment residues or an extract of such residues developed using the test method described in Section 728.Appendix A to assure that the treatment residues or extract meet the applicable treatment standards.

2) For wastes prohibited under Section 728.132 or 728.139 that are not subject to any treatment standards under 728.Subpart ~~D of this Part~~, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in Section 728.132 to assure that the treatment residues comply with the applicable prohibitions.

3) For wastes with treatment standards expressed as concentrations in the waste (Section 728.143), the owner or operator of the treatment facility shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.

4) A notice must be sent with each waste shipment to the land disposal facility that includes the following information, except that debris excluded from the definition of the hazardous waste under ~~Section~~35 Ill. Adm. Code 728~~1~~.103(~~f~~e)~~(2)~~ (i.e., debris treated by an extraction or destruction technology provided by Section 728.Table F, and debris that is delisted) is subject to the notififcation and certification requirments of subsection (d) below rather than these notification requirments:

A) U.S. EPA hazardous waste number;

B) The ~~corresponding treatment standards~~waste constituents to be monitored, if monitoring will not include all regulated constituents, for wastes F001 through F005, F039, D001, D002, D012 through D043, and wastes prohibited pursuant to Section 728.132 or Section 3004(d) of the Resource Conservation and Recovery Act, referenced in Section 728.139~~, and for underlying hazardous constituents (as defined in Section 728.102 of this Part), in D001 and D002 wastes if these wastes are prohibited under Section 728.137 of this Part. Treatment standards for all other restricted wastes must either be included, or be referenced by including on the notification the applicable~~The generator must also include whether the waste is a nonwastewater or wastewater (as defined in Section 728.102(d) or (f)), and indicate the subcategory of the waste ~~or nonwastewater (as defined~~

~~in Section 728.102(d)) category, the applicable subdivisions made within a waste code based on waste specific criteria~~ (such as D003 reactive cyanides), ~~and the Sections and subsections where the applicable treatment standard appears~~if applicable. ~~Where the applicable treatment standards are expressed as specified technologies in Section 728.142, the applicable five-letter treatment code found in Section 728.Table C (e.g., INCIN, WETOX) also must be listed on the notification.~~

C) The manifest number associated with the shipment of waste; and

D) Waste analysis data, where available.

5) The treatment facility owner or operator shall submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the treatment standards specified in 728.Subpart D ~~of this Part~~ and the applicable prohibitions set forth in Section 728.132 or 728.139. Debris excluded from the definiton of hazardous waste under ~~Section~~35 Ill. Adm. Code 728~~1~~.103(~~e~~)~~(2)~~ (i.e., debris treated by an extraction or destruction technology provided by Section 728.Table F, and debris that is delisted), however, is subject to the notififcation and certication requirments of subsection (d) below rather than the certification requirements of subsection (b)(5).

A) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (Sections 728.141 or 728.143), or for wastes prohibited under Section 728.132 or 728.139 that are not subject to any treatment standards under 728.Subpart D ~~of this Part~~, the certification must be signed by an authorized representative and must state the following:

> I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly, so as to comply with the performance levels specified in 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132 or 728.139 or Section 3004(d) of the Resource Conservation and Recovery Act without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

B) For wastes with treatment standards expressed as technologies (Section 728.142), the certification must be signed by an authorized representative and must

state the following:

> I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.142. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

C) For wastes with treatment standards expressed as concentrations in the waste pursuant to Section 728.143, if compliance with the treatment standards in 728.Subpart D ~~of this Part~~ is based in part or in whole on the ~~analytical~~ detection limit alternative specified in Section 728.143(c), the certification also must state the following:

> I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O, or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and 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 D001, D002, and D012 through D043 that are subject to the treatment standards in Section 728.140 (other than those expressed as a required method of treatment), that are reasonably expected to contain underlying hazardous constituents as defined in Section 728.102(i), that 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:

> I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

6) If the waste or treatment residue will be further managed at a different treatment or storage facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must comply with the notice and certification requirements applicable to generators under

this Section.

7) Where the wastes are recyclable materials used 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)(4) above. With each shipment of such wastes the owner or operator of the recycling facility shall submit a certification described in subsection (b)(5) above and a notice that includes the information listed in subsection (b)(4) above (except the manifest number) to the Agency. The recycling facility also shall keep records of the name and location of each entity receiving the hazardous waste-derived product.

c) Except where the owner or operator is disposing of 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:

1) Have copies of the notice and certification specified in subsection (a) or (b) above and the certification specified in Section 728.108, if applicable.

2) Test the waste, or an extract of the waste or treatment residue developed using the test method described in Section 728.Appendix A or using any methods required by generators under Section 728.132, to assure that the waste~~s~~ or treatment residue~~s~~ ~~are~~is in compliance with the applicable treatment standards set forth in 728.Subpart D ~~of this Part~~ and all applicable prohibitions set forth in Sections 728.132 or 728.139. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by 35 Ill. Adm. Code 724.113 or 725.113.

3) Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 728.133(f) but not subject to the prohibitions set forth in Section 728.132, the owner or operator shall ensure that such waste is the subject of a certification according to the requirements of Section 728.108 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 728.105(h)(2). The same requirement applies to any waste that is subject to the prohibitions under Section 728.133(f) and also is subject to the statutory prohibitions in the codified prohibitions in Section 728.139 or Section 728.132.

4) Where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), the owner or operator is not subject to subsections (c)(1) through (c)(3) above with respect to such waste.

d) A ~~g~~Generators or treaters that first claims that hazardous debris is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 728~~1~~.103(~~f~~e)~~(2)~~ (i.e., debris treated by an extraction or destruction technology provided by Section 728.Table F, and

debris that has been delisted) ~~are~~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 U.S. EPA hazardous waste numbers; and

C) For debris excluded under 35 Ill. Adm. Code 728.103(f)(2), the technology from Section 728.Table F~~T~~ used to treat the debris.

2) The notification must be updated if the debris is shipped to a different facility~~T~~ and, for debris excluded 35 Ill. Adm. Code 721.2(d)(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 728.103(f)(2), the owner or operator of the treatment facility shall document and certify compliance with the treatment standards of Section 728.Table F, 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: "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."

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.109 Special Rules for Characteristic Wastes

a) The initial generator of a solid waste shall determine each U.S. EPA hazardous waste number (waste code) applicable to the waste in order to determine the applicable treatment standards under 728.Subpart D ~~of this Part~~. For purposes of this Part, the waste must carry the waste code for any applicable listing under 35 Ill. Adm. Code 721.Subpart D. In addition, the waste must carry one or more of the waste codes under 35 Ill. Adm. Code 721.Subpart C where the waste exhibits the relevant characteristic, except in the case when the treatment standard for the waste code listed in 35 Ill. Adm. Code 721.Subpart D operates in lieu of the standard

for the waste code under 35 Ill. Adm. Code 721.Subpart C, as specified in subsection (b) below. If the generator determines that its waste displays the characteristic of ignitability (D001) (and is not in the High TOC Ignitable Liquids Subcategory or is not treated by ~~INCIN, FSUBS,~~CMBST or RORGS ~~of Section 728.Table C of this Part~~), ~~or~~ that its waste displays the characteristic of corrosivity (D002) and is prohibited under Section 728.137, or that its waste displays the characteristic of toxicity (D012-D043) and is prohibited under Section 728.138, the generator shall determine what underlying hazardous constituents (as defined in Section 728.102) are reasonably expected to be present in the D001, ~~or~~ D002, or D012 through D043 waste.

b) Where a prohibited waste is both listed under 35 Ill. Adm. Code 721.Subpart D and exhibits a characteristic under 35 Ill. Adm. Code 721.Subpart C, the treatment standard for the waste code listed in 35 Ill. Adm. Code 721.Subpart D will operate in lieu of the standard for the waste code under 35 Ill. Adm. Code 721.Subpart C, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste must meet the treatment standards for all applicable listed and characteristic waste codes.

c) In addition to any applicable standards determined from the initial point of generation, no prohibited waste ~~which~~that exhibits a characteristic under 35 Ill. Adm. Code 721.Subpart C shall be land disposed unless the waste complies with the treatment standards under 728.Subpart D ~~of this Part~~.

d) A ~~w~~Wastes that exhibits a characteristic ~~are~~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. 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 subtitle D 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 ~~non-~~RCRA Subtitle D ~~hazardous waste~~ (municipal solid waste landfill) facility receiving the waste shipment; and

B) A description of the waste as initially generated, including the applicable U.S. EPA hazardous waste numbers, the ~~applicable wastewater or nonwastewater~~treatability group(s), and the underlying hazardous constituents (as defined in Section 728.102[11]) ~~category, and the subdivisions made within a waste code based on waste-specific criteria (such as D003, reactive cyanides);~~ in D001 and D002 wastes prohibited under Section 728.137 or D012 through D043 wastes prohibited under Section 728.138.

~~C) The treatment standards applicable to the waste at the initial point of generation.~~

2) The certification must be signed by an authorized representative and must state the language found in Section 728.107(b)(5)(A). If treatment removes the characteristic but does not treat underlying hazardous constituents, then the certification found in Section 728.107(b)(5)(D) applies.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART C: PROHIBITION ON LAND DISPOSAL

Section 728.130 Waste Specific Prohibitions--Solvent Wastes

a) The spent solvent wastes specified in 35 Ill. Adm. Code 721.131 as U.S. EPA Hazardous Waste Numbers F001, F002, F003, F004, and F005 are prohibited under this Part from land disposal (except in an injection well) unless one or more of the following conditions apply:

1) The generator of the solvent waste is a small quantity generator of 100 to 1000 kilograms of hazardous waste per month; or

2) The solvent waste is generated from any response action taken under CERCLA or from RCRA corrective action, except where the waste is contaminated soil or debris; or

3) The initial generator's solvent waste is a solvent-water mixture, solvent-containing sludge or solid, or solvent-contaminated soil (non-CERCLA or non-RCRA corrective action) containing less than 1 percent total F001 through F005 solvent constituents listed in Table AT.

4) The solvent waste is a residue from treating a waste described in subsections (a)(1), (a)(2), or (a)(3) above~~.~~, or the solvent waste is a residue from treating a waste not described in subsections (a)(1), (a)(2), or (a)(3), provided such residue belongs to a different treatability group than the waste as initially generated and wastes belonging to such treatability group are described in subsection (a)(3).

b) The F001 through F005 solvent wastes listed in subsections (a)(1), (a)(2), (a)(3), or (a)(4) above are prohibited from land disposal.

c) ~~Effective November 8, 1990, t~~The F001 through F005 solvent wastes ~~which~~that are contaminated soil and debris resulting from a CERCLA response or RCRA corrective action or the residue from treatment of these wastes are prohibited from land disposal. ~~Until November 8, 1990, these wastes may be disposed in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105.~~

d) The requirements of subsections (a), (b), and (c) above do not apply if:

1) The wastes meet the standards of 728.Subpart D; or

2) ~~Persons have been granted a~~An exemption (adjusted standard) was granted from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units and the activity is covered by the petition; or

3) Persons have been granted an extension to the effective date of a prohibition by U.S. EPA pursuant to Section 728.105~~,~~ with respect to those wastes and units and the activity is covered by the extension.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.133 Waste Specific Prohibitions: ~~--~~First Third Wastes

a) The wastes specified in 35 Ill. Adm. Code 721.132 as U.S. EPA hazardous wastes numbers listed below are prohibited from land disposal (except in an injection well).

F006	(nonwastewater)
K001	
K004	wastes specified in Sections 728.143~~0(a)~~ and 728.Table ~~B~~T
K008	wastes specified in Sections 728.143~~0(a)~~ and 728.Table ~~B~~T
K015	
K016	
K018	
K019	
K020	
K021	wastes specified in Section Sections 728.143~~0(a)~~ and 728.Table BT
K022	(nonwastewater)
K024	
K025	nonwastewaters specified in Sections 728.143~~0(a)~~ and 728.Table ~~B~~T
K030	
K036	(nonwastewater)
K037	
K044	
K045	(nonexplosive)
K046	(nonwastewater)
K047	
K060	(nonwastewater)
K061	(nonwastewaters containing less than 15% zinc)
K062	(non $CaSO_4$)
K069	(nonwastewater)
K086	(solvent washes),
K087	
K099	
K100	nonwastewaters specified in Sections 728.143~~0(a)~~ and 728.Table ~~B~~T
K101	(wastewater)
K101	(nonwastewater, low arsenic subcategory -- less than 1% total arsenic)
K102	(wastewater)
K102	(nonwastewater, low arsenic subcategory -- less than 1% total arsenic)
K103	
K104	

b) The waste specified in 35 Ill. Adm. Code 721.132 as U.S. EPA Hazardous Waste No. K071 is prohibited from land disposal.

c) The wastes specified in Section 728.110 having a treatment standard in 728.Subpart D based on incineration and which are contaminated soil and debris are prohibited from land disposal.

e) The requirements of subsection (a), (b)~~,~~ and (c)~~,~~ above~~,~~ do not apply if:

1) The wastes meets the applicable standards specified in 728.Subpart D; ~~or~~

2) ~~Persons have been granted a~~An exemption (adjusted standard) was granted from a prohibition pursuant to a petition under Section 728.106~~,~~ with respect to those wastes and units and the activity is covered by the petition; or

3) Persons have been granted an extension to the effective date of a prohibition by U.S. EPA pursuant to Section 728.105~~,~~ with respect to those wastes and units and the activity is covered by the extension.

f) This subsection corresponds with 40 CFR 268.33(f), a provision whose effectiveness has expired. This statement maintains structural consistency with U.S. EPA regulations.

g) To determine whether a hazardous waste listed in Section 728.110 exceeds the applicable treatment standards specified in Sections 728.131, ~~and~~ 728.143~~0~~, and 728.Table T, the initial generator shall test a representative sample of the waste extract or the entire waste depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste, or the generator may use knowledge of the waste. If the waste contains constituents in excess of the applicable 728.Subpart D levels, the waste is prohibited from land disposal and all requirements of this Part are applicable except as otherwise specified.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.138 Waste-Specific Prohibitions: Newly-Identified Organic Toxicity Characteristic Wastes and Newly-Listed Coke By-Product and Chlorotoluene Production Wastes

a) The wastes specified in 35 Ill. Adm. Code 721.132 as U.S. EPA hazardous 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 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-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 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. §§ 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 wastes that are mixed with any of U.S. EPA hazardous waste number 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, before ultimate land disposal are prohibited from land disposal. Radioactive wastes mixed with any of U.S. EPA hazardous waste number 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).

d) The requirements of subsections (a), (b), and (c) above do not apply if:

1) The wastes meet the applicable treatment standards specified in 728.Subpart D;

2) Persons have been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;

3) The wastes meet the applicable alternate treatment standards established pursuant to a petition granted under Section 728.144;

4) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to these wastes covered by the extension.

e) To determine whether a hazardous waste identified in this section exceeds the applicable treatment standards specified in Sections 728.140 and 728.Table T, 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, the waste is prohibited from land disposal and all requirements of this Part are applicable, except as otherwise specified.

(Source: Added at 19 Ill. Reg. _____, effective _____)

SUBPART D: TREATMENT STANDARDS

Section 728.140 Applicability of Treatment Standards

a) ~~A restricted waste identified in Section 728.141 may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using Method 1311, the Toxicity Characteristic Leaching Procedure, does not exceed the value shown in Section 728.Table A for any hazardous constituent listed in~~

~~Section 728.Table A for that waste, with the following exceptions: D004, D008, K031, K084, K101, K102, P010, P011, P012, P036, P038 and U136. These wastes may be land disposed only if an extract of the waste or of the treatment residue of the waste developed using either Method 1310, the Extraction Procedure Toxicity Test, or Method 1311, the Toxicity Characteristic Leaching Procedure, or the test method in Section 728.Appendix A does not exceed the concentration shown in Section 728.Table B for any hazardous constituent listed in Section 728.Table A for that waste. Methods 1310 and 1311 are both found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", U.S. EPA Publication SW-846, as incorporated by reference in 35 Ill. Adm. Code 720.111.~~A waste identified in Section 728.Table T, "Treatment Standards for Hazardous Wastes", may be land disposed only if it meets the requirements found in that Section. For each waste, Section 728.Table T 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 that Section 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 that Section ("waste extract standards"); or

3) The waste must be treated using the technology specified in that Section ("technology standard"), which is described in detail in Section 728.Table C, "Technology Codes and Description of Technology-Based Standards".

b) ~~A restricted waste for which a treatment technology is specified under Section 728.142(a) or hazardous debris for which a treatment technology is specified under Section 728.145 may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Agency under the procedures set forth in Section 728.142(b). For waste displaying the characteristic of ignitability (D001) and reactivity (D003), that are diluted to meet the deactivation treatment standard in Section 728.Tables C and D (DEACT), the treater shall comply with the precautionary measures specified in 35 Ill. Adm. Code 724.117(b) and 35 Ill. Adm. Code 725.117(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", U.S. EPA Publication SW-846, incorporated by reference in Section 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", U.S. EPA Publication SW-846, incorporated by reference in Section 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) ~~Except as otherwise specified in Section 728.143(c), a restricted waste identified in Section 728.143 may be land disposed only if the constituent concentrations in the waste or treatment residue of the waste do not exceed the value shown in Section 728.Table B for any hazardous constituent listed in Section 728.Table B for that waste.~~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) ~~If a treatment standard has been established in Sections 728.141 through 728.143 for a hazardous waste that is itself subject to those standards rather than the standards for hazardous debris under Section 728.145.~~Notwithstanding the prohibitions specified in subsection (a) above, treatment and disposal facilities may demonstrate (and certify pursuant to 7235 Ill. Adm. Code 728.107(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in Section 728.Table T, 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 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) above 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 Section 728.Table T by an order of magnitude.

e) For characteristic wastes (U.S. EPA hazardous waste numbers D001, D002, and D012 through D043 that are subject to treatment standards in Section 728.Table T, "Treatment Standards for Hazardous Wastes", all underlying hazardous constituents (as defined in Section 728.102(1)) must meet universal treatment standards, found in Sections 728.148 and 728.Table U prior to land disposal.

f) The treatment standards for U.S. EPA 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", U.S. EPA Publication SW-846, incorporated by reference in Section 720.111. If the waste contains any of these three constituents along with any of the other 25 constituents found in U.S. EPA hazardous waste numbers F001 through F005, then compliance with treatment standards for carbon disulfide, cyclohexanone, or methanol are not required.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.141 Treatment Standards Expressed as Concentrations in Waste Extract

For the requirements previously found in this Section and for treatment standards in Section 728.Table A, "Table CCWE-Constituent Concentrations in Waste Extracts", refer to Section 728.140 and 728.Table T, "Treatment Standards for Hazardous Wastes".

~~a) Section 728.Table A identifies the restricted wastes and the concentrations of their associated constituents that may not be exceeded by the extract of a waste or waste treatment residual generated using Method 1311, the Toxicity Characteristic Leaching Procedure, for the allowable land disposal of such wastes. Compliance with these concentrations is required based upon grab samples, unless otherwise noted in Section 728.Table A. Method 1311 is found in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", U.S. EPA Publication SW-846, as incorporated by reference in 35 Ill. Adm. Code 720.111.~~

~~b) 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, except that mixtures of high and low zinc nonwastewater K061 are subject to the treatment standard for high zinc K061.~~

~~c) The treatment standards for the constituents in F001 through F005 that are listed in Section 728.Table A only apply to wastes which contain one, two, or all three of these constituents. If the waste contains any of these three constituents along with any of the other 26 constituents found in F001 through F005, then only the treatments standards in Section 728.Table A are required.~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.142 Treatment Standards Expressed as Specified Technologies

a) The following wastes in subsections (a)(1) and (b)(2) below and Sections 728.Table ~~B~~T, "Treatment Standards for Hazardous Wastes", for which standards are expressed as a treatment method rather than a concentration level, ~~and 728.Table B~~ must be treated using ~~the technology or technologies specified~~ in subsections (a)(1) and (a)(2) below and Section 728.Table ~~C~~T.

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.

2) Nonliquid hazardous wastes containing halogenated organic compounds (HOCs) in total concentrations greater than or equal to 1000 mg/kg and liquid HOC-containing wastes that are prohibited under Section 728.132(e)(1) must be incinerated in accordance with the requirements of 35 Ill.

Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O. These treatment standards do not apply where the waste is subject to a treatment standard codified in 728.Subpart C ~~of this Part~~ for a specific HOC (such as a hazardous waste chlorinated solvent for which a treatment standard is established under Section 728.141(a)).

3) A mixture consisting of wastewater, the discharge of which is subject to regulation under 35 Ill. Adm. Code 309 or 310, and de minimis losses of materials from manufacturing operations in which these materials are used as raw materials or are produced as products in the manufacturing process~~,~~ ~~and~~ that meets the criteria of the D001 ignitable liquids containing greater than 10% total organic constituents (TOC) subcategory~~,~~ ~~is~~are subject to the DEACT treatment standard described in Section 728.Table C. For purposes of this subsection, "de minimis losses" include:

A) Those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, 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) above and (c) and (d) below for wastes or specififed in Section 728.Table F for hazardous debris. The applicant shall submit information demonstrating that the applicant's treatment method is in compliance with federal and state requirements, including this Part~~,~~; 35 Ill. Adm. Code 709, 724, 725, 726, and 729; and Sections 22.6 and 39(h) of the Environmental Protection Act [415 ILCS 5/22.6 and 39(h)]~~,~~ and that ~~it~~the treatment method is protective of human health ~~or~~and the environment. On the basis of such information and any other available information, the Agency shall approve the use of the alternative treatment method if the Agency finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in subsections (a) above and (c) and (d) below and in Section 728.Table F, 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 comply with all limitations contained in such determination.

c) As an alternative to the otherwise applicable treatment standards of 728.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) ~~All hazardous wastes contained in such lab packs are specified in Section 728.Appendix D or Section 729.Appendix E~~The lab pack does not contain any of the wastes listed in Section 728.Appendix D;

3) The lab packs are incinerated in accordance with the requirements of 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O; and

4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in 728.Subpart D.

d) Radioactive hazardous mixed wastes ~~with treatment standards specified in Section 728.Table E are not subject to any treatment standards specified in Section 728.141, 728.143, or 728.Table D. Radioactive hazardous mixed wastes not subject to treatment standards in Section 728.Table E remain subject to all applicable treatment standards specified in Sections 728.141, 728.143, and 728.Table D.~~are subject to the treatment standards in Sections 728.140 and 728.Table T. Where treatment standards are specified for radioactive mixed wastes in Section 728.Table T, "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 EPA waste code) applies. Hazardous debris containing radioactive waste ~~is not subject to the treatment standards specified in Section 728.Table F but~~ is subject to the treatment standards specified in Section 728.145.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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, "CCW-Constituent Concentrations in Wastes", refer to Section 728.140 and 728.Table T, "Treatment Standards for Hazardous Wastes".

~~a) Table B identifies the restricted wastes and the concentrations of their associated hazardous constituents which must not be exceeded by the waste or treatment residual (not an extract of such waste or treatment residual) for the allowable land disposal of such waste or residual. Compliance with these concentrations is required based upon grab samples, unless otherwise noted in Table B.~~

~~b) When wastes with different 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.~~

~~c) Notwithstanding the prohibitions specified in subsection (a) and Table B, treatment and disposal facilities may demonstrate (and certify pursuant to Section 728.107(b)(5)) compliance with the treatment standards for organic constituents specified by a footnote in Table B, by satisfying the following conditions:~~

~~1) The treatment standards for the organic constituents were~~

~~established based on incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.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 (c)(1) to treat the organic constituents; and~~

~~3) The treatment or disposal facility has been unable to detect the organic constituents despite using its best good faith efforts as defined by applicable standards. Until such standards are developed, the treatment or disposal facility may demonstrate such good faith efforts by achieving detection limits for the regulated for the regulated organic constituents which are less than ten times the treatment standard specified in this Section.~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.145 Treatment Standards for Hazardous Debris

a) Treatment standards. Hazardous debris must be treated prior to land disposal as follows unless the Board has determined, under 35 Ill. Adm. Code 721.103(d)(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 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~~below, using the technology or technologies identified in Section 728.Table F.

2) Characteristic debris. Hazardous debris that exhibits the characteristic of ignitability, corrosivity, or reactivity identified under 35 Ill. Adm. Code 721.121, 721.122, ~~and~~or 721.123, respectively, must be deactivated by treatment using one of the technologies identified in Section 728.Table F.

3) Mixtures of debris types. The treatment standards of Section 728.Table F 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~~below must be treated for each contaminant using one or more treatment technologies identified in Section 728.Table F. 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:

1) Toxicity characteristic debris. The contaminants subject to treatment for debris that exhibits the Toxicity Characteristic (TC) by 35 Ill. Adm. Code 721.124 are those EP constituents for which the debris exhibits the TC toxicity characteristic.

2) Debris contaminated with listed waste. The contaminants subject to treatment for debris that is contaminated with a prohibited listed hazardous waste are those constituents or wastes for which ~~BDAT~~treatment standards are established for the waste under Sections 728.141~~0~~ and 728.~~143~~Table T.

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 Section 728.Table F and that does not exhibit a characteristic of hazardous waste identified under 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 Section 728.Table F 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) below:

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 728.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) above, must be deactivated prior to land disposal and is not subject to the waste-specific treatment standards of 728.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 U.S EPA hazardous waste number D003 under Section 728.143.

4) Ignitable nonwastewater residue. Ignitable nonwastewater residue containing equal to or greater than 10% total organic carbon is subject to the technology-based standards for U.S EPA hazardous waste number D001: "Ignitable Liquids based on 35 Ill. Adm. Code 721.121(a)(1)", under Section 728.142.

5) Residue from spalling. Layers of debris removed by spalling are hazardous debris that remain subject to the treatment standards of this Section.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.146 Alternative Treatment Standards Based on HTMR

~~Section 728.Table G identifies alternative treatment standards for F006 and K062 nonwastewaters.~~For the treatment standards previously found in Section 728.Table G, as formerly referenced in this Section, refer to Sections 728.140 and 728.Table T, "Treatment Standards for Hazardous Wastes".

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.148 Universal Treatment Standards

Section 728.Table U, "Universal Treatment Standards (UTS)", identifies the hazardous constituents, along with the nonwastewater and wastewater treatment standard levels, 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.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 728.Appendix D ~~Organometallic Lab Packs~~Wastes Excluded from Lab Packs

Hazardous waste with the following U.S. EPA 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.

~~Hazardous waste with the following hazardous waste code numbers may be placed in an "organometallic" or "Appendix D lab pack:"~~

~~P001, P002, P003, P004, P005, P006, P007, P008, P009, P013, P014, P015, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P029, P030, P031, P033, P034, P036, P037, P038, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P056, P057, P058, P059, P060, P062, P063, P064, P065, P066, P067, P068, P069, P070, P071, P072, P073, P074, P075, P077, P081, P082, P084, P085, P087, P088, P089, P092, P093, P094, P095, P096, P097, P098, P099, P101, P102, P103, P104, P105, P106, P108, P109, P110, P111, P112, P113, P114, P115, P116, P118, P119, P120, P121, P122, P123~~

~~U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U032, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U051, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, U140, U141, U142, U143, U147, U148, U149, U150, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U214, U215, U216, U217, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249~~

~~P001, P002, P003, P004, P005, P006, P010, P020, P021, P022, P023, P024, P025 P026, P027, P028, P039~~

~~K001, K002, K008, K009, K010, K011, K013, K014, K015, K016, K017, K018, K019, K020, K021, K022, K023, K024, K025, K026, K027, K028, K029, K030, K031, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K046, K047, K048, K049, K050, K051, K052, K060, K061, K069, K071, K073, K083, K084, K085, K086, K087, K093, K094, K095, K096, K097, K098, K099, K101, K102, K103, K104, K105, K113, K114, K115, K116~~

~~D001, D002, D003, D004, D005, D006, D007, D008, D010, D011, D012, D013, D014, D015, D016, D017~~

BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Appendix E Organic Lab Packs (Repealed)

~~Hazardous wastes with the following Hazardous Waste Code No. may be placed in an "organic" or "Appendix E" lab pack:~~

~~P001, P002, P003, P004, P005, P007, P008, P009, P014, P016, P017, P018, P020, P021, P022, P023, P024, P026, P027, P028, P030, P031, P033, P034, P037, P039, P040, P041, P042, P043, P044, P045, P046, P047, P048, P049, P050, P051, P054, P057, P058, P059, P060, P062, P063, P064, P066, P067, P068, P069, P070, P071, P072, P075, P077, P081, P082, P084, P085, P088, P089, P093, P094, P095, P097, P098, P101, P102, P105, P106, P108, P109, P111, P112, P116, P118, P123~~

~~U001, U002, U003, U004, U005, U006, U007, U008, U009, U010, U011, U012, U014, U015, U016, U017, U018, U019, U020, U021, U022, U023, U024, U025, U026, U027, U028, U029, U030, U031, U033, U034, U035, U036, U037, U038, U039, U041, U042, U043, U044, U045, U046, U047, U048, U049, U050, U052, U053, U055, U056, U057, U058, U059, U060, U061, U062, U063, U064, U066, U067, U068, U069, U070, U071, U072, U073, U074, U075, U076, U077, U078, U079, U080, U081, U082, U083, U084, U085, U086, U087, U088, U089, U090, U091, U092, U093, U094, U095, U096, U097, U098, U099, U101, U102, U103, U105, U106, U107, U108, U109, U110, U111, U112, U113, U114, U115, U116, U117, U118, U119, U120, U121, U122, U123, U124, U125, U126, U127, U128, U129, U130, U131, U132, U133, U135, U137, U138, U140, U141, U142, U143, U147, U148, U149, U150, U152, U153, U154, U155, U156, U157, U158, U159, U160, U161, U162, U163, U164, U165, U166, U167, U168, U169, U170, U171, U172, U173, U174, U176, U177, U178, U179, U180, U181, U182, U183, U184, U185, U186, U187, U188, U189, U190, U191, U192, U193, U194, U196, U197, U200, U201, U202, U203, U204, U205, U206, U207, U208, U209, U210, U211, U213, U218, U219, U220, U221, U222, U223, U225, U226, U227, U228, U234, U235, U236, U237, U238, U239, U240, U243, U244, U246, U247, U248, U249~~

~~F001, F002, F003, F004, F005, F010, F020, F021, F022, F023, F025, F026, F027, F028~~

~~K009, K010, K011, K013, K014, K016, K017, K018, K019, K020, K023, K024, K025, K026, K027, K029, K030, K032, K033, K034, K035, K036, K037, K038, K039, K040, K041, K042, K043, K044, K045, K047, K060, K073, K085, K093, K094, K095, K096, K097, K098, K099, K103, K104, K105, K113, K114, K116~~

~~D001, D012, D013, D014, D015, D016, D017~~

~~BOARD NOTE: 35 Ill. Adm. Code 729.301 and 729.312 include additional limitations on the use of lab packs.~~

(Source: Repealed at 19 Ill. Reg. _____, effective _____)

Section 728.Appendix J Recordkeeping, Notification, and Certification Requirements

Entity and Scenario	Frequency	Recipient of Notification	Recordkeeping, Notification, and Certification requirements
I. Generator			
A. Waste does not meet applicable treatment standards or exceeds applicable prohibition levels (see Section 728.107(a)(1)).	Each shipment	Treatment or storage facility.	Notice must include: •U.S. EPA hazardous waste number. •Constituents of concern. •Treatability group. •Manifest number. •Waste analysis data (where available).
B. Waste can be disposed of without further treatment (meets applicable treatment standards or does not exceed prohibition levels upon generation) (see Section 728.107 (a)(2)).	Each shipment	Land disposal facility	Notice and certification statement that waste meets applicable treatment standards or applicable prohibition levels. Notice must include: •U.S. EPA hazardous waste number. •Constituents of concern. •Treatability group. •Manifest number. •Waste analysis data (where available). Certification statement required under Section 728.107(a)(2)(B) that waste complies with treatment standards and prohibitions.
C. Waste is subject to exemption from a prohibition on the type of land disposal utilized for the waste, such as a case-by-case extension under Section 728.105, an exemption under Section 728.106, or a nationwide capacity variance (see Section 728.107(a)(3)).	Each shipment	Receiving facility	Notice must include: •Statement that waste is not prohibited from land disposal. •U.S. EPA hazardous waste number. •Constituents of concern. •Treatability group. •Manifest number. •Waste analysis data (where available). •Date the waste is subject to the prohibitions.
D. Waste is being accumulated in tanks or containers regulated under 35 Ill. Adm. Code 722.134 and is being treated in such tanks or containers to meet applicable treatment standards (see Section 728.107 (a)(4)).	Minimum of 30 days prior to treatment activity.	Agency. Delivery must be verified.	Generator must develop, keep on-site, and follow a written waste analysis plan describing procedures used to comply with the treatment standards. If waste is shipped off-site, generator also must comply with notification requirement of Section 728.107(a)(2).
E. Generator is managing a lab pack containing certain wastes and wishes to use an alternative treatment standard (see Section 728.107 (a)(6)).	Each shipment	Treatment facility	Notice in accordance with Section 728.107(a)(1), (a)(5), and (a)(6), where applicable. Certification in accordance with Section 728.107 (a)(8).

F. Small quantity generators with tolling agreements (pursuant to 35 Ill. Adm. Code 722.120(e)) (see Section 728.107 (a)(9)).	Initial shipment	Treatment facility	Must comply with applicable notification and certification requirements in Section 728.107(a). Generator also must retain copy of the notification and certification together with tolling agreement on-site for at least 3 years after termination or expiration of agreement.
G. Generator has determined waste is restricted based solely on his knowledge of the waste (see Section 728.107 (a)(5)).	N/A	Generator's file	All supporting data must be retained on-site in generator's files.
H. Generator has determined waste is restricted based on testing waste or an extract (see Section 728.107(a)(5))	N/A	Generator's file	All waste analysis data must be retained on-site in generator's files.
I. Generator has determined that waste is excluded from the definition of hazardous or solid waste or exempt from RCRA Subtitle C (hazardous waste) regulation (see Section 728.107(a)(6)).	One-time	Generator's file	Notice of generation and subsequent exclusion from the definition of hazardous or solid waste, or exemption from RCRA Subtitle C (hazardous waste) regulation, and information regarding the disposition of the waste.
J. Generator (or treater) claims that hazardous debris is excluded from the definition of hazardous waste under 35 Ill. Adm. Code 721.103(f)(1) (see Section 728.107(d)).	One-time	Agency. Notification must be updated as necessary under Section 728.107(d)(2).	Notice must include: •Name and address of RCRA Subtitle D (municipal solid waste landfill) facility receiving treated debris. •U.S. EPA hazardous waste number and description of debris as initially generated. •Technology used to treat the debris (Table 1 of Section 728.145). Certification and recordkeeping in accordance with Section 728.107 (d)(3).

K. Generator (or treater) claims that characteristic wastes are no longer hazardous (see Section 728.109 (d)).	One-time	Generator's (or treater's) files and Agency. Notification must be updated as necessary under Section 728.109(d).	Notice must include: •Name and address of RCRA Subtitle D (municipal solid waste landfill) facility receiving the waste. •U.S. EPA hazardous waste number and description of waste as initially generated. •Treatability group. •Underlying hazardous constituents. Certification in accordance with Section 728.109 (d)(2).

L. Other recordkeeping requirements (see Section 728.107 (e)(7)).	N/A	Generator's file	Generator must retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to Section 728.107 on-site for at least 5 years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. This period is automatically extended during enforcement actions or as requested by the Agency.
II. Treatment Facility			
A. Waste shipped from treatment facility to land disposal facility (see Sections 728.107(b)(4) and (b)(5)).	Each shipment	Land disposal facility	Notice must include: •U.S. EPA hazardous waste number. •Constituents of concern. •Treatability group. •Manifest number. •Waste analysis data (where available). Application certification, in accordance with Section 728.107 (b)(5)(A), (b)(5)(B) or (b)(5)(C), stating that the waste or treatment residue has been treated in compliance with applicable treatment standards and prohibitions.
B. Waste treatment residue from a	Each shipment	Receiving facility	Treatment, storage, or disposal

treatment or storage facility will be further managed at a different treatment or storage facility (see Section 728.107(b)(6)).			facility must comply with all notice and certification requirements applicable to generators.
C. Where wastes are recyclable materials used in a manner constituting disposal subject to Section 726.120 (b) (see Section 728.107(b)(7)).	Each shipment	Agency.	No notification to receiving facility required pursuant to Section 728.107(b)(4). Certification as described in Section 728.107(b)(5) and notice with information listed in Section 728.107 (b)(4), except manifest number. Recycling facility must keep records of the name and location of each entity receiving hazardous waste-derived products.
III. Land Disposal Facility.			
A. Wastes accepted by land disposal facility (see Section 728.107 (c)).	N/A	N/A	Maintain copies of notice and certifications specified in Section 728.107(a) and (b).

Certification Statements

A. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132 or RCRA section 3004(d). 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 fine and imprisonment. (Section 728.107(a)(2)(B))

B. I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack does not contain any wastes identified at Section 728.Appendix D. I am aware that there are significant penalties for submitting a false certification including possibility of fine or imprisonment. (Section 728.107(a)(8))

C. I certify under penalty of law that I have personally examined and am

familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 35 Ill. Adm. Code 728.Subpart D, and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132 or RCRA section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (Section 728.107(b)(5)(A))

D. I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.142. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (Section 728.107(b)(5)(B))

E. I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by incineration in units operated in accordance with 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O or by combustion in fuel substitution units operating in accordance with applicable technical requirements, and 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. (Section 728.107(b)(5)(C))

F. I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.140 to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment. (Section 728.107(b)(5)(D))

G. I certify under penalty of law that the debris have 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. (Section 728.107(d)(3)(C))

(Source: Added at 19 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, "Treatment Standards for Hazardous Wastes".

~~D, F and K Listed Wastes~~

~~Waste Code~~	~~See Also~~	~~Regulated Hazardous Constituent~~	~~CAS No. for Regulated Hazardous Constituent~~	~~Concentration (mg/L) Wastewaters~~	~~Concentration (mg/L) Nonwastewaters~~
~~D004~~	~~Table B~~	~~Arsenic~~	~~7440-38-2~~	~~NA~~	~~5.0 #A~~
~~D005~~	~~Table B~~	~~Barium~~	~~7440-39-3~~	~~NA~~	~~100.~~
~~D006~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~1.0~~
~~D007~~	~~Table B~~	~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.0~~
~~D008~~	~~Table B~~	~~Lead~~	~~7439-92-1~~	~~NA~~	~~5.0 #A~~
~~D009 (Low Mercury Subcategory--less than 260 mg/kg Mercury)~~					
	~~Tables B & D~~	~~Mercury~~	~~7439-97-6~~	~~NA~~	~~0.20~~
~~D010~~	~~Table B~~	~~Selenium~~	~~7782-49-2~~	~~NA~~	~~5.7~~
~~D011~~	~~Table B~~	~~Silver~~	~~7440-22-4~~	~~NA~~	~~5.0~~
~~F001-F005 spent solvents~~					
	~~Table B~~	~~Carbon disulfide~~	~~75-15-0~~	~~NA~~	~~4.8~~
		~~Cyclohexanone~~	~~108-94-1~~	~~NA~~	~~0.75~~
		~~Methanol~~	~~67-56-1~~	~~NA~~	~~0.75~~
~~F006~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F007~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F008~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F009~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F011~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F012~~	~~Table B~~	~~Cadmium~~	~~7440-43-9~~	~~NA~~	~~0.066~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
		~~Lead~~	~~7439-92-1~~	~~NA~~	~~0.51~~
		~~Nickel~~	~~7440-02-0~~	~~NA~~	~~0.32~~
		~~Silver~~	~~7440-22-4~~	~~NA~~	~~0.072~~
~~F019~~	~~Table B~~	~~Chromium (Total)~~	~~7440-47-32~~	~~NA~~	~~5.2~~
~~F020-F023 and F026-F028 dioxin-containing wastes *~~					

		HxCDD-All Hexachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		HxCDF-All Hexachlorodibenzofurans		<1. ppb	<1. ppb
		PeCDD-All Pentachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		PeCDF-All Pentachlorodibenzofurans		<1. ppb	<1. ppb
		TCDD-All Tetrachlorodibenzo-p-dioxins		<1. ppb	<1. ppb
		TCDF-All Tetrachlorodibenzofurans		<1. ppb	<1. ppb
		2,4,5-Trichlorophenol	95-95-4	<0.05 ppm	<0.05 ppm
		2,4,6-Trichlorophenol	88-06-2	<0.05 ppm	<0.05 ppm
		2,3,4,6-Tetrachlorophenol	58-90-2	<0.05 ppm	<0.05 ppm
		Pentachlorophenol	87-86-5	<0.01 ppm	<0.01 ppm
F024	Table B	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	Reserved
		Nickel	7440-02-0	NA	0.088
F037	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
F038	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
F039 (and D001 and D002 wastes prohibited under Section 728.137					
	Tables B & D	Antimony	7440-36-0	NA	0.23
		Arsenic	7440-38-2	NA	5.0
		Barium	7440-39-3	NA	52.
		Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
		Mercury	7439-97-6	NA	0.025
		Nickel	7440-02-0	NA	0.32
		Selenium	7782-49-2	NA	5.7
		Silver	7440-22-4	NA	0.072
K001	Table B	Lead	7439-92-1	NA	0.51
K002	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K003	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K004	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K005	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (anhydrous)					
	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K006 (hydrated)					
	Table B	Chromium (Total)	7440-47-32	NA	5.2
K007	Table B	Chromium (Total)	7440-47-32	NA	0.094

		Lead	7439-92-1	NA	0.37
K008	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K015	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.2
K021	Table B	Antimony	7440-36-0	NA	0.23 #A
K022	Table B	Chromium (Total)	7440-47-32	NA	5.2
		Nickel	7440-02-0	NA	0.32
K028	Table B	Chromium (Total)	7440-47-32	NA	0.073
		Lead	7439-92-1	NA	0.021
		Nickel	7440-02-0	NA	0.088
K031	Table B	Arsenic	7440-38-2	NA	5.6 #A
K046	Table B	Lead	7439-92-1	NA	0.18
K048	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K049	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K050	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K051	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K052	Table B	Chromium (Total)	7440-47-32	NA	1.7
		Nickel	7440-02-0	NA	0.20
K061	Table B	Antimony	7440-36-0	NA	2.1
		Arsenic	7440-38-2	NA	0.055
		Barium	7440-39-3	NA	7.6
		Beryllium	7440-41-7	NA	0.014
		Cadmium	7440-43-9	NA	0.19
		Chromium (Total)	7440-47-32	NA	0.33
		Lead	7439-92-1	NA	0.37
		Mercury	7439-97-6	NA	0.009
		Nickel	7440-02-0	NA	5.
		Selenium	7782-49-2	NA	0.16
		Silver	7440-22-4	NA	0.3
		Thallium		NA	0.078
		Zinc	7440-66-6	NA	5.3
K062	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K069 (Calcium Sulfate Subcategory)					
	Tables B & D	Cadmium	7440-43-9	NA	0.14
		Lead	7439-92-1	NA	0.24
K071	Table B	Mercury	7439-97-6	NA	0.025
K083	Table B	Nickel	7440-02-0	NA	0.088

K084	Table B	Arsenic	7440-38-2	NA	5.6 #A
K086	Table B	Chromium (Total)	7440-47-32	NA	0.094
		Lead	7439-92-1	NA	0.37
K087	Table B	Lead	7439-92-1	NA	0.51
K100	Table B	Cadmium	7440-43-9	NA	0.066
		Chromium (Total)	7440-47-32	NA	5.2
		Lead	7439-92-1	NA	0.51
K101	Table B	Arsenic	7440-38-2	NA	5.6 #A
K102	Table B	Arsenic	7440-38-2	NA	5.6 #A
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)					
	Tables B & D	Mercury	7439-97-6	NA	0.020
K106 (Low Mercury Subcategory--less than 260 mg/kg Mercury--that are not residues from RMERC)					
	Tables B & D	Mercury	7439-97-6	NA	0.025
K115	Table B	Nickel	7440-02-0	NA	0.32

P and U Listed Wastes

Waste Code	See Also	Commercial Chemical Name	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Wastewaters	Concentration (mg/L) Nonwastewaters
P010	Table B	Arsenic acid	Arsenic	7440-38-2	NA	5.6 #A
P011	Table B	Arsenic pentoxide	Arsenic	7440-38-2	NA	5.6 #A
P012	Table B	Arsenic trioxide	Arsenic	7440-38-2	NA	5.6 #A
P013	Table B	Barium cyanide	Barium	7440-39-3	NA	52.
P036	Table B	Dichlorophenylarsine	Arsenic	7440-38-2	NA	5.6 #A
P038	Table B	Diethylarsine	Arsenic	7440-38-2	NA	5.6 #A
P065 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)						
	Tables B & D	Mercury fulminate	Mercury	7439-97-6	NA	0.20
P065 (Low Mercury Subcategory--less than 260 mg/kg Mercury--incinerator residues (and are not residues from RMERC))						
	Tables B & D	Mercury fulminate	Mercury	7439-97-6	NA	0.025

P073	Table B	Nickel carbonyl	Nickel	7440-02-0	NA	0.32
P074	Table B	Nickel cyanide	Nickel	7440-02-0	NA	0.32
P092 (Low Mercury Subcategory -- less than 260 mg/kg Mercury residues from RMERC)						
	Tables B & D	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.20
P092 (Low Mercury Subcategory--less than 260 mg/kg Mercury--incinerator residues (and are not residues from RMERC))						
	Tables B & D	Phenyl mercury acetate	Mercury	7439-97-6	NA	0.025
P099	Table B	Potassium silver cyanide	Silver	7440-22-4	NA	0.072
P103	Table B	Selenourea	Selenium	7782-49-2	NA	5.7
P104	Table B	Silver cyanide	Silver	7440-22-4	NA	0.072
P110	Table B	Tetraethyl lead	Lead	7439-92-1	NA	0.51
P114	Table B	Thallium selenite	Selenium	7782-49-2	NA	5.7
U032	Table B	Calcium chromate	Chromium (Total)	7440-47-32	NA	0.094
U051	Table B	Creosote	Lead	7439-92-1	NA	0.51
U136	Table B	Cacodylic acid	Arsenic	7440-38-2	NA	5.6
U144	Table B	Lead acetate	Lead	7439-92-1	NA	0.51
U145	Table B	Lead phosphate	Lead	7439-92-1	NA	0.51
U146	Table B	Lead subacetate	Lead	7439-92-1	NA	0.51
U151 (Low Mercury Subcategory--less than 260 mg/kg Mercury--residues from RMERC)						
	Tables B & D	Mercury	Mercury	7439-97-6	NA	0.20
U151 (Low Mercury Subcategory--less than 260 mg/kg Mercury--that are not residues from RMERC)						
	Tables B & D	Mercury	Mercury	7439-97-6	NA	0.025
U204	Table B	Selenium dioxide	Selenium	7782-49-2	NA	5.7
U205	Table B	Selenium sulfide	Selenium	7782-49-2	NA	5.7

~~#A--These treatment standards have been based on EP Leachate analysis but this does not preclude the use of TCLP analysis.~~

~~*B--These waste codes are not subcategorized into wastewaters and nonwastewaters.~~

~~NA--Not Applicable.~~

(Source: Amended at 19 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, "Treatment Standards for Hazardous Wastes".

~~D, F and K Listed Wastes~~

~~Waste Code~~	~~See Also~~	~~Regulated Hazardous Constituent~~	~~CAS No. for Regulated Hazardous Constituent~~	~~Concentration (mg/l) Wastewaters~~	~~Concentration (mg/kg) Nonwastewaters~~
~~D003 (Reactive cyanides subcategory--based on 35 Ill. Adm. Code 721.123(a)(5))~~					
~~NA~~	~~Cyanides (Total)~~	~~57-12-5~~		~~Res. # 590. C~~	
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.86~~	~~30.~~
~~D004~~	~~Table A~~	~~Arsenic~~	~~7440-38-2~~	~~5.0~~	~~NA~~
~~D005~~	~~Table A~~	~~Barium~~	~~7440-39-3~~	~~100.~~	~~NA~~
~~D006~~	~~Table A~~	~~Cadmium~~	~~7440-43-9~~	~~1.0~~	~~NA~~
~~D007~~	~~Table A~~	~~Chromium (Total)~~	~~7440-47-32~~	~~5.0~~	~~NA~~
~~D008~~	~~Table A~~	~~Lead~~	~~7439-92-1~~	~~5.0~~	~~NA~~
~~D009~~	~~Table A~~	~~Mercury~~	~~7439-97-6~~	~~0.20~~	~~NA~~
~~D010~~	~~Table A~~	~~Selenium~~	~~7782-49-2~~	~~1.0~~	~~NA~~
~~D011~~	~~Table A~~	~~Silver~~	~~7440-22-4~~	~~5.0~~	~~NA~~
~~D012~~	~~Table B~~	~~Endrin~~	~~720-20-8~~	~~NA~~	~~0.13 A~~
~~D013~~	~~Table B~~	~~Lindane~~	~~58-89-9~~	~~NA~~	~~0.066 A~~
~~D014~~	~~Table B~~	~~Methoxychlor~~	~~72-43-5~~	~~NA~~	~~0.18 A~~
~~D015~~	~~Table B~~	~~Toxaphene~~	~~8001-35-1~~	~~NA~~	~~1.3 A~~
~~D016~~	~~Table B~~	~~2,4-D~~	~~94-75-7~~	~~NA~~	~~10.0 A~~
~~D017~~	~~Table B~~	~~2,4,5-TP Silvex~~	~~93-76-5~~	~~NA~~	~~7.9 A~~
~~F001-F005 spent solvents~~					
	~~Acetone~~	~~67-64-1~~	~~0.28~~	~~160.~~	
		~~Benzene~~	~~71-43-2~~	~~0.070~~	~~3.7 A~~
		~~n-Butyl alcohol~~	~~71-36-3~~	~~5.6~~	~~2.6~~

		~~Carbon tetrachloride~~	~~56-23-5~~	~~0.057~~	~~5.6~~
		~~Chlorobenzene~~	~~108-90-7~~	~~0.057~~	~~5.7~~
		~~Cresol (m- and p-isomers)~~		~~0.77~~	~~3.2~~
		~~o-cresol~~		~~0.11~~	~~5.6~~
		~~o-Dichlorobenzene~~	~~95-50-1~~	~~0.088~~	~~6.2~~
		~~Ethyl acetate~~	~~141-7-6~~	~~0.34~~	~~33.~~
		~~Ethyl Benzene~~	~~100-41-4~~	~~0.057~~	~~6.0~~
		~~Ethyl ether~~	~~60-29-7~~	~~0.12~~	~~160.~~
		~~Isobutyl alcohol~~	~~78-83-1~~	~~5.6~~	~~170.~~
		~~Methylene chloride~~	~~75-9-2~~	~~0.089~~	~~33.~~
		~~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~~	~~5.6~~
		~~Toluene~~	~~108-88-3~~	~~0.08~~	~~28.~~
		~~1,1,1-Trichloroethane~~	~~71-55-6~~	~~0.054~~	~~5.6~~
		~~1,1,2-Trichloroethane~~	~~79-00-5~~	~~0.030~~	~~7.6 A~~
		~~Trichloroethylene~~	~~79-01-6~~	~~0.054~~	~~6.6~~
		~~1,1,2-Trichloro-1,2,2-trifluoromethane~~	~~76-13-1~~	~~0.057~~	~~28.~~
		~~Trichloromono-fluoromethane~~	~~75-69-4~~	~~0.02~~	~~33.~~
		~~Xylenes (total)~~		~~0.32~~	~~28.~~
~~F006~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.2~~	~~590.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.86~~	~~30.~~
		~~Cadmium~~	~~7440-43-9~~	~~1.6~~	~~NA~~
		~~Chromium~~	~~7440-47-32~~	~~0.32~~	~~NA~~
		~~Lead~~	~~7439-92-1~~	~~0.040~~	~~NA~~
		~~Nickel~~	~~7440-02-0~~	~~0.44~~	~~NA~~
~~F007~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~590.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.1~~	~~30.~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~0.32~~	~~NA~~
		~~Lead~~	~~7439-92-1~~	~~0.04~~	~~NA~~
		~~Nickel~~	~~7440-02-0~~	~~0.44~~	~~NA~~
~~F008~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~590.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.12~~	~~30.~~
		~~Chromium~~	~~7440-47-32~~	~~0.32~~	~~NA~~
		~~Lead~~	~~7439-92-1~~	~~0.04~~	~~NA~~
		~~Nickel~~	~~7440-02-0~~	~~0.44~~	~~NA~~
~~F009~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~590.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.1~~	~~30.~~
		~~Chromium~~	~~7440-47-32~~	~~0.32~~	~~NA~~
		~~Lead~~	~~7439-92-1~~	~~0.04~~	~~NA~~
		~~Nickel~~	~~7440-02-0~~	~~0.44~~	~~NA~~
~~F010~~	~~NA~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~1.5~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.1~~	~~NA~~
~~F011~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~110.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.1~~	~~9.1~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~0.32~~	~~NA~~
		~~Lead~~	~~7439-92-1~~	~~0.04~~	~~NA~~
		~~Nickel~~	~~7440-02-0~~	~~0.44~~	~~NA~~
~~F012~~	~~Table A~~	~~Cyanides (Total)~~	~~57-12-5~~	~~1.9~~	~~110.~~
		~~Cyanides (Amenable)~~	~~57-12-5~~	~~0.1~~	~~9.1~~
		~~Chromium (Total)~~	~~7440-47-32~~	~~0.32~~	~~NA~~

		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
F019	Table A	Cyanides (Total)	57-12-5	1.2	590. C
		Cyanides (Amenable)	57-12-5	0.86	30. C
		Chromium (Total)	7440-47-32	0.32	NA
F024 (Note: F024 organic standards must be treated via incineration (INCIN))					
Tables A & B	2-Chloro-1,3-butadiene	126-99-8	0.28 A	0.28 A	
		3-Chloropropene	107-05-1	0.28 A	0.28 A
		1,1-Dichloroethane	75-34-3	0.014 A	0.014 A
		1,2-Dichloroethane	107-06-2	0.014 A	0.014 A
		1,2-Dichloropropane	78-87-5	0.014 A	0.014 A
		cis-1,3-Dichloropropene	10061-01-5	0.014 A	0.014 A
		trans-1,3-Dichloropropene	10061-02-6	0.014 A	0.014 A
		Bis(2-ethylhexyl)phthalate	117-81-7	0.036 A	1.8 A
		Hexachloroethane	67-72-1	0.036 A	1.8 A
		Chromium (Total)	7440-47-32	0.35	NA
		Nickel	7440-02-0	0.47	NA
F025 (Light ends subcategory)					
NA	Chloroform	67-66-3	0.046 B	6.2 A	
		1,2-Dichloroethane	107-06-2	0.21 B	6.2 A
		1,1-Dichloroethylene	75-35-4	0.025 B	6.2 A
		Methylene chloride	75-9-2	0.089 B	31. A
		Carbon tetrachloride	56-23-5	0.057 B	6.2 A
		1,1,2-Trichloroethane	79-00-5	0.054 B	6.2 A
		Trichloroethylene	79-01-6	0.054 B	5.6 A
		Vinyl chloride	75-01-4	0.27 B	33. A
F025 (Spent filters or aids and desiccants subcategory)					
NA	Chloroform	67-66-3	0.046 B	6.2 A	
		Methylene chloride	75-9-2	0.089 B	31. A
		Carbon tetrachloride	56-23-5	0.057 B	6.2 A
		1,1,2-Trichloroethane	79-00-5	0.054 B	6.2 A
		Trichloroethylene	79-01-6	0.054 B	5.6 A
		Vinyl chloride	75-01-4	0.27 B	33. A
		Hexachlorobenzene	118-74-1	0.055 B	37. A
		Hexachlorobutadiene	87-68-3	0.055 B	28. A
		Hexachloroethane	67-72-1	0.055 B	30. A
F027	Table A	Acenaphthene	208-96-8	0.059 B	NA
		Anthracene	120-12-7	0.059 B	28. A
		Benzene	71-43-2	0.14 B	14. A
		Benzo(a)anthracene	50-32-8	0.059 B	20. A
		Benzo(a)pyrene	117-81-7	0.061 B	13. A
		Bis(2-ethylhexyl) phthalate	75-15-0	0.28 B	7.3 A
		Chrysene	218-01-9	0.059 B	15. A
		Di-n-butyl phthalate	106-67-9	0.057 B	3.6 A
		Ethylbenzene	100-41-4	0.057 B	14. A
		Fluorene	86-73-7	0.059 B	NA
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Pyrene	129-00-0	0.067 B	36. A

		Toluene	108-88-3	0.08 B	14. A
		Xylene(s)		0.32 B	22. A
		Cyanides (Total)	57-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
F038	Table A	Benzene	71-43-2	0.14 B	14. A
		Benzo(a)pyrene	50-32-8	0.061 B	12. A
		Bis(2-ethylhexyl) phthalate	117-81-7	0.28 B	7.3 A
		Chrysene	218-01-9	0.059 B	15. A
		Di-n-butyl phthalate	84-74-2	0.057 B	3.6 A
		Ethylbenzene	100-41-4	0.057 B	14. A
		Fluorene	86-73-7	0.059 B	NA
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Pyrene	129-00-0	0.067 B	36. A
		Toluene	108-88-3	0.080 B	14. A
		Xylene(s)		0.32 B	22. A
		Cyanides (Total)	57-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
F039 (and D001 and D002 wastes prohibited under Section 728.137)					
Tables A & B	Acetone	67-64-1	0.28 B	160. A	
		Acenaphthalene	208-96-8	0.059 B	3.4 A
		Acenaphthene	83-32-9	0.059 B	4.0 A
		Acetonitrile	75-05-8	0.17 B	NA
		Acetophenone	96-86-2	0.010 B	9.7 A
		2-Acetylaminofluorene	53-96-3	0.059 B	140. A
		Acrolein	107-02-8	0.29 B	NA
		Acrylonitrile	107-13-1	0.24 B	84. A
		Aldrin	309-00-2	0.021 B	0.068 A
		4-Aminobiphenyl	92-67-1	0.13 B	NA
		Aniline	62-53-3	0.81 B	14. A
		Anthracene	120-12-7	0.059 B	4.0 A
		Aramite	140-57-8	0.36 B	NA
		Aroclor 1016	12674-11-2	0.013 B	0.92 A
		Aroclor 1221	11104-28-2	0.014 B	0.92 A
		Aroclor 1232	11141-16-5	0.013 B	0.92 A
		Aroclor 1242	53469-21-9	0.017 B	0.92 A
		Aroclor 1248	12672-29-6	0.013 B	0.92 A
		Aroclor 1254	11097-69-1	0.014 B	1.8 A
		Aroclor 1260	11096-82-5	0.014 B	1.8 A
		alpha-BHC	319-84-6	0.00014 B	0.066 A
		beta-BHC	319-85-7	0.00014 B	0.066 A
		delta-BHC	319-86-8	0.023 B	0.066 A
		gamma-BHC	58-89-9	0.0017 B	0.066 A
		Benzene	71-43-2	0.14 B	36. A
		Benzo(a)anthracene	56-55-3	0.059 B	8.2 A
		Benzo(b)fluoranthene	205-99-2	0.055 B	3.4 A
		Benzo(k)fluoranthene	207-08-9	0.059 B	3.4 A
		Benzo(g,h,i)perylene	191-24-2	0.0055 B	1.5 A
		Benzo(a)pyrene	50-32-8	0.061 B	8.2 A
		Bromodichloromethane	75-27-4	0.35 B	15. A
		Bromoform (Tribromomethane)	75-25-2	0.63 B	15. A
		Bromomethane (methyl bromide)	74-63-9	0.11 B	15. A

4-Bromophenyl phenyl ether	101-55-3	0.055 B	15. A
n-Butyl alcohol	71-36-3	5.6 B	2.6 A
Butyl benzyl phthalate	85-68-7	0.017 B	7.9 A
2-sec-Butyl-4,6-dinitro-phenol	88-85-7	0.066 B	2.5 A
Carbon tetrachloride	56-23-5	0.057 B	5.6 A
Carbon disulfide	75-15-0	0.014 B	NA
Chlordane	57-74-9	0.0033 B	0.13 A
p-Chloroaniline	106-47-8	0.46 B	15. A
Chlorobenzene	108-90-7	0.057 B	5.7 A
Chlorobenzilate	510-15-6	0.10 B	NA
2-Chloro-1,3-butadiene	126-99-8	0.057 B	NA
Chlorodibromomethane	124-48-1	0.057 B	16. A
Chloroethane	75-00-3	0.27 B	6.0 A
Bis(2-Chloroethoxy)methane	111-91-1	0.036 B	7.2 A
bis(2-Chloroethyl) ether	111-44-4	0.033 B	7.2 A
Chloroform	67-66-3	0.046 B	5.6 A
Bis(2-Chloroisopropyl) ether	39638-32-9	0.055 B	7.2 A
p-Chloro-m-cresol	59-50-7	0.018 B	14. A
Chloromethane (Methyl chloride)	74-87-3	0.19 B	33. A
2-Chloronaphthalene	91-8-7	0.055 B	5.6 A
2-Chlorophenol	95-57-8	0.044 B	5.7 A
3-Chloropropene	107-05-1	0.036 B	28. A
Chrysene	218-01-9	0.059 B	8.2 A
o-Cresol	95-48-7	0.11 B	5.6 A
Cresol (m- and p-isomers)		0.77 B	3.2 A
Cyclohexanone	108-94-1	0.36 B	NA
1,2-Dibromo-3-chloro-propane	96-12-8	0.11 B	15. A
1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.028 B	15. A
Dibromomethane	74-95-3	0.11 B	15. A
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	0.72 B	10. A
o,p'-DDD	53-19-0	0.023 B	0.087 A
p,p'-DDD	72-54-8	0.023 B	0.087 A
o,p'-DDE	3424-82-6	0.031 B	0.087 A
p,p'-DDE	72-55-9	0.031 B	0.087 A
o,p'-DDT	789-02-6	0.0039 B	0.087 A
p,p'-DDT	50-29-3	0.0039 B	0.087 A
Dibenzo(a,h)anthracene	53-70-3	0.055 B	8.2 A
Dibenzo(a,e)pyrene	192-65-4	0.061 A	NA
m-Dichlorobenzene	541-73-1	0.036 B	6.2 A
o-Dichlorobenzene	95-50-1	0.088 B	6.2 A
p-Dichlorobenzene	106-46-7	0.090 B	6.2 A
Dichlorodifluoromethane	75-71-8	0.23 B	7.2 A
1,1-Dichloroethane	75-34-3	0.059 B	7.2 A
1,2-Dichloroethane	107-06-2	0.21 B	7.2 A
1,1-Dichloroethylene	75-35-4	0.025 B	33. A
trans-1,2-Dichloroethylene		0.054 B	33. A
2,4-Dichlorophenol	120-83-2	0.044 B	14. A
2,6-Dichlorophenol	87-65-0	0.044 B	14. A
1,2-Dichloropropane	78-87-5	0.85 B	18. A
cis-1,3-Dichloropropene	10061-01-5	0.036 B	18. A
trans-1,3-Dichloropropene	10061-02-6	0.036 B	18. A
Dieldrin	60-57-1	0.017 B	0.13 A
Diethyl phthalate	84-66-2	0.20 B	28. A
2,4-Dimethyl phenol	105-67-9	0.036 B	14. A
Dimethyl phthalate	131-11-3	0.047 B	28. A
Di-n-butyl phthalate	84-74-2	0.057 B	28. A

1,4-Dinitrobenzene	100-25-4	0.32 B	2.3 A
4,6-Dinitro-o-cresol	534-52-1	0.28 B	160. A
2,4-Dinitrophenol	51-28-5	0.12 B	160. A
2,4-Dinitrotoluene	121-14-2	0.32 B	140. A
2,6-Dinitrotoluene	606-20-2	0.55 B	28. A
Di-n-octyl phthalate	117-84-0	0.017 B	28. A
Di-n-propylnitrosoamine	621-64-7	0.40 B	14. A
Diphenylamine	122-39-4	0.52 B	NA
1,2-Diphenyl hydrazine	122-66-7	0.087 B	NA
Diphenylnitrosoamine	621-64-7	0.40 B	NA
1,4-Dioxane	123-91-1	0.12 B	170. A
Disulfoton	298-04-4	0.017 B	6.2 A
Endosulfan I	939-98-8	0.023 B	0.066 A
Endosulfan II	33213-6-5	0.029 B	0.13 A
Endosulfan sulfate	1031-07-8	0.029 B	0.13 A
Endrin	72-20-8	0.0028 B	0.13 A
Endrin aldehyde	7421-93-4	0.025 B	0.13 A
Ethyl acetate	141-78-6	0.34 B	33. A
Ethyl cyanide	107-12-0	0.24 B	360. A
Ethyl benzene	100-41-4	0.057 B	6.0 A
Ethyl ether	60-29-7	0.12 B	160. A
Bis(2-Ethylhexyl) phthalate	117-81-7	0.28 B	28. A
Ethyl methacrylate	97-63-2	0.14 B	160. A
Ethylene oxide	75-21-8	0.12 B	NA
Famphur	52-85-7	0.017 B	15. A
Fluoranthene	206-44-0	0.068 B	8.2 A
Fluorene	86-73-7	0.059 B	4.0 A
Fluorotrichloromethane	75-69-4	0.020 B	33. A
Heptachlor	76-44-8	0.0012 B	0.066 A
Heptachlor epoxide	1024-57-3	0.016 B	0.066 A
Hexachlorobenzene	118-74-1	0.055 B	37. A
Hexachlorobutadiene	87-68-3	0.055 B	28. A
Hexachlorocyclopentadiene	77-47-4	0.057 B	3.6 A
Hexachlorodibenzofurans		0.000063 B	0.001 A
Hexachlorodibenzo-p-dioxins		0.000063 B	0.001 A
Hexachloroethane	67-72-1	0.055 B	28. A
Hexachloropropene	1888-71-7	0.035 B	28. A
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055 B	8.2 A
Iodomethane	74-88-4	0.019 B	65. A
Isobutanol	78-83-1	5.6 B	170. A
Isodrin	465-73-6	0.021 B	0.066 A
Isosafrole	120-58-1	0.081 B	2.6 A
Kepone	143-50-0	0.0011 B	0.13 A
Methacrylonitrile	126-98-7	0.24 B	84. A
Methanol	67-56-1	5.6 B	NA
Methapyrilene	91-80-5	0.081 B	1.5 A
Methoxychlor	72-43-5	0.25 B	0.18 A
3-Methylcholanthrene	56-49-5	0.0055 B	15. A
4,4-Methylene-bis-(2-chloroaniline)	101-14-4	0.50 B	25. A
Methylene chloride	75-09-2	0.089 B	33. A
Methyl ethyl ketone	78-93-3	0.28 B	36. A
Methyl isobutyl ketone	108-10-1	0.14 B	33. A
Methyl methacrylate	80-62-6	0.14 B	160. A
Methyl methanesulfonate	66-27-3	0.018 B	NA
Methyl parathion	298-00-1	0.014 B	4.6 A
Naphthalene	91-20-3	0.059 B	3.1 A
2-Naphthylamine	91-59-8	0.52 B	NA
p-Nitroaniline	100-01-6	0.028 B	28. A

Nitrobenzene	98-95-3	0.068 B	14. A
5-Nitro-o-toluidine	99-55-8	0.32 B	28. A
4-Nitrophenol	100-02-7	0.12 B	29. A
N-Nitrosodiethylamine	55-18-5	0.40 B	28. A
N-Nitrosodimethylamine	62-75-9	0.40 B	NA
N-Nitroso-di-n-butylamine	924-16-3	0.40 B	17. A
N-Nitrosomethylethylamine	105-95-5	0.40 B	2.3 A
N-Nitrosomorpholine	59-89-2	0.40 B	2.3 A
N-Nitrosopiperidine	100-75-4	0.013 B	35. A
N-Nitrosopyrrolidine	930-55-2	0.013 B	35. A
Parathion	56-38-2	0.014 B	4.6 A
Pentachlorobenzene	608-93-5	0.055 B	37. A
Pentachlorodibenzo-furans		0.000063 B	0.001 A
Pentachlorodibenzo-p-dioxins		0.000063 B	0.001 A
Pentachloronitrobenzene	82-68-8	0.055 B	4.8 A
Pentachlorophenol	87-86-5	0.089 B	7.4 A
Phenacetin	62-44-2	0.081 B	16. A
Phenanthrene	85-01-8	0.059 B	3.1 A
Phenol	108-95-2	0.039 B	6.2 A
Phorate	298-02-2	0.021 B	4.6 A
Phthalic anhydride	85-44-9	0.69 B	NA
Pronamide	23950-58-5	0.093 B	1.5 A
Pyrene	129-00-0	0.067 B	8.2 A
Pyridine	110-86-1	0.014 B	16. A
Safrole	94-59-7	0.081 B	22. A
Silvex (2,4,5-TP)	93-72-1	0.72 B	7.9 A
2,4,5-T	93-76-5	0.72 B	7.9 A
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055 B	19. A
Tetrachlorodibenzofurans		0.000063 B	0.001 A
Tetrachlorodibenzo-p-dioxins		0.000063 B	0.001 A
1,1,1,2-Tetrachloroethane	630-20-6	0.057 B	42. A
1,1,2,2-Tetrachloroethane	79-34-6	0.057 B	42. A
Tetrachloroethylene	127-18-4	0.056 B	5.6 A
2,3,4,6-Tetrachlorophenol	58-90-2	0.030 B	37. A
Toluene	108-88-3	0.080 B	28. A
Toxaphene	8001-35-1	0.0095 B	1.3 A
1,2,4-Trichlorobenzene	120-82-1	0.055 B	19. A
1,1,1-Trichloroethane	71-55-6	0.054 B	5.6 A
1,1,2-Trichloroethane	79-00-5	0.054 B	5.6 A
Trichloroethylene	79-01-6	0.054 B	5.6 A
2,4,5-Trichlorophenol	95-95-4	0.18 B	37. A
2,4,6-Trichlorophenol	88-06-2	0.035 B	37. A
1,2,3-Trichloropropane	96-18-4	0.85 B	28. A
1,1,2-Trichloro-1,2,2-tri-fluoroethane	76-13-1	0.057 B	28. A
Tris(2,3-dibromopropyl)-phosphate	126-72-7	0.11 B	NA
Vinyl chloride	75-01-4	0.27 B	33. A
Xylene(s)		0.32 B	28. A
Cyanides (Total)	57-12-5	1.2 B	1.8 A
Fluoride	16964-48-8	35. B	NA
Sulfide	8496-25-8	14. B	NA
Antimony	7440-36-0	1.9 B	NA
Arsenic	7440-38-2	1.4 B	NA
Barium	7440-39-3	1.2 B	NA
Beryllium	7440-41-7	0.82 B	NA
Cadmium	7440-43-9	0.20 B	NA
Chromium (Total)	7440-47-32	0.37 B	NA

		Copper	7440-50-8	1.3 B	NA
		Lead	7439-92-1	0.28 B	NA
		Mercury	7439-97-6	0.15 B	NA
		Nickel	7440-02-2	0.55 B	NA
		Selenium	7782-49-2	0.82 B	NA
		Silver	7440-22-4	0.29 B	NA
		Thallium	7440-28-0	1.4 B	NA
		Vanadium	7440-62-2	0.042 B	NA
		Zinc	7440-66-0	1.0 B	NA
K001	Table A	Naphthalene	91-20-3	0.031 A	1.5 A
		Pentachlorophenol	87-86-5	0.031 A	1.5 A
		Phenanthrene	85-01-8	0.18 A	7.4 A
		Pyrene	129-00-0	0.028 A	1.5 A
		Toluene	108-88-3	0.028 A	28. A
		Xylenes (Total)		0.032 A	33. A
		Lead	7439-92-1	0.037 A	NA
K002	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
K003	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
K004	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
K005	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
		Cyanides (Total)	57-12-5	0.74 B	-D
K006	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
K007	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA-D
		Cyanides (Total)	57-12-5	0.74 B	
K008	Table A	Chromium (Total)	7440-47-32	0.9 B	NA
		Lead	7439-92-1	3.4 B	NA
K009	NA	Chloroform	67-66-3	0.1	6.0 A
K010	NA	Chloroform	67-66-3	0.1	6.0
K011	NA	Acetonitrile	75-05-8	38.	1.8
		Acrylonitrile	107-13-1	0.06	1.4
		Acrylamide	79-06-1	19.	23.
		Benzene	71-43-2	0.02	0.03
		Cyanide (Total)	57-12-5	21.	57.
K013	NA	Acetonitrile	75-05-8	38.	1.8 A
		Acrylonitrile	107-13-1	0.06	1.4 A
		Acrylamide	79-06-1	19.	23. A
		Benzene	71-43-2	0.02	0.03 A
		Cyanide (Total)	57-12-5	21.	57.
K014	NA	Acetonitrile	75-05-8	38.	1.8 A
		Acrylonitrile	107-13-1	0.06	1.4 A
		Acrylamide	79-06-1	19.	23. A
		Benzene	71-43-2	0.02	0.03 A
		Cyanide (Total)	57-12-5	21.	57.

K015	Table A	Anthracene	120-12-7	0.059	3.4 A
		Benzal Chloride	98-87-3	0.28	6.2 A
		Sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene	207-08-9	0.055	3.4
		Phenanthrene	85-01-8	0.059	3.4 A
		Toluene	108-88-3	0.08	6.0 A
		Chromium (Total)	7440-47-32	0.32	NA
		Nickel	7440-02-0	0.44	NA
K016	NA	Hexachlorobenzene	118-74-1	0.055	28. A
		Hexachlorobutadiene	87-68-3	0.055	5.6 A
		Hexachlorocyclopentadiene	77-47-4	0.057	5.6 A
		Hexachloroethane	67-72-1	0.055	28. A
		Tetrachloroethene	127-18-4	0.056	6.0 A
K017	NA	1,2-Dichloropropane	78-87-5	0.85 A B	18. A
		1,2,3-Trichloropropane	96-18-4	0.85 A B	28. A
		Bis(2-chloroethyl)ether	111-44-4	0.033 A B	7.2 A
K018	NA	Chloroethane	76-00-3	0.27	6.0 A
		Chloromethane	74-87-3	0.19	NA
		1,1-Dichloroethane	75-34-3	0.059	6.0 A
		1,2-Dichloroethane	107-06-2	0.21	6.0 A
		Hexachlorobenzene	118-74-1	0.055	28. A
		Hexachlorobutadiene	87-68-3	0.055	5.6 A
		Pentachloroethane	76-01-7	NA	5.6
		1,1,1-Trichloroethane	71-55-6	0.054	6.0
		Hexachloroethane	67-72-1	0.055	28. A
K019	NA	Bis(2-chloroethyl) ether	111-44-4	0.033	5.6 A
		Chlorobenzene	108-90-7	0.057	6.0 A
		Chloroform	67-66-3	0.046	6.0 A
		p-Dichlorobenzene	106-46-7	0.09	NA
		1,2-Dichloroethane	107-06-2	0.21	6.0 A
		Fluorene	86-73-7	0.059	NA
		Hexachloroethane	67-72-1	0.055	28. A
		Naphthalene	91-20-3	0.059	5.6 A
		Phenanthrene	85-01-8	0.059	5.6 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
		Tetrachloroethene	127-18-4	0.056	6.0 A
		1,2,4-Trichlorobenzene	120-82-1	0.055	19. A
		1,1,1-Trichloroethane	71-55-6	0.054	6.0 A
K020	NA	1,2-Dichloroethane	106-93-4	0.21	6.0 A
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	5.6 A
		Tetrachloroethene	127-18-4	0.056	6.0 A
K021	Table A	Chloroform	67-66-3	0.046 B	6.2 A
		Carbon tetrachloride	56-23-5	0.057 B	6.2 A
		Antimony	7440-36-0	0.60 B	6.2 A
K022	Table A	Toluene	108-88-3	0.080 B	0.034 A
		Acetophenone	96-86-2	0.010	19. A
		Diphenylamine	22-39-4	0.52 B	NA
		Diphenylnitrosamine	86-30-6	0.40 B	NA
		Sum of Diphenylamine and Diphenylnitrosamine		NA	13. A
		Phenol	108-95-2	0.039	12. A
		Chromium (Total)	7440-47-32	0.35	NA
		Nickel	7440-02-0	0.47	NA

K023	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	0.069	28. A
K024	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	0.069	28. A
K028	Table A	1,1-Dichloroethane trans-1,2-Dichloroethane	75-34-3	0.059 0.054	6.0 A 6.0 A
		Hexachlorobutadiene	87-68-3	0.055	5.6 A
		Hexachloroethane	67-72-1	0.055	28. A
		Pentachloroethane	76-01-7	NA	5.6 A
		1,1,1,2-Tetrachloroethane	630-20-6	0.057	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	5.6 A
		1,1,1,-Trichloroethane	71-55-6	0.054	6.0 A
		1,1,2-Trichloroethane	79-00-5	0.054	6.0 A
		Tetrachloroethylene	127-18-4	0.056	6.0 A
		Cadmium	7440-43-9	6.4	NA
		Chromium (Total)	7440-47-32	0.35	NA
		Lead	7439-92-1	0.037	NA
		Nickel	7440-02-0	0.47	NA
K029	NA	Chloroform	67-66-3	0.46	6.0 A
		1,2-Dichloroethane	107-06-2	0.21	6.0 A
		1,1-Dichloroethylene	75-35-4	0.025	6.0 A
		1,1,1-Trichloroethane	71-55-6	0.054	6.0 A
		Vinyl chloride	75-01-4	0.27	6.0 A
K030	NA	o-Dichlorobenzene	95-50-1	0.088	NA
		p-Dichlorobenzene	106-46-7	0.09	NA
		Hexachlorobutadiene	87-68-3	0.055	5.6 A
		Hexachloroethane	67-72-1	0.055	28. A
		Hexachloropropene	1888-71-7	NA	19. A
		Pentachlorobenzene	608-93-5	NA	28. A
		Pentachloroethane	76-01-7	NA	5.6 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14. A
		Tetrachloroethene	127-18-4	0.056	6.0 A
		1,2,4-Trichlorobenzene	120-82-1	0.055	19. A
K031	Table A	Arsenic	7440-38-2	0.79	NA
K032	NA	Hexachlorocyclopentadiene	77-47-4	0.057 B	24. A
		Chlordane	57-74-9	0.0033 B	0.26 A
		Heptachlor	76-44-8	0.0012 B	0.066 A
		Heptachlor epoxide	1024-57-3	0.016 B	0.066 A
K033	NA	Hexachlorocyclopentadiene	77-47-4	0.057 B	2.4 A
K034	NA	Hexachlorocyclopentadiene	77-47-4	0.057 B	2.4 A
K035	NA	Acenaphthene	83-32-9	NA	3.4 A
		Anthracene	120-12-7	NA	3.4 A
		Benz(a)anthracene	56-55-3	0.59 B	3.4 A
		Benzo(a)pyrene	50-32-8	NA	3.4 A
		Chrysene	218-01-9	0.059 B	3.4 A
		Dibenz(a,h)anthracene	53-70-3	NA	3.4 A
		Fluoranthene	206-44-0	0.068 B	3.4 A
		Fluorene	86-73-7	NA	3.4 A
		Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4 A
		Cresols (m- and p-isomers)		0.77 B	NA

		Naphthalene	91-20-3	0.059 B	3.4 A
		o-Cresol	95-48-7	0.11 B	NA
		Phenanthrene	85-01-8	0.059 B	3.4 A
		Phenol	108-95-2	0.039	NA
		Pyrene	129-00-0	0.067 B	8.2 A
K036	NA	Disulfoton	298-04-4	0.025 B	0.1 A
K037	NA	Disulfoton	298-04-4	0.025 B	0.1 A
		Toluene	108-88-3	0.080 B	28. A
K038	NA	Phorate	298-02-2	0.025	0.1 A
K040	NA	Phorate	298-02-2	0.025	0.1 A
K041	NA	Toxaphene	8001-35-1	0.0095 B	2.6 A
K042	NA	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055 B	4.4 A
		o-Dichlorobenzene	95-50-1	0.088 B	4.4 A
		p-Dichlorobenzene	106-46-7	0.090 B	4.4 A
		Pentachlorobenzene	608-93-5	0.055 B	4.4 A
		1,2,4-Trichlorobenzene	120-82-1	0.055 B	4.4 A
K043	NA	2,4-Dichlorophenol	120-83-2	0.044	0.38 A
		2,6-Dichlorophenol	187-65-0	0.044	0.34 A
		2,4,5-Trichlorophenol	95-95-4	0.18	8.2 A
		2,4,6-Trichlorophenol	88-06-2	0.035	7.6 A
		Tetrachlorophenols (Total)		NA	0.68 A
		Pentachlorophenol	87-86-5	0.089	1.9 A
		Tetrachloroethene	79-01-6	0.056	1.7 A
		Hexachlorodibenzo-p-dioxins		0.000063	0.001 A
		Hexachlorodibenzofurans		0.000063	0.001 A
		Pentachlorodibenzo-p-dioxins		0.000063	0.001 A
		Pentachlorodibenzo-furans		0.000063	0.001 A
		Tetrachlorodibenzo-p-dioxins		0.000063	0.001 A
		Tetrachlorodibenzo-furans		0.000063	0.001 A
K046	Table A	Lead	7439-92-1	0.037	NA
K048	Table A	Benzene	71-43-2	0.14 B	14. A
		Benzo(a)pyrene	50-32-8	0.061 B	12. A
		Bis(2-ethylhexyl) phthalate	117-81-7	0.28 B	7.3 A
		Chrysene	218-01-9	0.059 B	15. A
		Di-n-butylphthalate	84-74-2	0.057 B	3.6 A
		Ethylbenzene	100-41-4	0.057 B	14. A
		Fluorene	86-73-7	0.059 B	NA
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Pyrene	129-00-0	0.067 B	36. A
		Toluene	108-88-3	0.080 B	14. A
		Xylene(s)		0.32 B	22. A
		Cyanides (Total)	57-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.72	NA
		Lead	7439-92-1	0.037	NA
K049	Table A	Anthracene	120-12-7	0.059 B	28. A
		Benzene	71-43-2	0.14 B	14. A

		Benzo(a)pyrene	117-81-7	0.061 B	12. A
		Bis(2-ethylhexyl) phthalate	75-150-0	0.28 B	7.3 A
		Carbon disulfide	75-15-0	0.014 B	NA
		Chrysene	2218-01-9	0.059 B	15. A
		2,4-Dimethyl phenol	105-67-9	0.036 B	NA
		Ethylbenzene	100-41-4	0.057 B	14. A
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Pyrene	129-00-0	0.067 B	36. A
		Toluene	108-88-3	0.08 B	14. A
		Xylene(s)		0.32 B	22. A
		Cyanides (Total)	56-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
K050	Table A	Lead	7439-92-1	0.037	NA
		Benzo(a)pyrene	50-32-8	0.061 B	12. A
		Phenol	108-95-2	0.039 B	3.6 A
		Cyanides (Total)	57-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-29-1	0.037	NA
K051	Table A	Acenaphthene	208-96-8	0.059 B	NA
		Anthracene	120-12-7	0.059 B	28. A
		Benzene	71-43-2	0.14 B	14. A
		Benzo(a) anthracene	117-81-7	0.059 B	20. A
		Benzo(a)pyrene	117-81-7	0.061 B	12. A
		Bis(2-ethylhexyl) phthalate	75-15-0	0.28 B	7.3 A
		Chrysene	2218-01-9	0.059 B	15. A
		Di-n-butyl phthalate	105-67-9	0.057 B	3.6 A
		Ethylbenzene	100-41-4	0.057 B	14. A
		Fluorene	86-73-7	0.059 B	NA
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Pyrene	129-00-0	0.067 B	36. A
		Toluene	108-88-3	0.08 B	14. A
		Xylene(s)		0.32 B	22. A
		Cyanides (Total)	57-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K052	Table A	o-Cresol	95-48-7	0.11 B	6.2 A
		p-Cresol	106-44-5	0.77 B	6.2 A
		2,4-Dimethylphenol	105-67-9	0.036 B	NA
		Ethylbenzene	100-41-4	0.057 B	14. A
		Naphthalene	91-20-3	0.059 B	42. A
		Phenanthrene	85-01-8	0.059 B	34. A
		Phenol	108-95-2	0.039 B	3.6 A
		Toluene	108-88-3	0.08 B	14. A
		Xylenes		0.32 B	22. A
		Cyanides (Total)	56-12-5	0.028 A	1.8 A
		Chromium (Total)	7440-47-32	0.2	NA
		Lead	7439-92-1	0.037	NA
K060	NA	Benzene	71-43-2	0.17 B	0.071 A
		Benzo(a)pyrene	50-32-8	0.035 B	3.6 A
		Naphthalene	91-20-3	0.028 B	3.4 A

		Phenol	108-95-2	0.042 B	3.4 A
		Cyanides (Total)	57-12-5	1.9	1.2
K061	Table A	Cadmium	7440-43-9	1.61	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
		Nickel	7440-02-0	0.44	NA
K062	Table A	Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.04	NA
		Nickel	7440-02-0	0.44	NA
K069	Tables A & D	Cadmium	7440-43-9	1.6	NA
		Lead	7439-92-1	0.51	NA
K071	Table A	Mercury	7439-97-6	0.030	NA
K073	NA	Carbon tetrachloride	58-23-5	0.057 B	6.2 A
		Chloroform	67-66-3	0.046 B	6.2 A
		Hexachloroethane	67-72-1	0.055 B	30. A
		Tetrachloroethene	127-18-4	0.056 B	6.2 A
		1,1,1-Trichloroethane	71-55-6	0.054 B	6.2 A
K083	Table A	Benzene	71-43-2	0.14 B	6.6 A
		Aniline	62-53-3	0.81 B	14. A
		Diphenylamine	22-39-4	0.52 B	NA
		Diphenylnitrosamine	86-30-6	0.40 B	NA
		Sum of Diphenylamine and Diphenylnitrosamine		NA	14. A
		Nitrobenzene	98-95-3	0.068 B	14. A
		Phenol	108-95-2	0.039	5.6 A
		Cyclohexanone	108-94-1	0.36	30. A
		Nickel	7440-02-0	0.47	NA
K084	NA	Arsenic	7440-38-2	0.79	NA
K085	NA	Benzene	71-43-2	0.14 B	4.4 A
		Chlorobenzene	108-90-7	0.057 B	4.4 A
		o-Dichlorobenzene	95-50-1	0.088 B	4.4 A
		m-Dichlorobenzene	541-73-1	0.036 B	4.4 A
		p-Dichlorobenzene	106-46-7	0.090 B	4.4 A
		1,2,4-Trichlorobenzene	120-82-1	0.055 B	4.4 A
		1,2,4,5-Tetrachlorobenzene	95-94-3	0.055 B	4.4 A
		Pentachlorobenzene	608-93-5	0.055	4.4 A
		Hexachlorobenzene	118-74-1	0.055 B	4.4 A
		Aroclor 1016	12674-11-2	0.013 B	0.9 A
		Aroclor 1221	11104-28-2	0.014 B	0.92 A
		Aroclor 1232	11141-16-5	0.013 B	0.92 A
		Aroclor 1242	53469-21-9	0.017 B	0.92 A
		Aroclor 1248	12672-29-6	0.013 B	0.92 A
		Aroclor 1254	11097-69-1	0.014 B	1.8 A
		Aroclor 1260	11096-82-5	0.014 B	1.8 A
K086	Table A	Acetone	67-64-1	0.28	160. A
		Acetophenone	96-86-2	0.010	9.7 A
		Bis(2-ethylhexyl)phthalate	117-81-7	0.28 B	28. A
		n-Butyl alcohol	71-36-3	5.6	2.6 A
		Butylbenzylphthalate	85-68-7	0.017 B	7.9 A
		cyclohexanone	108-94-1	0.36	NA
		1,2-Dichlorobenzene	95-50-1	0.088	6.0 A
		Diethyl phthalate	84-66-2	0.20 B	28. A

		Dimethyl phthalate	131-11-3	0.047 B	28. A
		Di-n-butyl phthalate	84-74-2	0.057 B	28. A
		Di-n-octyl phthalate	117-84-0	0.017 B	28. A
		Ethyl acetate	141-78-6	0.34 B	33. A
		Ethylbenzene	100-41-4	0.057 B	6.0 A
		Methanol	67-56-1	5.6 B	NA
		Methyl isobutyl ketone	108-10-1	0.14	33. A
		Methyl ethyl ketone	78-93-3	0.28	36. A
		Methylene chloride	75-09-2	0.089 B	33. A
		Naphthalene	91-20-3	0.059 B	3.1 A
		Nitrobenzene	98-95-3	0.068 B	14. A
		Toluene	108-88-3	0.080 B	28. A
		1,1,1-Trichloroethane	71-55-6	0.054 B	5.6 A
		Trichloroethylene	79-01-6	0.054 B	5.6 A
		Xylene(s) (Total)		0.32 B	28. A
		Cyanides (Total)	57-12-5	1.9	1.5
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.037	NA
K087	Table A	Acenaphthalene	208-96-8	0.059 B	3.4
		Benzene	71-43-2	0.14 B	0.071 A
		Chrysene	218-01-9	0.059 B	3.4 A
		Fluoranthene	206-44-0	0.068 B	3.4 A
		Indeno (1,2,3-cd) pyrene	193-39-5	0.0055 B	3.4 A
		Naphthalene	91-20-3	0.059 B	3.4 A
		Phenanthrene	85-01-8	0.059 B	3.4 A
		Toluene	108-88-3	0.08 B	0.65 A
		Xylenes		0.32 B	0.07 A
		Lead	7439-92-1	0.037	NA
K093	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	0.069	28. A
K094	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	0.069	28. A
K095	NA	1,1,1,2-Tetrachloroethane	630-20-6	0.057	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	5.6 A
		Tetrachloroethene	127-18-4	0.056	6.0 A
		1,1,2-Trichloroethane	79-00-5	0.054	6.0 A
		Trichloroethylene	79-01-6	0.054	5.6 A
		Hexachloroethane	67-72-1	0.055	28. A
		Pentachloroethane	76-01-7	0.055	5.6 A
K096	NA	1,1,1,2-Tetrachloroethane	630-20-6	0.057	5.6 A
		1,1,2,2-Tetrachloroethane	79-34-6	0.057	5.6 A
		Tetrachloroethene	127-18-4	0.056	6.0 A
		1,1,2-Trichloroethane	79-00-5	0.054	6.0 A
		Trichloroethene (Trichloroethylene)	79-01-6	0.054	5.6 A
		1,3-Dichlorobenzene	541-73-1	0.036	5.6 A
		Pentachloroethane	76-01-7	0.055	5.6 A
		1,2,4-Trichlorobenzene	120-82-1	0.055	19. A
K097	NA	Hexachlorocyclopentadiene	77-47-4	0.057 B	2.4
		Chlordane	57-74-9	0.0033 B	0.26 A
		Heptachlor	76-44-8	0.0012 B	0.066 A
		Heptachlor epoxide	1024-57-3	0.016 B	0.066 A
K098	NA	Toxaphene	8001-35-1	0.0095 B	2.6 A

K099	NA	2,4-Dichlorophenoxyacetic acid	94-75-7	1.0 A	1.0 A
		Hexachlorodibenzo-p-dioxins		0.001 A	0.001 A
		Hexachlorodibenzofurans		0.001 A	0.001 A
		Pentachlorodibenzo-p-dioxins		0.001 A	0.001 A
		Pentachlorodibenzofurans		0.001 A	0.001 A
		Tetrachlorodibenzo-p-dioxins		0.001 A	0.001 A
		Tetrachlorodibenzofurans		0.001 A	0.001 A
K100	Table A	Cadmium	7440-43-9	1.6	NA
		Chromium (Total)	7440-47-32	0.32	NA
		Lead	7439-92-1	0.51	NA
K101	NA	o-Nitroaniline		0.27 A	14. A
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K102	Table A	o-Nitrophenol		0.028 A	13. A
		Arsenic	7440-38-2	0.79	NA
		Cadmium	7440-43-9	0.24	NA
		Lead	7439-92-1	0.17	NA
		Mercury	7439-97-6	0.082	NA
K103	NA	Aniline	62-53-3	4.5 A	5.6
		Benzene	71-43-2	0.15 A	6.0 A
		2,4-Dinitrophenol	51-28-5	0.61 A	5.6 A
		Nitrobenzene	98-95-3	0.073 A	5.6 A
		Phenol	108-95-2	1.4 A	5.6 A
K104	NA	Aniline	62-53-3	4.5 A	5.6 A
		Benzene	71-43-2	0.15 A	6.0 A
		2,4-Dinitrophenol	51-28-5	0.61 A	5.6 A
		Nitrobenzene	98-95-3	0.073 A	5.6 A
		Phenol	108-95-2	1.4 A	5.6 A
		Cyanides (Total)	57-12-5	2.7	1.8 A
K105	NA	Benzene	71-43-2	0.14	4.4 A
		Chlorobenzene	108-90-7	0.057	4.4 A
		o-Dichlorobenzene	95-50-1	0.088	4.4 A
		p-Dichlorobenzene	106-46-7	0.090	4.4 A
		2,4,5-Trichlorophenol	95-95-4	0.18	4.4 A
		2,4,6-Trichlorophenol	88-06-2	0.035	4.4 A
		2-Chlorophenol	95-57-8	0.044	4.4 A
		Phenol	108-95-2	0.039	4.4 A
K106	Tables A & D	Mercury	7439-97-6	0.030	NA
K115	Table A	Nickel	7440-02-0	0.47	NA
K111	NA	2,4-Dinitrotoluene	121-14-2	0.32	140. A
		2,6-Dinitrotoluene	606-20-2	0.55	28. A
K117	NA	Ethylene dibromide	106-93-4	0.028	15. A
		Methyl bromide	74-83-9	0.11	15. A
		Chloroform	67-66-3	0.046	5.6 A

K118	NA	Ethylene dibromide	106-93-4	0.028	15. A
		Methyl bromide	74-83-9	0.11	15. A
		Chloroform	67-66-3	0.046	5.6 A
K131	NA	Methyl bromide	74-83-9	0.11	15. A
K132	NA	Methyl bromide	74-83-9	0.11	15. A
K136	NA	Ethylene dibromide	106-93-4	0.028	15. A
		Methyl bromide	74-83-9	0.11	15. A
		Chloroform	67-66-3	0.046	5.6 A

TABLE B (CCW): P AND U LISTED WASTES

Waste Code	Commercial Chemical Name	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Concentration (mg/L) Wastewaters	Concentration (mg/L) Nonwastewaters
P004	Aldrin	NA	Aldrin	309-00-2	0.21 B	0.066 A
P010	Arsenic acid	Table A	Arsenic	7440-38-2	0.79	NA
P011	Arsenic pentoxide	Table A	Arsenic	7440-38-2	0.79	NA
P012	Arsenic trioxide	Table A	Arsenic	7440-38-2	0.79	NA
P013	Barium cyanide	Table A	Cyanides (Total)	57-12-5	1.9	110.
			Cyanides (Amenable)	57-12-5	0.1	9.1
P020	2-sec-Butyl-4,6-dinitro-phenol (Dinoseb)	NA	2-sec-Butyl-4,6-dinitro-phenol (Dinoseb)	88-85-7	0.066	2.5 A
P021	Calcium cyanide	NA	Cyanides (Total)	57-12-5	1.9	110.
			Cyanides (Amenable)	57-12-5	0.1	9.1
P022	Carbon disulfide	Table B	Carbon disulfide	75-15-0	0.014	NA
P024	p-Chloro-aniline	NA	p-Chloro-aniline	106-47-8	0.46	16. A
P029	Copper cyanide	NA	Cyanides (Total)	57-12-5	1.9	110.
			Cyanides (Amenable)	57-12-5	0.1	9.1
P030	Cyanides (soluble salts and complexes)	NA	Cyanides (Total)	57-12-5	1.9	110.
			Cyanides (Amenable)	57-12-5	0.1	9.1

P036	Dichloro-phenylarsine	Table A	Arsenic	7440-38-2	0.79	NA
P037	Dieldrin	NA	Dieldrin	60-57-1	0.017 B	0.13 A
P038	Diethyl-arsine	Table A	Arsenic	7440-38-2	0.79	NA
P039	Disulfoton	NA	Disulfoton	298-04-4	0.017	0.1 A
P047	4,6-Dinitro-o-cresol	NA	4,6-Dinitro-o-cresol	534-52-1	0.28 B	160. A
P048	2,4-Dinitro-phenol	NA	2,4-Dinitro-phenol	51-28-5	0.12 B	160. A
P050	Endosulfan	NA	Endosulfan I Endosulfan II Endosulfan sulfate	939-98-8 33213-6-5 1031-07-8	0.023 B 0.029 B 0.029 B	0.066 A 0.13 A 0.13 A
P051	Endrin	NA	Endrin Endrin aldehyde	72-20-8 7421-93-4	0.0028 B 0.025 B	0.13 A 0.13 A
P056	Fluoride	Table D	Fluoride	16984-48-8	35.	NA
P059	Heptachlor	NA	Heptachlor Heptachlor epoxide	76-44-8 1024-57-3	0.0012 B 0.016 B	0.066 A 0.066 A
P060	Isodrin	NA	Isodrin	465-73-6	0.021 B	0.066 A
P063	Hydrogen cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.10	110. 9.1
P065	Mercury fulminate	Tables A & B	Mercury	7439-97-6	0.030	NA
P071	Methyl parathion	NA	Methyl parathion	298-00-0	0.025	0.1 A
P073	Nickel carbonyl	Table A	Nickel	7440-02-0	0.32	NA
P074	Nickel cyanide	Table A	Cyanides (Total) Cyanides (Amenable) Nickel	57-12-5 57-12-5 7440-02-0	1.9 0.10 0.44	110. 9.1 NA
P077	p-Nitro-aniline	NA	p-Nitro-aniline	100-01-6	0.028 B	28. A
P082	N-Nitrosodi-methylamine	Table D	N-Nitrosodi-methylamine	62-75-9	0.40 B	NA
P089	Parathion	NA	Parathion	56-38-2	0.025	0.1 A

P092	Phenylmercury acetate	Tables A & B	Mercury	7439-97-6	0.030	NA
P094	Phorate	NA	Phorate	298-02-2	0.025	0.1 A
P097	Famphur	NA	Famphur	52-85-7	0.025	0.1 A
P098	Potassium cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.10	110. 9.1
P099	Potassium silver cyanide	Table A	Cyanides (Total) Cyanides (Amenable) Silver	57-12-5 57-12-5 7440-22-4	1.9 0.1 0.29	110. 9.1 NA
P101	Ethyl cyanide (Propanenitrile)	NA	Ethyl cyanide (Propanenitrile)	107-12-0	0.24 B	360. A
P103	Selenourea	Table A	Selenium	7782-49-2	1.0 B	NA
P104	Silver cyanide	Table A	Cyanides (Total) Cyanides (Amenable) Silver	57-12-5 57-12-5 7440-22-4	1.9 0.10 0.29	110. 9.1 NA
P106	Sodium cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.10	110. 9.1
P110	Tetraethyl lead	Tables A & B	Lead	7439-92-1	0.040	NA
P113	Thallic oxide	Table D	Thallium	7440-28-0	0.14 B	NA
P114	Thallium selenite	Table A	Selenium	7782-49-2	1.0	NA
P115	Thallium(I) sulfate	Table D	Thallium	7440-28-0	0.14 B	NA
P119	Ammonia vanadate	Table D	Vanadium	7440-62-2	28. B	NA
P120	Vanadium pentoxide	Table D	Vanadium	7440-62-2	28. B	NA
P121	Zinc cyanide	NA	Cyanides (Total) Cyanides (Amenable)	57-12-5 57-12-5	1.9 0.10	110. 9.1
P123	Toxaphene	NA	Toxaphene	8001-35-1	0.0095 B	1.3 A
U002	Acetone	NA	Acetone	67-64-1	0.28	160. A

U003	Acetonitrile	Table D	Acetonitrile	75-05-8	0.17	0.17
U004	Acetophenone	NA	Acetophenone	98-86-2	0.010 A	9.7 A
U005	2-Acetylaminofluorene	NA	2-Acetylaminofluorene	53-96-3	0.059 B	140. A
U009	Acrylonitrile	NA	Acrylonitrile	107-13-1	0.24 A	84. A
U012	Aniline	NA	Aniline	62-53-3	0.81	14. A
U018	Benz(a)anthracene	NA	Benz(a)anthracene	56-55-3	0.059 B	8.2 A
U019	Benzene	NA	Benzene	71-43-2	0.14 B	36. A
U022	Benzo(a)pyrene	NA	Benzo(a)pyrene	50-32-8	0.061 B	8.2 A
U024	Bis(2-chloroethoxy)methane	NA	Bis(2-chloroethoxy)methane	111-91-1	0.036	7.2 A
U025	Bis(2-chloroethyl) ether	NA	Bis(2-chloroethyl) ether	111-44-4	0.033	7.2 A
U027	Bis(2-chloroisopropyl) ether	NA	Bis(2-chloroisopropyl) ether	39638-32-9	0.055	7.2 A
U028	Bis(2-ethylhexyl) phthalate	NA	Bis(2-ethylhexyl) phthalate	117-81-7	0.28 A	28. A
U029	Bromomethane (Methyl bromide)	NA	Bromomethane (Methyl bromide)	74-83-9	0.11 A	15. A
U030	4-Bromophenyl phenyl ether	NA	4-Bromophenyl phenyl ether	101-55-3	0.055 A	15. A
U031	n-Butyl alcohol	NA	n-Butyl alcohol	71-36-3	5.6	2.6 A
U032	Calcium chromate	Table A	Chromium (Total)	7440-47-32	0.32	NA
U036	Chlordane (alpha and gamma)	NA	Chlordane (alpha and gamma)	57-74-9	0.00033 B	0.13 A
U037	Chlorobenzene	NA	Chlorobenzene	108-90-7	0.057 B	5.7 A
U038	Chlorobenzilate	Table D	Chlorobenzilate	510-15-6	0.10 B	NA
U039	p-Chloro-m-cresol	NA	p-Chloro-m-cresol	59-50-7	0.018 B	14. A

U043	Vinyl chloride	NA	Vinyl chloride	75-01-4	0.27 B	33. A
U044	Chloroform	NA	Chloroform	67-66-3	0.046 B	5.6 A
U045	Chloromethane (Methyl chloride)	NA	Chloromethane (Methyl chloride)	74-87-3	0.19 B	33. A
U047	2-Chloronaphthalene	NA	2-Chloronaphthalene	91-58-7	0.055 B	5.6 A
U048	2-Chlorophenol	NA	2-Chlorophenol	95-57-8	0.044 B	5.7 A
U050	Chrysene	NA	Chrysene	218-01-9	0.059 B	8.2 A
U051	Creosote	Table A	Naphthalene	91-20-3	0.031	1.5 A
			Pentachlorophenol	87-86-5	0.18	7.4 A
			Phenanthrene	85-01-8	0.031	1.5 A
			Pyrene	129-00-0	0.028	28. A
			Toluene	108-88-3	0.028	33. A
			Xylenes (Total)		0.032	NA
			Lead	7439-92-1	0.037	NA
U052	Cresols (Cresylic acid)	NA	o-Cresol	95-48-7	0.11 B	5.6 A
			Cresols (m- and p-isomers)		0.77 B	3.2 A
U057	Cyclohexanone	Table D	Cyclohexanone	108-94-1	0.36	NA
U060	DDD	NA	o,p'-DDD	53-19-0	0.023 B	0.087 A
			p,p'-DDD	72-54-8	0.023 B	0.087 A
U061	DDT	NA	o,p'-DDT	789-02-6	0.0039 B	0.087 A
			p,p'-DDT	50-29-3	0.0039 B	0.087 A
			o,p'-DDD	53-19-0	0.023 B	0.087 A
			p,p'-DDD	72-54-8	0.023 B	0.087 A
			o,p'-DDE	3424-82-6	0.031 B	0.087 A
			p,p'-DDE	72-55-9	0.031 B	0.087 A
U062	Dibenzo(a,h)anthracene	NA	Dibenzo(a,h)anthracene	53-70-3	0.055 B	8.2 A
U066	1,2-Dibromo-3-chloropropane	NA	1,2-Dibromo-3-chloropropane	96-12-8	0.11 B	15. A
U067	1,2-Dibromoethane (Ethylene dibromide)	NA	1,2-Dibromoethane (Ethylene dibromide)	106-93-4	0.028 B	15. A
U068	Dibromoethane	NA	Dibromoethane	74-95-3	0.11 B	15. A

U069	Di-n-butyl phthalate	NA	Di-n-butyl phthalate	84-74-2	0.057 A	28. A
U070	o-Dichlorobenzene	NA	o-Dichlorobenzene	95-50-1	0.088 B	6.2 A
U071	m-Dichlorobenzene	NA	m-Dichlorobenzene	541-73-1	0.036	6.2 A
U072	p-Dichlorobenzene	NA	p-Dichlorobenzene	106-46-7	0.090 B	6.2 A
U075	Dichlorodifluoromethane	NA	Dichlorodifluoromethane	75-71-8	0.23 B	7.2 A
U076	1,1-Dichloroethane	NA	1,1-Dichloroethane	75-34-3	0.059 B	7.2 A
U077	1,2-Dichloroethane	NA	1,2-Dichloroethane	107-06-2	0.21 B	7.2 A
U078	1,1-Dichloroethylene	NA	1,1-Dichloroethylene	75-35-4	0.025 B	33. A
U079	1,2-Dichloroethylene	NA	trans-1,2-Dichloroethylene	156-60-5	0.054 B	33. A
U080	Methylene chloride	NA	Methylene chloride	75-09-2	0.089 B	33. A
U081	2,4-Dichlorophenol	NA	2,4-Dichlorophenol	120-83-2	0.044 B	14. A
U082	2,6-Dichlorophenol	NA	2,6-Dichlorophenol	87-65-0	0.044 B	14. A
U083	1,2-Dichloropropane	NA	1,2-Dichloropropane	78-87-5	0.85 B	18. A
U084	1,3-Dichloropropene	NA	cis-1,3-Dichloropropylene	10061-01-5	0.036 B	18. A
			trans-1,3-Dichloropropylene	10061-02-6	0.036 B	18. A
U088	Diethyl phthalate	NA	Diethyl phthalate	84-66-2	0.2	28. A
U093	p-Dimethylaminoazobenzene	Table D	p-Dimethylaminoazobenzene	60-11-7	0.13 B	NA
U101	2,4-Dimethylphenol	NA	2,4-Dimethylphenol	105-67-9	0.036 B	14. A
U102	Dimethyl phthalate	NA	Dimethyl phthalate	131-11-3	0.047	28. A
U105	2,4-Dinitrotoluene	NA	2,4-Dinitrotoluene	121-14-2	0.32 B	140. A

U106	2,6-Dinitrotoluene	NA	2,6-Dinitrotoluene	606-20-2	0.55 B	28. A
U107	Di-n-octyl phthalate	NA	Di-n-octyl phthalate	117-84-0	0.017	28. A
U108	1,4-Dioxane	NA	1,4-Dioxane	123-91-1	0.12 B	170. A
U111	Di-n-propylnitrosoamine	NA	Di-n-propylnitrosoamine	621-64-7	0.40 B	14. A
U112	Ethyl acetate	NA	Ethyl acetate	141-78-6	0.34 B	33. A
U117	Ethyl ether	NA	Ethyl ether	60-29-7	0.12 B	160. A
U118	Ethyl methacrylate	NA	Ethyl methacrylate	97-63-2	0.14 B	160. A
U120	Fluoranthene	NA	Fluoranthene	206-44-0	0.068 B	8.2 A
U121	Trichloromonofluoromethane	NA	Trichloromonofluoromethane	75-69-4	0.020 B	33. A
U127	Hexachlorobenzene	NA	Hexachlorobenzene	118-74-1	0.055 B	37. A
U128	Hexachlorobutadiene	NA	Hexachlorobutadiene	87-68-3	0.055 B	28. A
U129	Lindane	NA	alpha-BHC	319-84-6	0.00014 B	0.66 A
			beta-BHC	319-85-7	0.00014 B	0.66 A
			Delta-BHC	319-86-8	0.023 B	0.66 A
			gamma-BHC (Lindane)	58-89-9	0.0017 B	0.66 A
U130	Hexachlorocyclopentadiene	NA	Hexachlorocyclopentadiene	77-47-7	0.057 B	3.6 A
U131	Hexachloroethane	NA	Hexachloroethane	67-72-1	0.055 B	28. A
U134	Hydrogen fluoride	Table D	Fluoride	16964-48-8	35.	NA
U136	Cacodylic acid	Table A	Arsenic	7440-38-2	0.79	NA
U137	Indeno(1,2,3-c,d)pyrene	NA	Indeno(1,2,3-c,d)pyrene	193-39-5	0.0055 B	8.2 A
U138	Iodomethane	NA	Iodomethane	74-88-4	0.19 B	65. A
U140	Isobutyl alcohol	NA	Isobutyl alcohol	78-83-1	5.6	170. A
U141	Isosafrole	NA	Isosafrole	120-58-1	0.081	2.6 A

U142	Kepone	NA	Kepone	143-50-8	0.0011	0.13 A
U144	Lead acetate	Table A	Lead	7439-92-1	0.040	NA
U145	Lead phosphate	Table A	Lead	7439-92-1	0.040	NA
U146	Lead subacetate	Table A	Lead	7439-92-1	0.040	NA
U151	Mercury	Tables A & D	Mercury	7439-97-6	0.030	NA
U152	Methacrylonitrile	NA	Methacrylonitrile	126-98-7	0.24 B	84. A
U154	Methanol	NA	Methanol	67-56-1	5.6	NA
U155	Methapyrilene	NA	Methapyrilene	91-80-5	0.081	1.5 A
U157	3-Methylcholanthrene	NA	3-Methylcholanthrene	56-49-5	0.0055 B	15. A
U158	4,4'-Methylenebis(2-chloroaniline)	NA	Methylenebis(2-chloroaniline)	101-14-4	0.50 B	35. A
U159	Methyl ethyl ketone	NA	Methyl ethyl ketone	78-93-3	0.28	36. A
U161	Methyl isobutyl ketone	NA	Methyl isobutyl ketone	108-10-1	0.14	33. A
U162	Methyl methacrylate	NA	Methyl methacrylate	80-62-6	0.14	160. A
U165	Naphthalene	NA	Naphthalene	91-20-3	0.059 B	3.1 A
U168	2-Naphthylamine	Table D	2-Naphthylamine	91-59-8	0.52 B	NA
U169	Nitrobenzene	NA	Nitrobenzene	98-95-3	0.068 B	14. A
U170	4-Nitrophenol	NA	4-Nitrophenol	100-02-7	0.12 B	29. A
U172	N-Nitrosodi-n-butylamine	NA	N-Nitrosodi-n-butylamine	924-16-3	0.40 B	17. A
U174	N-Nitrosodiethylamine	NA	N-Nitrosodiethylamine	55-18-5	0.40 B	28. A
U179	N-Nitrosopiperidine	NA	N-Nitrosopiperidine	100-75-4	0.013 B	35. A
U180	N-Nitrosopyrrolidine	NA	N-Nitrosopyrrolidine	930-55-2	0.013 B	35. A
U181	5-Nitro-o-toluidine	NA	5-Nitro-o-toluidine	99-55-8	0.32 B	28. A

U183	Pentachlorobenzene	NA	Pentachlorobenzene	608-93-5	0.055 B	37. A
U185	Pentachloronitrobenzene	NA	Pentachloronitrobenzene	82-68-8	0.055 B	4.8 A
U187	Phenacetin	NA	Phenacetin	62-44-2	0.081	16. A
U188	Phenol	NA	Phenol	108-95-2	0.039	6.2 A
U190	Phthalic anhydride (measured as Phthalic acid)	NA	Phthalic anhydride (measured as Phthalic acid)	85-44-9	0.069	28. A
U192	Pronamide	NA	Pronamide	23950-58-5	0.093	1.5 A
U196	Pyridine	NA	Pyridine	110-86-1	0.014 B	16. A
U203	Safrole	NA	Safrole	94-59-7	0.081	22. A
U204	Selenium dioxide	Table A	Selenium	7782-49-2	1.0	NA
U205	Selenium sulfide	Table A	Selenium	7782-49-2	1.0	NA
U207	1,2,4,5-Tetrachlorobenzene	NA	1,2,4,5-Tetrachlorobenzene	95-94-3	0.055 B	19. A
U208	1,1,1,2-Tetrachloroethane	NA	1,1,1,2-Tetrachloroethane	630-20-6	0.057	42. A
U209	1,1,2,2-Tetrachloroethane	NA	1,1,2,2-Tetrachloroethane	79-34-5	0.057 B	42. A
U210	Tetrachloroethylene	NA	Tetrachloroethylene	127-18-4	0.056 B	5.6 A
U211	Carbon tetrachloride	NA	Carbon tetrachloride	56-23-5	0.057 B	5.6 A
U214	Thallium(I) acetate	Table D	Thallium	7440-28-0	0.14 B	NA
U215	Thallium(I) carbonate	Table D	Thallium	7440-28-0	0.14 B	NA
U216	Thallium(I) chloride	Table D	Thallium	7440-28-0	0.14 B	NA
U217	Thallium(I) nitrate	Table D	Thallium	7440-28-0	0.14 B	NA
U220	Toluene	NA	Toluene	108-88-3	0.080 B	28. A

U225	Tribromomethane (Bromoform)	NA	Tribromomethane (Bromoform)	75-25-2	0.63 B	15. A
U226	1,1,1-Trichloroethane	NA	1,1,1-Trichloroethane	71-55-6	0.054 B	5.6 A
U227	1,1,2-Trichloroethane	NA	1,1,2-Trichloroethane	79-00-5	0.054 B	5.6 A
U228	Trichloroethylene	NA	Trichloroethylene	79-01-6	0.054 B	5.6 A
U235	tris-(2,3-Dibromopropyl)-phosphate	NA	tris-(2,3-Dibromopropyl)-phosphate	126-72-7	0.025	0.10 A
U239	Xylenes	NA	Xylene		0.32 B	28. A
U240	2,4-Dichlorophenoxyacetic acid	NA	2,4-Dichlorophenoxyacetic acid	94-75-7	0.72	10. A
U243	Hexachloropropene	NA	Hexachloropropene	1888-71-7	0.035 B	28.
U247	Methoxychlor	NA	Methoxychlor	72-43-5	0.25 B	0.18 A

A Treatment standards for this organic constituent were established based upon incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may certify compliance with these treatment standards according to provisions in Section 728.107.

B Based on analysis of composite samples.

C As analyzed using SW-846 Method 9010 or 9012; sample size: 10g; distillation time: one hour and fifteen minutes.

R Reserved.

NA Not Applicable.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Table C Technology Codes and Description of Technology-Based Standards

Technology code — Description of technology-based standard

ADGAS Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid)--venting can be accomplished through physical release utilizing valves/ or piping; physical penetration of the container; and/or penetration through detonation.

AMLGM Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and

thereby reducing potential emissions of elemental mercury vapors to the air.

BIODG Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Ttotal Oorganic Ccarbon (TOC) can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).

CARBN Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/or organic constituents, operated suchso that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., Ttotal Oorganic Ccarbon (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) Hhypochlorite (e.g. bleach);

2) chlorine;

3) chlorine dioxide;

4) ozone or UV (ultraviolet light) assisted ozone;

5) peroxides;

6) persulfates;

7) perchlorates;

8) permangantes; and/or

9) other oxidizing reagents of equivalent efficiency, performed in units operated suchso that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., Ttotal Oorganic Ccarbon (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) Ssulfur dioxide;

2) sodium, potassium, or alkali salts of sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG);

3) sodium hydrosulfide;

4) ferrous salts; and/or

5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., ~~T~~total ~~O~~organic ~~H~~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 Combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 726.Subpart H.

DEACT Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, ~~and/~~or reactivity.

FSUBS Fuel substitution in units operated in accordance with applicable technical operating requirements.

HLVIT Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the federal Nuclear Regulatory Commission.

IMERC Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O. All wastewater and nonwastewater residues derived from this process must then comply with the corresponding treatment standards per waste code with consideration of any applicable subcategories (e.g., ~~H~~high or ~~L~~low ~~M~~mercury ~~S~~subcategories).

INCIN Incineration in units operated in accordance with the technical operating requirements of 35 Ill. Adm. Code 724.Subpart O or 725.Subpart O.

LLEXT Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous constituents have a greater solvent affinity, resulting in an extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery~~/~~ 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) ~~A~~acids;

2) bases; or

3) water (including wastewaters) resulting in a pH greater than 2 but less than 12.5 as measured in the aqueous residuals.

NLDBR No land disposal based on recycling.

PRECP Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination:

1) ~~L~~lime (i.e., containing oxides ~~and/~~or hydroxides of calcium ~~and/~~or magnesium;

2) caustic (i.e., sodium ~~and/~~or potassium hydroxides;

3) soda ash (i.e., sodium carbonate);

4) sodium sulfide;

5) ferric sulfate or ferric chloride;

6) alum; or

7) sodium sulfate. Additional flocculating, coagulation, or similar reagents~~/~~ or processes that enhance sludge dewatering characteristics are not precluded from use.

RBERY Thermal recovery of ~~B~~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) ~~D~~distillation (i.e., thermal concentration);

2) ion exchange;

3) resin or solid adsorption;

4) reverse osmosis; ~~and/~~or

5) incineration for the recovery of acid--

Note: this does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including 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 ~~N~~national ~~E~~emissions ~~S~~standard for ~~H~~hazardous ~~A~~air ~~P~~pollutants (NESHAP) for mercury (40 CFR 61, Subpart E);

b) A ~~B~~best ~~A~~available ~~C~~control ~~T~~technology (BACT) or a ~~L~~lowest ~~A~~achievable ~~E~~emission ~~R~~rate (LAER) standard for mercury imposed pursuant to a ~~P~~prevention of ~~S~~significant ~~D~~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., Hhigh or Llow Mmercury Ssubcategories).

RMETL Recovery of metals or inorganics utilizing one or more of the following direct physical~~/~~ or removal technologies:

1) ~~I~~ion exchange;

2) resin or solid (i.e., zeolites) adsorption;

3) reverse osmosis;

4) chelation~~/~~ or solvent extraction;

5) freeze crystallization;

6) ultrafiltration; ~~and/~~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 ~~and/~~or compressive strength, or to overall reduce the leachability of the metal or inorganic.

SSTRP Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit such as, the number of separation stages and the internal column design. Thus, resulting in a condensed extract high in organics that must undergo either incineration, reuse as a fuel, or other recovery~~/~~ 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., Ttotal Oorganic Ccarbon (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 ~~D~~T by indicating the five letter technology code that must be applied first, then the designation "fb." (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on.

Note 2: When more than one technology (or treatment train) are specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "OR". This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Table D Technology-Based Standards by RCRA Waste Code

BOARD NOTE: For the requirements previously found in this Section, refer to Sections 728.140 and 728.Table T.

Waste Codes	See Also	CAS No.	Technology Code, Waste-waters	Technology Code, Non-waste-waters	Waste Descriptions or Treatment Subcategory
D001	Tables A & B	NA	DEACT, and meet FO39, or FSUBS, NONGS, or INCIN	DEACT, and meet FO39, or FSUBS, NONGS, or INCIN	All descriptions based on 35 Ill. Adm. Code 721.121, except for the Section 721.121(a)(1) High TOC subcategory, managed in non-CWA/non-CWA-equivalent/non-Class I SDWA systems
D001	NA	NA	DEACT	DEACT	All descriptions based on 35 Ill. Adm. Code 721.121, except for the Section 261.121(a)(1) High TOC subcategory, managed in CWA, CWA-equivalent, or Class I SDWA systems
D001	NA	NA	NA	FSUBS, NONGS, or INCIN	All descriptions based on 35 Ill. Adm. Code 721.121(a)(1) High TOC Ignitable Liquids Subcategory--Greater than or equal to 10% total organic carbon
D002	Tables A & B	NA	DEACT and meet FO39	DEACT and meet FO39	Acid, alkaline, and other subcategory Based on 35 Ill. Adm. Code 721.122 managed in non-CWA/non-CWA equivalent/ non-Class I SDWA systems
D002	NA	NA	DEACT	DEACT	Acid, alkaline, and other subcategory based on 35 Ill. Adm. Code 721.122 managed in CWA, CWA-equivalent, or Class I SDWA systems
D003	NA	NA	DEACT (but not including dilution as a substitute for adequate treatment)	DEACT (but not including dilution as a substitute for adequate treatment)	Reactive sulfides based on 35 Ill. Adm. Code 721.123(a)(5)
D003	NA	NA	DEACT	DEACT	Explosives based on 35 Ill. Adm. Code 721.123 (a)(6), (a)(7), and (a)(8)

D003	NA	NA	NA	DEACT	Water reactives based on 35 Ill. Adm. Code 721.123(a)(2), (a)(3), and (a)(4)
D003	NA	NA	DEACT	DEACT	Other reactives based on 35 Ill. Adm. Code 721.123(a)(1)
D006	NA	7440-43-9	NA	RTHERM	Cadmium-containing batteries
D008	NA	7439-92-1	NA	RLEAD	Lead acid batteries (Note: This standard only applies to lead acid batteries that are identified as RCRA hazardous wastes and that are not excluded elsewhere from regulation under the land disposal restrictions of this Part or exempted under other regulations (see 35 Ill. Adm. Code 726.180).)
D009	Tables A & B	7439-97-6	NA	INERG, or RMERG	Mercury: (High Mercury Subcategory--greater than or equal to 260 mg/kg total Mercury--contains mercury and organics (and are not incinerator residues))
D009	Tables A & B	7439-97-6	NA	RMERG	Mercury: (High Mercury Subcategory--greater than or equal to 260 mg/kg total Mercury--inorganics (including incinerator residues and residues from RMERG))
D012	Table B	72-20-8	BIODG, or INCIN	NA	Endrin
D013	Table B	58-89-9	GARBN, or INCIN	NA	Lindane
D014	Table B	72-43-5	WETOX, or INCIN	NA	Methoxychlor
D015	Table B	8001-35-1	BIODG, or INCIN	NA	Toxaphene
D016	Table B	94-75-7	CHOXD, BIODG, or INCIN	NA	2,4-D
D017	Table B	93-72-1	CHOXD, or INCIN	NA	2,4,5-TP

F005	Tables A & B	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Nitropropane
F005	Tables A & B	110-80-5	BIODG; or INCIN	INCIN	2-Ethoxyethanol
F024	Tables A & B	NA	INCIN	INCIN	————
K025	NA	NA	LLEXT fb STRIP fb CARBN; or INCIN	INCIN	Distillation bottoms from the production of nitrobenzene by the nitration of benzene
K026	NA	NA	INCIN	INCIN	Stripping still tails from the production of methyl ethyl pyridines
K027	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Centrifuge and distillation residues from toluene di-isocyanate production
K039	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Filter cake from the filtration of diethyl-phosphorodithioc acid in the production of phorate
K044	NA	NA	DEACT	DEACT	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	NA	NA	DEACT	DEACT	Spent carbon from the treatment of wastewater containing explosives
K047	NA	NA	DEACT	DEACT	Pink/red water from TNT operations
K069	Tables A & B	NA	NA	RLEAD	Emission control dust/ sludge from secondary lead smelting: Non-Calcium Sulfate Sub-category
K106	Tables A & B	NA	NA	RMERC	Wastewater treatment sludge from the mercury cell process in chlorine production: (High Mercury Subcategory greater than or equal to 260 mg/kg total mercury))

K107	NA	NA	INCIN; or CHOXD fb; CARBN; or BIODG fb CARBN	INCIN.	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K108	NA	NA	INCIN; or CHOXD fb; CARBN; or BIODG fb CARBN	INCIN.	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K109	NA	NA	INCIN; or CHOXD fb; CARBN; or BIODG fb CARBN	INCIN.	Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K110	NA	NA	INCIN; or CHOXD fb; CARBN; or BIODG fb CARBN	INCIN.	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides
K112	NA	NA	INCIN; or CHOXD fb; CARBN; or BIODG fb CARBN	INCIN.	Reaction by product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene
K113	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K114	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K115	NA	NA	CARBN; or INCIN	FSUBS; or INCIN	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene

K116	NA	NA	CARBN; or INGIN	FSUBS; or INGIN	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine
K123	NA	NA	INGIN; or CHOXD fb (BIODG or CARBN)	INGIN.	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebis-dithiocarbamic acid and its salts
K124	NA	NA	INGIN; or CHOXD fb (BIODG or CARBN)	INGIN.	Reactor vent scrubber water from the production of ethylenebisdi-thiocarbamic acid and its salts
K125	NA	NA	INGIN; or CHOXD fb (BIODG or CARBN)	INGIN.	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdi-thiocarbamic acid and its salts
K126	NA	NA	INGIN; or CHOXD fb (BIODG or CARBN)	INGIN.	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylene bisdithiocarbamic acid and its salts
P001	NA	81-81-2	(WETOX or CHOXD) fb CARBN; or INGIN	FSUBS; or INGIN	Warfarin (>0.3%)
P002	NA	591-08-2	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	1-Acetyl-2-thiourea
P003	NA	107-02-8	NA	FSUBS; or INGIN	Acrolein
P005	NA	107-18-6	(WETOX or CHOXD) fb CARBN; or INGIN	FSUBS; or INGIN	Allyl alcohol
P006	NA	20859-73-8	CHOXD; CHRED; or INGIN	CHOXD; CHRED; or INGIN	Aluminum phosphide

P007	NA	2763-96-4	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	5-Aminoethyl 3-Isoxazolol
P008	NA	504-24-5	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	4-Aminopyridine
P009	NA	131-74-8	CHOXD; CHRED; CARBN; BIODG; or INGIN	FSUBS; CHOXD; CHRED; or INGIN	Ammonium picrate
P014	NA	108-95-5	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Thiophenol (Benzene thiol)
P015	NA	7440-41-7	RMETL or RTHRM	RMETL; or RTHRM	Beryllium powder
P016	NA	542-88-1	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Bis(chloromethyl)ether
P017	NA	598-31-2	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Bromoacetone
P018	NA	357-57-3	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Brucine
P022	Table B	75-15-0	NA	INGIN	Carbon disulfide
P023	NA	107-20-0	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Chloroacetaldehyde
P026	NA	5344-82-1	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	1-(o-Chlorophenyl)thio-urea
P027	NA	542-76-7	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	3-Chloropropionitrile
P028	NA	100-44-7	(WETOX or CHOXD) fb CARBN; or INGIN	INGIN	Benzyl chloride

P031	NA	460-19-5	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen
P033	NA	506-77-4	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen chloride
P034	NA	131-89-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Cyclohexyl-4,6-dinitrophenol
P040	NA	297-97-2	CARBN; or INCIN	FSUBS; or INCIN	O,O-Diethyl O-pyrazinyl phosphorothioate
P041	NA	311-45-5	CARBN; or INCIN	FSUBS; or INCIN	Diethyl-p-nitrophenyl phosphate
P042	NA	51-43-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Epinephrine
P043	NA	55-91-4	CARBN; or INCIN	FSUBS; or INCIN	Diisopropylfluorophosphate (DFP)
P044	NA	60-51-5	CARBN; or INCIN	FSUBS; or INCIN	Dimethoate
P045	NA	39196-18-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiofanox
P046	NA	122-09-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	alpha,alpha-Dimethylphenethylamine
P047	NA	534-52-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	4,6-Dinitro-o-cresol salts
P049	NA	541-53-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2,4-Dithiobiuret
P054	NA	151-56-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Aziridine
P056	Table B	7782-41-4	NA	ADCAS fb NSUTR	Fluorine
P057	NA	640-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Fluoroacetamide

P058	NA	62-74-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Fluoroacetic acid, sodium salt
P062	NA	757-58-4	CARBN; or INCIN	FSUBS or INCIN	Hexaethyltetraphosphate
P064	NA	624-83-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Isocyanic acid, ethyl ester
P065	Tables A & B	628-86-4	NA	RMERC	Mercury fulminate: (High Mercury Subcategory - greater than or equal to 260 mg/kg total Mercury - either incinerator residues or residues from RMERC)
P065	Tables A & B	628-86-4	NA	IMERC	Mercury fulminate: (All nonwastewaters that are not incinerator residues or are not residues from RMERC; regardless of Mercury Content)
P066	NA	16752-77-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methomyl
P067	NA	75-55-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Methylaziridine
P068	NA	60-34-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; OR INCIN	Methyl hydrazine
P069	NA	75-86-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methyllactonitrile
P070	NA	116-06-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Aldicarb
P072	NA	86-88-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Naphthyl-2-thiourea

P075	NA	54-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Nicotine and salts
P076	NA	10102-43-9	ADCAS	ADCAS	Nitric oxide
P078	NA	10102-44-0	ADCAS	ADCAS	Nitrogen dioxide
P081	NA	55-63-0	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Nitroglycerin
P082	Table B	62-75-9	NA	INCIN	N-Nitrosodimethylamine
P084	NA	4549-40-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitrosomethylvinylamine
P085	NA	152-16-9	CARBN; or INCIN	FSUBS; or INCIN	Octamethylpyrophosphoramide
P087	NA	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM	Osmium tetroxide
P088	NA	145-73-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Endothall
P092	Tables A & B	62-38-4	NA	RMERC	Phenyl mercury acetate; (High Mercury Subcategory--greater than or equal to 260 mg/kg total Mercury--either incinerator residues or residues from RMERC)
P092	Tables A & B	62-38-4	NA	IMERC; or RMERC	Phenyl mercury acetate; (All nonwastewaters that are not incinerator residues and are not residues from RMERC; regardless of Mercury Content)
P093	NA	103-85-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Phenylthiourea
P095	NA	75-44-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Phosgene
P096	NA	7803-51-2	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Phosphine

P102	NA	107-19-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Propargyl alcohol
P105	NA	26628-22-8	CHOXD; CHRED; CARBN BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Sodium azide
P108	NA	57-24-9 A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Strychnine and salts
P109	NA	3689-24-5	CARBN; or INCIN	FSUBS; or INCIN	Tetraethyldithiopyrophosphate
P112	NA	509-14-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Tetranitromethane
P113	Table B	1314-32-5	NA	RTHRM; or STABL	Thallic oxide
P115	Table B	7446-18-6	NA	RTHRM; or STABL	Thallium (I) sulfate
P116	NA	79-19-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiosemicarbazide
P118	NA	75-70-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trichloromethanethiol
P119	Table B	7803-55-6	NA	STABL	Ammonium vanadate
P120	Table B	1314-62-1	NA	STABL	Vanadium pentoxide
P122	NA	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Zinc Phosphide (≥10%)
U001	NA	75-07-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Acetaldehyde
U003	Table B	75-05-8	NA	INCIN	Acetonitrile
U006	NA	75-36-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Acetyl chloride

U007	NA	79-06-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Acrylamide
U008	NA	79-10-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Acrylic acid
U010	NA	50-07-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Mitomycin C
U011	NA	61-82-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Amitrole
U014	NA	492-80-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Auramine
U015	NA	115-02-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Azaserine
U016	NA	225-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Benz(c)acridine
U017	NA	98-87-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzal chloride
U020	NA	98-09-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzenesulfonyl chloride
U021	NA	92-87-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Benzidine
U023	NA	98-07-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Benzotrichloride
U026	NA	494-03-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chlornaphazin

U033	NA	353-50-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Carbonyl fluoride
U034	NA	75-87-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trichloroacetaldehyde (Chloral)
U035	NA	305-03-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chlorambucil
U038	Table B	510-15-6	NA	INCIN	Chlorobenzilate
U041	NA	106-89-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Chloro-2,3-epoxy-propane (Epichlorohydrin)
U042	Table B	110-75-8	NA	INCIN	2-Chloroethyl vinyl ether
U046	NA	107-30-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Chloromethyl methyl ether
U049	NA	3165-93-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	4-Chloro-o-toluidine hydrochloride
U053	NA	4170-30-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Crotonaldehyde
U055	NA	98-82-8	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Cumene
U056	NA	110-82-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Cyclohexane
U057	Table B	108-94-1	NA	FSUBS; or INCIN	Cyclohexanone
U058	NA	50-18-0	CARBN; or INCIN	FSUBS; or INCIN	Cyclophosphamide
U059	NA	20830-81-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Daunomycin

U062	NA	2303-16-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Diallate
U064	NA	189-55-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,2,7,8-Dibenzopyrene
U073	NA	91-94-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dichlorobenzidine
U074	NA	1476-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	cis-1,4-Dichloro-2-butene; trans-1,4-Dichloro-2-butene
U085	NA	1464-53-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,2:3,4-Diepoxybutane
U086	NA	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	N,N-Diethylhydrazine
U087	NA	3288-58-2	CARBN; or INCIN	FSUBS; or INCIN	O,O-Diethyl S-methyl dithiophosphate
U089	NA	56-53-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Diethyl stilbestrol
U090	NA	94-58-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Dihydrosafrole
U091	NA	119-90-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dimethoxybenzidine
U092	NA	124-40-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dimethylamine
U093	Table B	621-90-9	NA	INCIN	p-Dimethylaminoazobenzene
U094	NA	57-97-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	7,12-Dimethylbenz(a)anthracene

U095	NA	119-93-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	3,3'-Dimethylbenzidine
U096	NA	80-15-9	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	alpha,alpha-Dimethylbenzyl hydroperoxide
U097	NA	79-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dimethylcarbamoyl chloride
U098	NA	57-14-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,1-Dimethylhydrazine
U099	NA	540-73-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,2-Dimethylhydrazine
U103	NA	77-78-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Dimethyl sulfate
U109	NA	122-66-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	1,2-Diphenylhydrazine
U110	NA	142-84-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Dipropylamine
U113	NA	140-88-5	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Ethyl acrylate
U114	NA	111-54-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethylenebisdithiocarbamic acid
U115	NA	75-21-8	(WETOX or CHOXD) fb CARBN; or INCIN	CHOXD; or INCIN	Ethylene oxide

U116	NA	96-45-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethylene thiourea
U119	NA	62-50-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethyl methanesulfonate
U122	NA	50-00-0	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Formaldehyde
U123	NA	64-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Formic acid
U124	NA	110-00-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Furan
U125	NA	98-01-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Furfural
U126	NA	765-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Glycidaldehyde
U132	NA	70-30-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Hexachlorophene
U133	NA	302-01-2	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Hydrazine
U134	Table B	7664-39-3	NA	ADGAS fb NEUTR; or NEUTR	Hydrogen Fluoride
U135	NA	7783-06-4	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Hydrogen Sulfide
U143	NA	303-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Lasiocarpine

U147	NA	108-31-6	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Maleic anhydride
U148	NA	123-33-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Maleic hydrazide
U149	NA	109-77-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Malononitrile
U150	NA	148-82-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Melphalan
U151	Tables A & B	7439-97-6	NA	RMERC	Mercury: (High Mercury Subcategory--greater than or equal to 260 mg/kg total Mercury)
U153	NA	74-93-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methanethiol
U154	NA	67-56-1	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Methanol
U156	NA	79-22-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methyl chlorocarbonate
U160	NA	1338-23-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	FSUBS; CHOXD; CHRED; or INCIN	Methyl ethyl ketone peroxide
U163	NA	70-25-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Methyl-N'-nitro-N-Nitrosoguanidine
U164	NA	56-04-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Methylthiouracil
U166	NA	130-15-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,4-Naphthoquinone

U167	NA	134-32-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1-Naphthylamine
U168	Table B	91-59-8	NA	INCIN	2-Naphthylamine
U171	NA	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Nitropropane
U173	NA	1116-54-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-diethanolamine
U176	NA	759-73-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-ethylurea
U177	NA	684-93-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-methylurea
U178	NA	615-53-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	N-Nitroso-N-methyl-urethane
U182	NA	123-63-7	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Paraldehyde
U184	NA	76-01-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Pentachloroethane
U186	NA	504-60-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	1,3-Pentadiene
U189	NA	1314-80-3	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Phosphorus sulfide
U191	NA	109-06-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2-Picoline
U193	NA	1120-71-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	1,3-Propane-sultone

U194	NA	107-10-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	n-Propylamine
U197	NA	106-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	p-Benzoquinone
U200	NA	50-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Reserpine
U201	NA	108-46-3	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Resorcinol
U202	NA	81-07-2-A	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Saccharin and salts
U206	NA	18883-66-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Streptozotocin
U213	NA	109-99-9	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Tetrahydrofuran
U214	Table B	563-68-8	NA	RTHRM; or STABL	Thallium (I) acetate
U215	Table B	6533-73-9	NA	RTHRM; or STABL	Thallium (I) carbonate
U216	Table B	7791-12-0	NA	RTHRM; or STABL	Thallium (I) chloride
U217	Table B	10102-45-1	NA	RTHRM; or STABL	Thallium (I) nitrate
U218	NA	62-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thioacetamide
U219	NA	62-56-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiourea
U221	NA	25376-45-8	CARBN; or INCIN	FSUBS; or INCIN	Toluenediamine

U222	NA	636-21-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	o-Toluidine hydrochloride
U223	NA	26471-62-5	CARBN; or INCIN	FSUBS; or INCIN	Toluene diisocyanate
U234	NA	99-35-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	sym-Trinitrobenzene
U236	NA	72-57-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Trypan Blue
U237	NA	66-75-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Uracil mustard
U238	NA	51-79-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Ethyl carbamate
U240	NA	94-75-7*	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	2,4-Dichlorophenoxyacetic acid (salts and esters)
U244	NA	137-26-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN	Thiram
U246	NA	506-68-3	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN	Cyanogen bromide
U248	NA	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	FSUBS; or INCIN	Warfarin (0.3% or less)
U249	NA	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN	Zinc Phosphide (<10%)
U328	NA	95-53-4	INCIN; or CHOXD fb; (BIODC or CARBN); or BIODC fb CARBN	INCIN; or Thermal Destructio n.	o-toluidine

U353	NA	106-49-0	INCIN; or CHOXD fb; (BIODC or CARBN); or BIODC fb CARBN	INCIN; or Thermal Destructio n.	p-toluidine
U359	NA	110-80-5	INCIN; or CHOXD fb; (BIODC or CARBN); or BIODC fb CARBN	INCIN; or FSUBS.	2-ethoxy-ethanol

A CAS Number given for parent compound only.

B This waste code exists in gaseous form and is not categorized as wastewater or nonwastewater forms.

NA Not Applicable.

BOARD NOTE: When a combination of these technologies (i.e., a treatment train) is specified as a single treatment standard, the order of application is specified in this Table by indicating the five letter technology code that must be applied first, then the designation "fb" (an abbreviation for "followed by"), then the five letter technology code for the technology that must be applied next, and so on. When more than one technology (or treatment train) are specified a alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon (;) with the last technology preceded by the word "or". This indicates that any one of these BDAT technologies or treatment trains can be used for compliance with the standard. See Section 728.Table C for a listing of the technology codes and technology based treatment standards. Derived from 40 CFR 268.42, Table 2 (1992), as amended at 57 Fed. Reg. 37273 (Aug. 18, 1992) and 59 Fed. Reg. 31552 (June 20, 1994).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Table E Standards for Radioactive Mixed Waste

BOARD NOTE: For the requirements previously found in this Section, refer to Sections 728.140 and 728.Table T.

			Technology Code	
Waste code	Waste descriptions and/or treatment category	CAS No.	Wastewaters	Nonwastewaters
D002	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D004	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D005	Radioactive high level	NA	NA	HLVIT

	wastes generated during the reprocessing of fuel rods subcategory			
D006	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D007	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D008	Radioactive lead solids subcategory (Note: these lead solids include, but are not limited to, all forms of lead shielding, and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organolead materials that can be incinerated and stabilized as ash).	7439-92-1	NA	MACRO
D008	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D009	Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM
D009	Hydraulic oil contaminated with mercury; radioactive materials subcategory	7439-97-6	NA	IMERG
D009	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT

D010	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
D011	Radioactive high level wastes generated during the reprocessing of fuel rods subcategory	NA	NA	HLVIT
U151	Mercury: Elemental mercury contaminated with radioactive materials	7439-97-6	NA	AMLGM

Note: NA means Not Applicable.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Table G Alternative Treatment Standards Based on HMTMR

For the treatment standards previously found in this Section and Section 728.146, refer to Sections 728.140 and 728.Table T, "Treatment Standards for Hazardous Wastes".

Waste code	See Also	Regulated Hazardous Constituent	CAS No. for Regulated Hazardous Constituent	Nonwastewaters Concentration (mg/l) TCLP
F006	Tables A & B	Antimony	7440-36-0	2.1
		Arsenic	7440-38-2	0.055
		Barium	7440-39-3	7.6
		Beryllium	7440-41-7	0.014
		Cadmium	7440-43-9	0.19
		Chromium (total)	7440-47-32	0.33
		Cyanide (mg/kg) (total)	57-12-5	1.8
		Lead	7439-92-1	0.37
		Mercury	7439-97-6	0.009
		Nickel	7440-02-0	5.0
		Selenium	7782-49-2	0.16
		Silver	7440-22-4	0.30
		Thallium		0.078
		Zinc	7440-66-6	5.3
K062	Tables A & B	Antimony	7440-36-0	2.1
		Arsenic	7440-38-2	0.055
		Barium	7440-39-3	7.6
		Beryllium	7440-41-7	0.014
		Cadmium	7440-43-9	0.19
		Chromium (total)	7440-47-32	0.33
		Lead	7439-92-1	0.37
		Mercury	7439-97-6	0.009
		Nickel	7440-02-0	5.0

~~Selenium~~	~~7782-49-2~~	~~0.16~~
~~Silver~~	~~7440-22-4~~	~~0.30~~
~~Thallium~~		~~0.078~~
~~Zinc~~	~~7440-66-6~~	~~5.3~~

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 728.Table T Treatment Standards for Hazardous Wastes

Note: The treatment standards that heretofore appeared in tables in Sections 728.141, 728.142, and 728.143 have been consolidated into this table.

Waste Code Waste Description and Treatment or Regulatory Subcategory[1]	Regulated Hazardous Constituent		Wastewaters	Nonwastewaters
	Common Name	CAS[2] Number	Concentration mg/l[3]; or Technology Code[4]	Concentration in mg/kg[5] unless noted as "mg/l TCLP"; or Technology Code[4]
D001 Ignitable Characteristic Wastes, except for the Section 721.121(a)(1) High TOC Subcategory, that are managed in non-CWA or non-CWA-equivalent or non-Class I SDWA systems.				
	NA	NA	DEACT and meet Section 728.148 standards; or RORGS; or CMBST	DEACT and meet Section 728.148 standards; or RORGS; or CMBST
D001 Ignitable Characteristic Wastes, except for the Section 721.121(a)(1) High TOC Subcategory, that are managed in CWA or CWA-equivalent or Class I SDWA systems				
	NA	NA	DEACT	DEACT
D001 High TOC Ignitable Characteristic Liquids Subcategory based on 35 Ill. Adm. Code 721.121(a)(1) - Greater than or equal to 10% total organic carbon. (Note: This subcategory consists of nonwastewaters only.)				
	NA	NA	NA	RORGS; or CMBST
D002 Corrosive Characteristic Wastes that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems.				
	NA	NA	DEACT and meet Section 728.148 standards	DEACT and meet Section 728.148 standards
D002, D004, D005, D006, D007, D008, D009, D010, D011 Radioactive high level wastes generated during the reprocessing of fuel rods. (Note: This subcategory consists of nonwastewaters only.)				
	Corrosivity (pH)	NA	NA	HLVIT
	Arsenic	7440-38-2	NA	HLVIT
	Barium	7440-39-3	NA	HLVIT

Cadmium	7440-43-9	NA	HLVIT
Chromium (Total)	7440-47-3	NA	HLVIT
Lead	7439-92-1	NA	HLVIT
Mercury	7439-87-6	NA	HLVIT
Selenium	7782-49-2	NA	HLVIT
Silver	7440-22-4	NA	HLVIT

D003
Reactive Sulfides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

NA	NA	DEACT	DEACT

D003
Explosive subcategory based on 35 Ill. Adm. Code 721.123(a)(6), (a)(7), and (a)(8).

NA	NA	DEACT	DEACT

D003
Other Reactives Subcategory based on 35 Ill. Adm. Code 721.123(a)(1).

NA	NA	DEACT	DEACT

D003
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

D003
Reactive Cyanides Subcategory based on 35 Ill. Adm. Code 721.123(a)(5).

Cyanides (Total)[7]	57-12-5	--	590
Cyanides (Amenable)[7]	57-12-5	0.86	30

D004
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for arsenic based on the extraction procedure (EP) in SW-846 Method 1310.

Arsenic	7440-38-2	5.0	5.0 mg/l EP
Arsenic; alternate[6] standard for nonwastewaters only.	7440-38-2	NA	5.0 mg/l TCLP

D005
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for barium based on the extraction procedure (EP) in SW-846 Method 1310.

Barium	7440-39-3	100	100 mg/l TCLP

D006
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for cadmium based on the extraction procedure (EP) in SW-846 Method 1310.

Cadmium	7440-43-9	1.0	1.0 mg/l TCLP

D006
Cadmium Containing Batteries Subcategory
(Note: This subcategory consists of nonwastewaters only.)

Cadmium	7440-43-9	NA	RTHRM

D007
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for chromium based on the extraction procedure (EP) in SW-846 Metod 1310.

Chromium (Total)	7440-47-3	5.0	5.0 mg/l TCLP

D008
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for lead based on the extraction procedure (EP) in SW-846 Method 1310.

Lead	7439-92-1	5.0	5.0 mg/l EP
Lead; alternate' standard for nonwastewaters only	7439-92-1	NA	5.0 mg/l TCLP

D008
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).).
(Note: This subcategory consists of nonwastewaters only.)

Lead	7439-92-1	NA	RLEAD

D008
Radioactive Lead Solids Subcategory
(Note: These lead solids include, but are not limited to, all forms of lead shielding and other elemental forms of lead. These lead solids do not include treatment residuals such as hydroxide sludges, other wastewater treatment residuals, or incinerator ashes that can undergo conventional pozzolanic stabilization, nor do they include organo-lead materials that can be incinerated and stabilized as ash.)
(Note: This subcategory consists of nonwastewaters only.)

Lead	7439-92-1	NA	MACRO

D009
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the extraction procedure (EP) in SW-846 Method 1310; 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
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the extraction procedure (EP) in SW-846 Method 1310; 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
Nonwastewaters that exhibit, or are expected to exhibit, the characteristic of toxicity for mercury based on the extraction procedure (EP) in SW-846 Method 1310; and contain less than 260 mg/kg total mercury.
(Low Mercury Subcategory)

Mercury	7439-97-6	NA	0.20 mg/l TCLP

All D009 wastewaters.

Mercury	7439-97-6	0.20	NA

D009
Elemental mercury contaminated with radioactive materials.
(Note: This subcategory consists of nonwastewaters only.)

Mercury	7439-97-6	NA	AMLGM

D009
Hydraulic oil contaminated with Mercury Radioactive Materials Subcategory.
(Note: This subcategory consists of nonwastewaters only.)

Mercury	7439-97-6	NA	IMERC

D010
Wastes that exhibit, or are expected to exhibit, the characteristic or toxicity for selenium based on the extraction procedure (EP) in SW-846 Method 1310.

Selenium	7782-49-2	1.0	5.7 mg/l TCLP

D011
Wastes that exhibit, or are expected to exhibit, the characteristic of toxicity for silver based on the extraction procedure (EP) in SW-846 Method 1310.

Silver	7440-22-4	5.0	5.0 mg/l TCLP

D012
Wastes that are TC for Endrin based on the TCLP in SW-846 Method 1311.

Endrin	72-20-8	BIODG; or INCIN	0.13 and meet Section 728.148 standards
Endrin aldehyde	7421-93-4	BIODG; or INCIN	0.13 and meet Section 728.148 standards

D013
Wastes that are TC for Lindane based on the TCLP in SW-846 Method 1311.

alpha-BHC	319-84-6	CARBN; or INCIN	0.066 and meet Section 728.148 standards
beta-BHC	319-85-7	CARBN; or INCIN	0.066 and meet Section 728.148 standards
delta-BHC	319-86-8	CARBN; or INCIN	0.066 and meet Section 728.148 standards
gamma-BHC (Lindane)	58-89-9	CARBN; or INCIN	0.066 and meet Section 728.148 standards

D014
Wastes that are TC for Methoxychlor based on the TCLP in SW-846 Method 1311.

Methoxychlor	72-43-5	WETOX or INCIN	0.18 and meet Section 728.148 standards

D015
Wastes that are TC for Toxaphene based on the TCLP in SW-846 Method 1311.

Toxaphene	8001-35-2	BIODG or INCIN	2.6 and meet Section 728.148 standards

D016
Wastes that are TC for 2,4-D (2,4-Dichlorophenoxyacetic acid) based on the TCLP in SW-846 Method 1311.

2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	CHOXD, BIODG, or INCIN	10 and meet Section 728.148 standards

D017
Wastes that are TC for 2,4,5-TP (Silvex) based on the TCLP in SW-846 Method 1311.

2,4,5-TP (Silvex)	93-72-1	CHOXD or INCIN	7.9 and meet Section 728.148 standards

D018
Wastes that are TC for Benzene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Benzene	71-43-2	0.14 and meet Section 728.148 standards	10 and meet Section 728.148 standards

D019
Wastes that are TC for Carbon tetrachloride based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Carbon tetrachloride	56-23-5	0.05 and meet Section 728.148 standards	76.0 and meet Section 728.148 standards

D020
Wastes that are TC for Chlordane based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Chlordane (alpha and gamma isomers)	57-74-9	0.0033 and meet Section 728.148 standards	0.26 and meet Section 728.148 standards

D021
Wastes that are TC for Chlorobenzene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Chlorobenzene	108-90-7	0.057 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D022
Wastes that are TC for Chloroform based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Chloroform	67-66-3	0.046 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D023
Wastes that are TC for o-Cresol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

o-Cresol	95-48-7	0.11 and meet Section 728.148 standards	5.6 and meet Section 728.148 standards

D024
Wastes that are TC for m-Cresol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77 and meet Section 728.148 standards	5.6 and meet Section 728.148 standards

D025
Wastes that are TC for p-Cresol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77 and meet Section 728.148 standards	5.6 and meet Section 728.148 standards

D026
Wastes that are TC for Cresols (Total) based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88 and meet Section 728.148 standards	11.2 and meet Section 728.148 standards

D027
Wastes that are TC for p-Dichlorobenzene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

p-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	0.090 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D028
Wastes that are TC for 1,2-Dichloroethane based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

1,2-Dichloroethane	107-06-2	0.2 and meet Section 728.148 standards	16.0 and meet Section 728.148 standards

D029
Wastes that are TC for 1,1-Dichloroethylene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

1,1-Dichloroethylene	75-35-4	0.025 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D030
Wastes that are TC for 2,4-Dinitrotoluene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

2,4-Dinitrotoluene	121-14-2	0.32 and meet Section 728.148 standards	140 and meet Section 728.148 standards

D031
Wastes that are TC for Heptachlor based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Heptachlor	76-44-8	0.0012	0.066 and meet Section 728.148 standards
Heptachlor epoxide	1024-57-3	0.016 and meet Section 728.148 standards	0.066 and meet Section 728.148 standards

D032
Wastes that are TC for Hexachlorobenzene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Hexachlorobenzene	118-74-1	0.055 and meet Section 728.148 standards	10 and meet Section 728.148 standards

D033
Wastes that are TC for Hexachlorobutadiene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Hexachlorobutadiene	67-68-3	0.055 and meet Section 728.148 standards	5.6 and meet Section 728.148 standards

D034
Wastes that are TC for Hexachloroethane based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Hexachloroethane	67-72-1	0.055 and meet Section 728.148 standards	30 and meet Section 728.148 standards

D035
Wastes that are TC for Methyl ethyl ketone based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Methyl ethyl ketone	78-93-3	0.28 and meet Section 728.148 standards	36 and meet Section 728.148 standards

D036
Wastes that are TC for Nitrobenzene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Nitrobenzene	98-95-3	0.068 and meet Section 728.148 standards	14 and meet Section 728.148 standards

D037
Wastes that are TC for Pentachlorophenol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Pentachlorophenol	87-86-5	0.089 and meet Section 728.148 standards	7.4 and meet Section 728.148 standards

D038
Wastes that are TC for Pyridine based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Pyridine	110-86-1	0.014 and meet Section 728.148 standards	16 and meet Section 728.148 standards

D039
Wastes that are TC for Tetrachloroethylene based on the TCLP in SW-846 Method

1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Tetrachloroethylene	127-18-4	0.056 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D040
Wastes that are TC for Trichloroethylene based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Trichloroethylene	79-01-6	0.054 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

D041
Wastes that are TC for 2,4,5-Trichlorophenol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

2,4,5-Trichlorophenol	95-95-4	0.18 and meet Section 728.148 standards	7.4 and meet Section 728.148 standards

D042
Wastes that are TC for 2,4,6-Trichlorophenol based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

2,4,6-Trichlorophenol	88-06-2	0.035 and meet Section 728.148 standards	7.4 and meet Section 728.148 standards

D043
Wastes that are TC for Vinyl chloride based on the TCLP in SW-846 Method 1311 and that are managed in non-CWA or non-CWA equivalent or non-Class I SDWA systems only.

Vinyl chloride	75-01-4	0.27 and meet Section 728.148 standards	6.0 and meet Section 728.148 standards

F001, F002, F003, F004 & F005
F001, F002, F003, F004, or F005 solvent wastes that contain any combination of one or more of the following spent solvents: acetone, benzene, n-butyl alcohol, carbon disulfide, carbon tetrachloride, chlorinated fluorocarbons, chlorobenzene, o-cresol, m-cresol, p-cresol, cyclohexanone, o-dichlorobenzene, 2-ethoxyethanol, ethyl acetate, ethyl benzene, ethyl ether, isobutyl alcohol, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, 2-nitropropane, pyridine, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 1,1,2-trichloro- 1,2,2-trifluoroethane, trichloroethylene, trichloromonofluoromethane, or xylenes (except as specifically noted in other subcategories). See further details of these listings in 35 Ill. Adm. Code 721.131

Acetone	67-64-1	0.28	160
Benzene	71-43-2	0.14	10

n-Butyl alcohol	71-36-3	5.6	2.6
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlorobenzene	108-90-7	0.057	6.0
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Ethyl acetate	141-78-6	0.34	33
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
Isobutyl alcohol	78-83-1	5.6	170
Methanol	67-56-1	5.6	NA
Methylene chloride	75-9-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Nitrobenzene	98-95-3	0.068	14
Pyridine	110-86-1	0.014	16
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoro-methane	75-69-4	0.020	30
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30

F001, F002, F003, F004 & F005
F003 and F005 solvent wastes that contain any combination of one or more of the following three solvents as the only listed F001 through F005 solvents: carbon disulfide, cyclohexanone, or methanol. (Formerly Section 728.141(c))

Carbon disulfide	75-15-0	3.8	4.8 mg/l 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 CHOXD) fb CARBN; or INCIN	INCIN

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 INCIN	INCIN

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	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP

F007
Spent cyanide plating bath solutions from electroplating operations.

Cadmium	7440-43-9	NA	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 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	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP

F009
Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP

F010
Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.

Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	NA

F011
Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.

Cadmium	7440-43-9	NA	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP

Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP

F012
Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process.

Cadmium	7440-43-9	NA	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP

F019
Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30

F020, F021, F022, F023, F026
Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of: (1) tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives, excluding wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol (i.e., F020); (2) pentachlorophenol, or of intermediates used to produce its derivatives (i.e., F021); (3) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F022).
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); (2) tetra-, penta-, or hexachlorobenzenes under alkaline conditions (i.e., F026).

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4

Pentachlorophenol	87-86-5	0.089	7.4

F027
Discarded unused formulations contianing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4

F028
Residues resulting from the incineration or thermal treatment of soil contaminated with U.S. EPA hazardous waste numbers F020, F021, F023, F026, and F027.

HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4

F024
Process wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 35 Ill. Adm. Code 721.131 or 721.132.).

All F024 wastes	NA	INCIN	INCIN
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	0.86 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 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 to and including five, with varying amounts and positions of chlorine substitution.
F025 - Light Ends Subcategory

Carbon tetrachloride	56-23-6	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 or Aids and Desiccants Subcategory

Carbon tetrachloride	56-23-5	0.067	6.0
Chloroform	67-66-3	0.046	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Methylene chloride	75-9-2	0.089	30
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

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 agressive biological treatment units) and K051 wastes are not included in this listing.

Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4

Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.032	30
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

F038
Petroleum refinery secondary (emulsified) oil/water/solids separation sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. -Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated from non-contact once-through cooling waters segregated for treatment from other process or oily cooling waters, sludges and floats generated in agressive 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 agressive biological units) and F037, K048, and K051 are not included in this listing.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 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 728.Subpart D. (Leachate resulting from the disposal of one or more of the following U.S. EPA hazardous wastes and no other hazardous wastes retains its U.S. EPA hazardous waste numbers: F020, F021, F022, F026, F027, or F028.).

Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	NA
Acetophenone	96-86-2	0.010	9.7
2-Acetylaminofluorene	53-96-3	0.059	140
Acrolein	107-02-8	0.29	NA
Acrylonitrile	107-13-1	0.24	84
Aldrin	309-00-2	0.021	0.066
4-Aminobiphenyl	92-67-1	0.13	NA
Aniline	62-53-3	0.81	14
Anthracene	120-12-7	0.059	3.4
Aramite	140-57-8	0.36	NA
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066
Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-methane)	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitro-phenol (Dinoseb)	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	NA
Carbon tetrachloride	56-23-5	0.057	6.0
Chlordane (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	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	108-60-1	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
Chloromethane (Methyl chloride)	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6

m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	NA
1,2-Dibromo-3-chloro-propane	96-12-8	0.11	15
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	0.72	10
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloro-ethylene	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-Dichloro-propylene	10061-01-5	0.036	18
trans-1,3-Dichloro-propylene	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	NA	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	NA
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	NA
1,2-Diphenylhydrazine	122-66-7	0.087	NA
Disulfoton	298-04-4	0.017	6.2

Endosulfan I	939-98-8	0.023	0.066
Endosulfan II	33213-6-5	0.029	0.13
Endosulfan sulfate	1-31-07-8	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 (Propane-nitrile)	107-12-0	0.24	360
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopenta-diene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65
Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-8	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	NA
Methapyrilene	91-80-5	0.081	1.5
Methoxychlor	72-43-5	0.25	0.18
3-Methylcholanthrene	56-49-5	0.0055	15
4,4-Methylene bis(2-chloroaniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
p-Nitroaniline	100-01-6	0.028	28
Nitrobenzene	98-95-3	0.068	14
5-Nitro-o-toluidine	99-55-8	0.32	28
p-Nitrophenol	100-02-7	0.12	29
N-Nitrosodiethylamine	55-18-5	0.40	28
N-Nitrosodimethylamine	62-75-9	0.40	NA
N-Nitroso-di-n-butyl-amine	924-16-3	0.40	17
N-Nitrosomethylethyl-amine	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
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
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 Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloroethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromomethane)	75-25-2	0.63	15
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Trichloromonofluoromethane	75-69-4	0.020	30
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
1,2,3-Trichloropropane	96-18-4	0.85	30
1,1,2-Trichloro-1,2,2-trifluoroethane	76-13-1	0.057	30
tris(2,3-Dibromopropyl) phosphate	126-72-7	0.11	NA
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum or o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Antimony	7440-36-0	1.9	2.1 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	7.6 mg/l TCLP
Beryllium	7440-41-7	0.82	NA

Cadmium	7440-43-9	0.69	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	NA
Fluoride	16964-48-8	35	NA
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Mercury	7439-97-6	0.15	0.025 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Selenium	7782-49-2	0.82	0.16 mg/l TCLP
Silver	7440-22-4	0.43	0.30 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	0.37 mg/l TCLP

K002
Wastewater treatment sludge from the production of chrome yellow and orange pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K003
Wastewater treatment sludge from the production of molybdate orange pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K004
Wastewater treatment sludge from the production of zinc yellow pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K005
Wastewater treatment sludge from the production of chrome green pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590

K006
Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous).

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K006
Wastewater treatment sludge from the production of chrome oxide green pigments (hydrated).

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	NA

K007
Wastewater treatment sludge from the production of iron blue pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590

K008
Oven residue from the production of chrome oxide green pigments.

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K009
Distillation bottoms from the production of acetaldehyde from ethylene.

Chloroform	67-66-3	0.046	6.0

K010
Distillation side cuts from the production of acetaldehyde from ethylene.

Chloroform	67-66-3	0.046	6.0

K011
Bottom stream from the wastewater stripper in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	18
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K013
Bottom stream from the acetonitrile column in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	1.8
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K014
Bottoms from the acetonitrile purification column in the production of acrylonitrile.

Acetonitrile	75-05-8	5.6	1.8
Acrylonitrile	107-13-1	0.24	84
Acrylamide	79-06-1	19	23
Benzene	71-43-2	0.14	10
Cyanide (Total)	57-12-5	1.2	590

K015
Still bottoms from the distillation of benzyl chloride.

Anthracene	120-12-7	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP

K016
Heavy ends or distillation residues from the production of carbon tetrachloride.

Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachlorocyclopentadiene	77-47-4	0.057	2.4
Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.056	6.0

K017
Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.

bis(2-Chloroethyl)ether	111-44-4	0.033	6.0
1,2-Dichloropropane	78-87-5	0.85	18
1,2,3-Trichloropropane	96-18-4	0.85	30

K018
Heavy ends from the fractionation column in ethyl chloride production.

Chloroethane	75-00-3	0.27	6.0
Chloromethane	74-87-3	0.19	NA
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	NA	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0

K019
Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.

bis(2-Chloroethyl)ether	111-44-1	0.033	6.0
Chlorobenzene	108-90-7	0.057	6.0
Chloroform	67-66-3	0.046	6.0
p-Dichlorobenzene	106-46-7	0.090	NA
1,2-Dichloroethane	107-06-2	0.21	6.0
Fluorene	86-73-7	0.059	NA
Hexachloroethane	67-72-1	0.055	30
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	NA
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,1-Trichloroethane	71-55-6	0.054	6.0

K020
Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.

1,2-Dichloroethane	107-06-2	0.21	6.0
1,1,2,2-Tetrachloroethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0

K021
Aqueous spent antimony catalyst waste from fluoromethanes production.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Antimony	7440-36-0	1.9	2.1 mg/l TCLP

K022
Distillation bottom tars from the production of phenol or acetone from cumene.

Toluene	108-88-3	0.080	10
Acetophenone	96-86-2	0.010	9.7
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
Phenol	108-95-2	0.039	6.2
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Nickel	7440-02-0	0.98	5.0 mg/l TCLP

K023
Distillation light ends from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28

K024
Distillation bottoms from the production of phthalic anhydride from naphthalene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28

K025
Distillation bottoms from the production of nitrobenzene by the nitration of benzene.

NA	NA	LLEXT fb SSTRP fb CARBN; or INCIN	INCIN

K026
Stripping still tails from the production of methyl ethyl pyridines.

NA	NA	INCIN	INCIN

K027
Centrifuge and distillation residues from the toluene diisocyanate production.

NA	NA	CARBN; or INCIN	CMBST

K028
Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.

1,1-Dichloroethane	76-34-3	0.059	6.0
trans-1,2-Dichloroethylene	156-60-5	0.054	30
Hexachlorobutadiene	87-88-3	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	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP

K029
Waste from the product steam stripper in the production of 1,1,1-trichloroethane.

Chloroform	67-66-3	0.046	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Vinyl chloride	75-01-4	0.27	6.0

K030
Column bodies or heavy ends from the combined production of trichloroethylene and perchloroethylene.

o-Dichlorobenzene	95-50-1	0.088	NA
p-Dichlorobenzene	106-46-7	0.090	NA
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloroethane	67-72-1	0.055	30
exachloropropylene	1888-71-7	NA	30
entachlorobenzene	608-93-5	NA	10
entachloroethane	76-01-7	NA	6.0
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
etrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K031
By-product salts generated in the production of MSMA and cacodylic acid.

Arsenic	7440-38-2	1.4	5.0 mg/l TCLP

K032
Wastewater treatment sludge from the production of chlordane.

Hexachlorocyclopentadiene	77-48-4	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

K033
Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4

K034
Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.

Hexachlorocyclopentadiene	77-47-4	0.057	2.4

K035
Wastewater treatment sludges generated in the production of creosote.

Acenaphthene	83-32-9	NA	3.4
Anthracene	120-12-7	NA	3.4

Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Dibenz(a,h)anthracene	53-70-3	NA	8.2
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	NA	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	NA	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2

K036
Still bottoms from toluene reclamation distillaiton 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 INCIN	CMBST

K040
Wastewater treatment sludge from the production of phorate.

Phorate	298-02-2	0.021	4.6

K041
Wastewater treatment sludge from the production of toxaphene.

Toxaphene	8001-35-2	0.0095	2.6

K042
Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.

o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K043
2,6-Dichlorophenol waste from the production of 2,4-D.

2,4-Dichlorophenol	120-83-2	0.044	14

2,6-Dichlorophenol	187-65-0	0.044	14
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4
2,3,4,6-Tetrachlorophenol	58-90-2	0.030	7.4
Pentachlorophenol	87-86-5	0.089	7.4
Tetrachloroethylene	127-18-4	0.056	6.0
HxCDDs (All Hexachlorodibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachlorodibenzofurans)	NA	0.000063	0.001
PeCDDs (All Pentachlorodibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachlorodibenzofurans)	NA	0.000035	0.001
TCDDs (All Tetrachlorodibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachlorodibenzofurans)	NA	0.000063	0.001

K044
Wastewater treatment sludges from the manufacturing and processing of explosives.

NA	NA	DEACT	DEACT

K045
Spent carbon from the treatment of wastewater containing explosives.

NA	NA	DEACT	DEACT

K046
Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.

Lead	7439-92-1	0.69	0.37 mg/l TCLP

K047
Pink or red water from TNT operations.

NA	NA	DEACT	DEACT

K048
Dissolved air flotation (DAF) float from the petroleum refining industry.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	218-01-9	0.059	3.4
Di-n-butyl phthalate	84-74-2	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-33	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)'	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

K049
Slop oil emulsion solids from the petroleum refining industry.

Anthracene	120-12-7	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Carbon disulfide	75-15-0	3.8	NA
Chrysene	2218-01-9	0.059	3.4
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

K050
Heat exchanger bundle cleaning sludge from the petroleum refining industry.

Benzo(a)pyrene	50-32-8	0.061	3.4
Phenol	108-95-2	0.039	6.2
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

K051
API separator sludge from the petroleum refining industry.

Acenaphthene	83-32-9	0.059	NA
Anthracene	120-12-7	0.059	3.4
Benz(a)anthracene	56-55-3	0.059	3.4
Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Chrysene	2218-01-9	0.059	3.4
Di-n-butyl phthalate	105-67-9	0.057	28
Ethylbenzene	100-41-4	0.057	10
Fluorene	86-73-7	0.059	NA
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Pyrene	129-00-0	0.067	8.2
Toluene	106-88-3	0.08	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Cyanides (Total)[7]	57-12-5	1.2	590
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

K052
Tank bottoms (leaded) from the petroleum refining industry.

Benzene	71-43-2	0.14	10

Benzo(a)pyrene	50-32-8	0.061	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
2,4-Dimethylphenol	105-67-9	0.036	NA
Ethylbenzene	100-41-4	0.057	10
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Toluene	108-88-3	0.08	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	NA
Nickel	7440-02-0	NA	5.0 mg/l TCLP

K060
Ammonia still lime sludge from coking operations.

Benzene	71-43-2	0.14	10
Benzo(a)pyrene	50-32-8	0.061	3.4
Naphthalene	91-20-3	0.059	5.6
Phenol	108-95-2	0.039	6.2
Cyanides (Total)[7]	57-12-5	1.2	590

K061
Emission control dust or sludge from the primary production of steel in electric furnaces.

Antimony	7440-36-0	NA	2.1 mg/l TCLP
Arsenic	7440-38-2	NA	5.0 mg/l TCLP
Barium	7440-39-3	NA	7.6 mg/l TCLP
Beryllium	7440-41-7	NA	0.014 mg/l TCLP
Cadmium	7440-43-9	0.69	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Mercury	7439-97-6	NA	0.025 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Selenium	7782-49-2	NA	0.16 mg/l TCLP
Silver	7440-22-4	NA	0.30 mg/l TCLP
Thallium	NA	NA	0.078 mg/l TCLP
Zinc	7440-66-6	NA	5.3 mg/l TCLP

K062
Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332).

Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP
Nickel	7440-02-0	3.98	NA

K069
Emission control dust or sludge from secondary lead smelting. - Calcium sulfate (Low Lead) Subcategory

Cadmium	7440-43-9	0.69	0.19 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K069
Emission control dust or sludge from secondary lead smelting. - Non-Calcium sulfate (High Lead) Subcategory

NA	NA	NA	RLEAD

K071
K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are residues from RMERC.

Mercury	7439-97-6	NA	0.20 mg/l TCLP

K071
K071 (Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used) nonwastewaters that are not residues from RMERC.

Mercury	7439-97-6	NA	0.025 mg/l TCLP

K071
All K071 wastewaters.

Mercury	7439-97-6	0.15	NA

K073
Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.

Carbon tetrachloride	56-23-5	0.057	6.0
Chloroform	67-66-3	0.046	6.0
Hexachloroethane	67-72-1	0.055	30
Tetrachloroethylene	127-18-4	0.058	6.0
1,1,1-Trichloroethane	71-55-6	0.054	6.0

K083
Distillation bottoms from aniline production.

Aniline	62-53-3	0.81	14
Benzene	71-43-2	0.14	10
Cyclohexanone	108-94-1	0.36	NA
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguish from diphenylamine)	86-30-6	0.92	13
Nitrobenzene	98-95-3	0.068	14
Phenol	108-95-2	0.039	6.2
Nickel	7440-02-0	3.98	5.0 mg/l TCLP

K084
Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Arsenic	7440-38-2	1.4	5.0 mg/l TCLP

K085
Distillation or fractionation column bottoms from the production of chlorobenzenes.

Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
m-Dichlorobenzene	541-73-1	0.036	6.0

o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0
Hexachlorobenzene	118-74-1	0.055	10
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
1,2,4,5-Tetrachlorobenzene	95-94-3	0.055	14
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K086
Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead.

Acetone	67-64-1	0.28	160
Acetophenone	96-86-2	0.010	9.7
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
n-Butyl alcohol	71-36-3	5.6	2.6
Butylbenzyl phthalate	85-68-7	0.017	28
Cyclohexanone	108-94-1	0.36	NA
o-Dichlorobenzene	95-50-1	0.088	6.0
Diethyl phthalate	84-66-2	0.20	28
Dimethyl phthalate	131-11-3	0.047	28
Di-n-butyl phthalate	84-74-2	0.057	28
Di-n-octyl phthalate	117-84-0	0.017	28
Ethyl acetate	141-78-6	0.34	33
Ethylbenzene	100-41-4	0.057	10
Methanol	67-56-1	5.6	NA
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methylene chloride	75-09-2	0.089	30
Naphthalene	91-20-3	0.059	5.6
Nitrobenzene	98-95-3	0.068	14
Toluene	108-88-3	0.080	10
1,1,1-Trichloroethane	71-55-6	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K087
Decanter tank tar sludge from coking operations.

Acenaphthylene	208-96-8	0.059	3.4
Benzene	71-43-2	0.14	10
Chrysene	218-01-9	0.059	3.4
Fluoranthene	206-44-0	0.068	3.4
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4
Naphthalene	91-20-3	0.059	5.6
Phenanthrene	85-01-8	0.059	5.6
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K093
Distillation light ends from the production of phthalic anhydride from ortho-

xylene.

Phthalic anhydride (measured as Phthalic acid or erephthalic acid)	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28

K094
Distillation bottoms from the production of phthalic anhydride from ortho-xylene.

Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28

K095
Distillation bottoms from the production of 1,1,1-trichloroethane.

Hexachloroethane	67-72-1	0.055	30
Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloro-ethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloro-ethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0

K096
Heavy ends from the heavy ends column from the production of 1,1,1-trichloro-ethane.

m-Dichlorobenzene	541-73-1	0.036	6.0
Pentachloroethane	76-01-7	0.055	6.0
1,1,1,2-Tetrachloro-ethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloro-ethane	79-34-6	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19
1,1,2-Trichloroethane	79-00-5	0.054	6.0
Trichloroethylene	79-01-6	0.054	6.0

K097
Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.

Chlordane (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	0.068
Hexachlorocyclopenta-diene	77-47-4	0.057	2.4

K098
Untreated process wastewater from the production of toxaphene.

Toxaphene	8001-35-2	0.0095	2.6

K099
Untreated wastewater from the production of 2,4-D.

2,4-Dichlorophenoxy-acetic acid	94-75-7	0.72	10
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001

HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	NA	0.000035	0.001
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	NA	0.000063	0.001

K100
Waste leaching solution from acid leaching of emission control dust or sludge from secondary lead smelting.

Cadmium	7440-43-9	0.69	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Lead	7439-92-1	0.69	0.37 mg/l TCLP

K101
Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

o-Nitroaniline	88-74-4	0.27	14
Arsenic	7440-38-2	1.4	5.0 mg/l 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 f--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)[7]	57-12-5	1.2	590

K105
Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.

Benzene	71-43-2	0.14	10
Chlorobenzene	108-90-7	0.057	6.0
2-Chlorophenol	95-57-8	0.044	5.7
o-Dichlorobenzene	95-50-1	0.088	6.0
p-Dichlorobenzene	106-46-7	0.090	6.0

Phenol	108-95-2	0.039	6.2
2,4,5-Trichlorophenol	95-95-4	0.18	7.4
2,4,6-Trichlorophenol	88-06-2	0.035	7.4

K106
K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain greater than or equal to 260 mg/kg total mercury.

Mercury	7439-97-6	NA	RMERC

K106
K106 (wastewater treatment sludge from the mercury cell process in chlorine production) nonwastewaters that contain less than 260 mg/kg total mercury that are residues from RMERC.

Mercury	7439-97-6	NA	0.20 mg/l TCLP

K106
Other K106 nonwastewaters that contain less than 260 mg/kg total mercury and are not residues from RMERC.

Mercury	7439-97-6	NA	0.025 mg/l TCLP

K106
All K106 wastewaters.

Mercury	7439-97-6	0.15	NA

K107
Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	INCIN; or CHOXD fb CARBN; or BIODG fb CARBN	INCIN

K108
Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	INCIN; or CHOXD fb CARBN; or BIODG fb CARBN	INCIN

K109
Spent filter cartridges from product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	INCIN; or CHOXD fb CARBN; or BIODG fb CARBN	INCIN

K110
Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.

NA	NA	INCIN; or CHOXD fb CARBN; or BIODG fb CARBN	INCIN

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	INCIN; or ~~CHOXD fb~~ CARBN; or BIODG fb CARBN	INCIN

K113
Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA	NA	CARBN; or INCIN	CMBST

K114
Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

NA	NA	CARBN; or INCIN	CMBST

K115
Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.

Nickel	7440-02-0	3.98	5.0 mg/l TCLP
NA	NA	CARBN; or INCIN	CMBST

K116
Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.

NA	NA	CARBN; or INCIN	CMBST

K117
Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K118
Spent absorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K123
Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	INCIN; or ~~CHOXD fb~~ (BIODG or CARBN)	INCIN

K124
Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	INCIN; or CHOXD fb (BIODG or CARBN)	INCIN

K125
Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.

NA	NA	INCIN; or CHOXD fb (BIODG or CARBN)	INCIN

K126
Baghouse dust and floor sweepings in milling and pachaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.

NA	NA	INCIN; or CHOXD fb (BIODG or CARBN)	INCIN

K131
Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.

Methyl bromide (Bromomethane)	74-83-9	0.11	15

K132
Spent absorbent and wastewater separator solids from the production of methyl bromide.

Methyl bromide (Bromomethane)	74-83-9	0.11	15

K136
Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

Methyl bromide (Bromomethane)	74-83-9	0.11	15
Chloroform	67-66-3	0.046	6.0
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15

K141
Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludge from coking operations).

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-2-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K142
Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Ideno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K143
Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4

K144
Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2

K145
Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4

Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	6.2
Naphthalene	91-20-3	0.059	5.6

K147
Tar storage tank residues from coal tar refining.

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K148
Residues from coal tar distillation, including, but not limited to, still bottoms.

Benz(a)anthracene	56-55-3	0.059	3.4
Benzo(a)pyrene	50-32-8	0.061	3.4
Benzo(b)fluoranthene (difficult to distinguish from benzo-(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo-(b)fluoranthene)	207-08-9	0.11	6.8
Chrysene	218-01-9	0.059	3.4
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

K149
Distillation bottoms from the production of 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-Tetrachloro-benzene	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-Tetrachloro-benzene	95-94-3	0.055	14
1,1,2,2- Tetrachloro-ethane	79-34-5	0.057	6.0
Tetrachloroethylene	127-18-4	0.056	6.0
1,2,4-Trichlorobenzene	120-82-1	0.055	19

K151
Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of 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-Tetrachloro-benzene	95-94-3	0.055	14
Tetrachloroethylene	127-18-4	0.056	6.0
Toluene	108-88-3	0.080	10

P001
Warfarin, & salts, when present at concentrations greater than 0.3%

Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST

P002
1-Acetyl-2-thiourea

1-Acetyl-2-thiourea	591-08-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

P003
Acrolein

Acrolein	107-02-6	0.29	CMBST

P004
Aldrin

Aldrin	309-00-2	0.021	0.068

P005
Allyl alcohol

Allyl alcohol	107-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST

P006
Aluminum phosphide

Aluminum phosphide	20859-73-6	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN

P007
5-Aminomethyl-3-isoxazolol

5-Aminomethyl-3-isoxazolol	2763-96-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P008			
4-Aminopyridine			
4-Aminopyridine	504-24-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P009			
Ammonium picrate			
Ammonium picrate	131-74-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
P010			
Arsenic acid			
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P011			
Arsenic pentoxide			
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P012			
Arsenic trioxide			
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
P013			
Barium cyanide			
Barium	7440-39-3	NA	7.6 mg/l TCLP
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P014			
Thiophenol (Benzene thiol)			
Thiophenol (Benzene thiol)	108-98-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P015			
Beryllium dust			
Beryllium	7440-41-7	RMETL;or RTHRM	RMETL; or RTHRM
P016			
Dichloromethyl ether (Bis(chloromethyl)ether)			
Dichloromethyl ether	542-88-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P017			
Bromoacetone			
Bromoacetone	598-31-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

P018			
Brucine			
Brucine	357-57-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P020			
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)			
2-sec-Butyl-4,6-dinitrophenol (Dinoseb)	88-85-7	0.066	2.5
P021			
Calcium cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P022			
Carbon disulfide			
Carbon disulfide	75-15-0	3.8	INCIN
Carbon disulfide; alternate[6] standard for nonwastewaters only	75-15-0	NA	4.8 mg/l TCLP
P023			
Chloroacetaldehyde			
Chloroacetaldehyde	107-20-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P024			
p-Chloroaniline			
p-Chloroaniline	106-47-8	.046	16
P026			
1-(o-Chlorophenyl)thiourea			
1-(o-Chlorophenyl)thiourea	5344-82-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P027			
3-Chloropropionitrile			
3-Chloropropionitrile	542-76-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P028			
Benzyl chloride			
Benzyl chloride	100-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P029			
Copper cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30

P030			
Cyanides (soluble salts and complexes)			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P031			
Cyanogen			
Cyanogen	460-19-5	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN
P033			
Cyanogen chloride			
Cyanogen chloride	506-77-4	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN
P034			
2-Cyclohexyl-4,6-dinitrophenol			
2-Cyclohexyl-4,6-dinitrophenol	131-89-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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-phosphorothioate			
O,O-Diethyl-O-pyrazinyl-phosphorothioate	297-97-2	CARBN; or INCIN	CMBST
P041			
Diethyl-p-nitrophenyl phosphate			
Diethyl-p-nitrophenyl phosphate	311-45-5	CARBN; or INCIN	CMBST
P042			
Epinephrine			
Epinephrine	51-43-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P043			
Diisopropylfluorophosphate (DFP)			
Diisopropylfluorophosphate (DFP)	55-91-4	CARBN; or INCIN	CMBST
P044			
Dimethoate			

Dimethoate	60-51-5	CARBN; or INCIN	CMBST
P045			
Thiofanox			
Thiofanox	39196-18-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P046			
alpha,alpha-Dimethylphenethylamine			
alpha,alpha-Dimethylphenethylamine	122-09-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
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 INCIN	INCIN
P050			
Endosulfan			
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
P051			
Endrin			
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
P054			
Aziridine			
Aziridine	151-56-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
P058			
Fluoroacetic acid, sodium salt			
Fluoroacetic acid, sodium salt	62-74-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P059			
Heptachlor			
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
P060			
Isodrin			
Isodrin	465-73-6	0.021	0.066
P062			
Hexaethyl tetraphosphate			
Hexaethyl tetraphosphate	757-58-4	CARBN; or INCIN	CMBST
P063			
Hydrogen cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P064			
Isocyanic acid, ethyl ester			
Isocyanic acid, ethyl ester	624-83-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P065			
P065 (mercury fulminate) nonwastewaters, regardless of their total mercury contant, that are not incinerator residues or are not residues from RMERC.			
Mercury	7439-97-6	NA	RMERC
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 CHOXD) fb CARBN; or INCIN	INCIN
P067			
2-Methyl-aziridine			
2-Methyl-aziridine	75-55-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P068			
Methyl hydrazine			
Methyl hydrazine	60-34-4	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED, or CMBST
P069			
2-Methyllactonitrile			
2-Methyllactonitrile	75-86-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P070			
Aldicarb			
Aldicarb	116-06-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
P073			
Nickel carbonyl			
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
P074			
Nickel cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
P075			
Nicotine and salts			

Nicotine and salts	54-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	CHOXD; CHRED; or CMBST
P082			
N-Nitrosodimethylamine			
N-Nitrosodimethylamine	62-75-9	0.40	2.3
P084			
N-Nitrosomethylvinylamine			
N-Nitrosomethylvinyl-amine	4549-40-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P085			
Octamethylpyrophosphoramide			
Octamethylpyrophosphor-amide	152-16-9	CARBN; or INCIN	CMBST
P087			
Osmium tetroxide			
Osmium tetroxide	20816-12-0	RMETL; or RTHRM	RMETL; or RTHRM
P088			
Endothall			
Endothall	145-73-3	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
P089			
Parathion			
Parathion	56-38-2	0.014	4.6
P092			
P092 (phenyl mercuric acetate) nonwastewaters, regardless of their total mercury content, that are not incinerator residues or are not residues from RMERC.			
Mercury	7439-97-6	NA	IMERC; or RMERC

P092			
P092 (phenyl mercuric acetate) nonwastewaters that are either incinerator residues or are residues from RMERC; and still contain greater than or equal to 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	RMERC
P092			
P092 (phenyl mercuric acetate) nonwastewaters that are residues from RMERC and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.20 mg/l TCLP
P092			
P092 (phenyl mercuric acetate) nonwastewaters that are incinerator residues and contain less than 260 mg/kg total mercury.			
Mercury	7439-97-6	NA	0.025 mg/l TCLP
P092			
All P092 (phenyl mercuric acetate) wastewaters.			
Mercury	7439-97-6	0.15	NA
P093			
Phenylthiourea			
Phenylthiourea	103-85-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P094			
Phorate			
Phorate	298-02-2	0.021	4.6
P095			
Phosgene			
Phosgene	75-44-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P096			
Phosphine			
Phosphine	7803-51-2	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN
P097			
Famphur			
Famphur	52-85-7	0.017	15
P098			
Potassium cyanide.			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P099			
Potassium silver cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Silver	7440-22-4	0.43	0.30 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 INCIN	CMBST
P103			
Selenourea			
Selenium	7782-49-2	0.82	0.16 mg/l TCLP
P104			
Silver cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
Silver	7440-22-4	0.43	0.30 mg/l TCLP
P105			
Sodium azide			
Sodium azide	26628-22-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
P106			
Sodium cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P108			
Strychnine and salts			
Strychnine and salts	57-24-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P109			
Tetraethyldithiopyrophosphate			
Tetraethyldithiopyro-phosphate	3689-24-5	CARBN; or INCIN	CMBST
P110			
Tetraethyl lead			
lead	7439-92-1	0.69	0.37 mg/l TCLP
P111			
Tetraethylpyrophosphate			
Tetraethylpyrophosphate	107-49-3	CARBN; or INCIN	CMBST
P112			
Tetranitromethane			
Tetranitromethane	509-14-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	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	0.16 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 INCIN	INCIN
P118			
Trichloromethanethiol			
Trichloromethanethiol	75-70-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
P119			
Ammonium vanadate			
Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P120			
Vanadium pentoxide			
Vanadium (measured in wastewaters only)	7440-62-2	4.3	STABL
P121			
Zinc cyanide			
Cyanides (Total)[7]	57-12-5	1.2	590
Cyanides (Amenable)[7]	57-12-5	0.86	30
P122			
Zinc phosphide Zn_3P_2, when present at concentrations greater than 10%			
Zinc Phosphide	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN
P123			
Toxaphene			
Toxaphene	8001-35-2	0.0095	2.6
U001			
Acetaldehyde			
Acetaldehyde	75-07-0	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U002			
Acetone			
Acetone	67-64-1	0.28	160
U003			
Acetonitrile			
Acetonitrile	75-05-8	5.6	INCIN

Acetonitrile; alternate[6] standard for nonwastewaters only	75-05-8	NA	1.8
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 INCIN	INCIN
U007 Acrylamide Acrylamide	79-06-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U008 Acrylic acid Acrylic acid	79-10-7	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U009 Acrylonitrile Acrylonitrile	107-13-1	0.24	84
U010 Mitomycin C Mitomycin C	50-07-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U011 Amitrole Amitrole	61-82-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U012 Aniline Aniline	62-53-3	0.81	14
U014 Auramine Auramine	492-80-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

U015 Azaserine Azaserine	115-02-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U016 Benz(c)acridine Benz(c)acridine	225-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U017 Benzal chloride Benzal chloride	98-87-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
U021 Benzidine Benzidine	92-87-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	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 INCIN	INCIN
U027 bis(2-Chloroisopropyl)ether Bis(2-Chloroisopropyl)-ether	39638-32-9	0.055	7.2
U028 bis(2-Ethylhexyl)phthalate Bis(2-Ethylhexyl)-phthalate	117-81-7	0.28	28
U029 Methyl bromide (Bromomethane) Methyl bromide (Bromo-methane)	74-83-9	0.11	15
U030 4-Bromophenyl phenyl ether 4-Bromophenyl phenyl ether	101-55-3	0.055	15
U031 n-Butyl alcohol n-Butyl alcohol	71-36-3	5.6	2.6
U032 Calcium chromate Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
U033 Carbon oxyfluoride Carbon oxyfluoride	353-50-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U034 Trichloroacetaldehyde (Chloral) Trichloroacetaldehyde (Chloral)	75-87-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U035 Chlorambucil Chlorambucil	305-03-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U036 Chlordane Chlordane (alpha and gamma 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	INCIN
U039 p-Chloro-m-cresol p-Chloro-m-cresol	59-50-7	0.018	14
U041 Epichlorohydrin (1-Chloro-2,3-epoxypropane) Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106-89-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U042 2-Chloroethyl vinyl ether 2-Chloroethyl vinyl ether	110-75-8	0.062	INCIN
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 INCIN	INCIN
U047 2-Chloronaphthalene 2-Chloronaphthalene	91-58-7	0.055	5.6
U048 2-Chlorophenol 2-Chlorophenol	95-57-8	0.044	5.7
U049 4-Chloro-o-toluidine hydrochloride 4-Chloro-o-toluidine hydrochloride	3165-93-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U050 Chrysene Chrysene	218-01-9	0.059	3.4

U051			
Creosote			
Naphthalene	91-20-3	0.059	5.6
Pentachlorophenol	87-86-5	0.089	7.4
Phenanthrene	85-01-8	0.059	5.6
Pyrene	129-00-0	0.067	8.2
Toluene	108-88-3	0.080	10
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Lead	7439-92-1	0.69	0.37 mg/l TCLP
U052			
Cresols (Cresylic acid)			
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cresol-mixed isomers (Cresylic acid) (sum of o-, m-, and p-cresol concentrations)	1319-77-3	0.88	11.2
U053			
Crotonaldehyde			
Crotonaldehyde	4170-30-3	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U055			
Cumene			
Cumene	98-82-8	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U056			
Cyclohexane			
Cyclohexane	110-82-7	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U057			
Cyclohexanone			
Cyclohexanone	108-94-1	0.36	CMBST
Cyclohexanone; alternate standard for nonwastewaters only	108-94-1	NA	0.75 mg/l TCLP
U058			
Cyclophosphamide			
Cyclophosphamide	50-18-0	CARBN; or INCIN	CMBST
U059			
Daunomycin			

Daunomycin	20830-81-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U060			
DDD			
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
U061			
DDT			
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
U062			
Diallate			
Diallate	2303-16-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	CMBST
U066			
1,2-Dibromo-3-chloropropane			
1,2-Dibromo-3-chloropropane	96-12-8	0.11	15
U067			
Ethylene dibromide (1,2-Dibromoethane)			
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.02815	U068
U067			
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 INCIN	INCIN
U074 1,4-Dichloro-2-butene			
cis-1,4-Dichloro-2-butene	1476-11-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
trans-1,4-Dichloro-2-butene	764-41-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U075 Dichlorodifluoromethane			
Dichlorodifluoromethane	75-71-8	0.23	7.2
U076 1,1-Dichloroethane			
1,1-Dichloroethane	75-34-3	0.059	6.0
U077 1,2-Dichloroethane			
1,2-Dichloroethane	107-06-2	0.21	6.0
U078 1,1-Dichloroethylene			
1,1-Dichloroethylene	75-35-4	0.025	6.0
U079 1,2-Dichloroethylene			
trans-1,2-Dichloroethylene	156-60-5	0.054	30
U080 Methylene chloride			
Methylene chloride	75-09-2	0.089	30
U081 2,4-Dichlorophenol			
2,4-Dichlorophenol	120-83-2	0.044	14
U082 2,6-Dichlorophenol			
2,6-Dichlorophenol	87-65-0	0.044	14
U083 1,2-Dichloropropane			
1,2-Dichloropropane	78-87-5	0.85	18
U084 1,3-Dichloropropylene			

cis-1,3-Dichloropropylene	10061-01-5	0.036	18
trans-1,3-Dichloropropylene	10061-02-6	0.036	18
U085 1,2:3,4-Diepoxybutane			
1,2:3,4-Diepoxybutane	1464-53-5	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U086 N,N'-Diethylhydrazine			
N,N'-Diethylhydrazine	1615-80-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
U087 O,O-Diethyl S-methyldithiophosphate			
O,O-Diethyl S-methyldithiophosphate	3288-58-2	CARBN; or INCIN	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 INCIN	CMBST
U090 Dihydrosafrole			
Dihydrosafrole	94-58-6	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U091 3,3'-Dimethoxybenzidine			
3,3'-Dimethoxybenzidine	119-90-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U092 Dimethylamine			
Dimethylamine	124-40-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U093 p-Dimethylaminoazobenzene			
p-Dimethylaminoazobenzene	60-11-7	0.13	INCIN
U094 7,12-Dimethylbenz(a)anthracene			

7,12-Dimethylbenz(a)-anthracene	57-97-6	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U095			
3,3'-Dimethylbenzidine			
3,3'-Dimethylbenzidine	119-93-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U096			
alpha, alpha-Dimethyl benzyl hydroperoxide			
alpha, alpha-Dimethyl benzyl hydroperoxide	80-15-9	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
U097			
Dimethylcarbamoyl chloride			
Dimethylcarbamoyl chloride	79-44-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U098			
1,1-Dimethylhydrazine			
1,1-Dimethylhydrazine	57-14-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
U099			
1,2-Dimethylhydrazine			
1,2-Dimethylhydrazine	540-73-8	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
U101			
2,4-Dimethylphenol			
2,4-Dimethylphenol	105-67-9	0.036	14
U102			
Dimethyl phthalate			
Dimethyl phthalate	131-11-3	0.047	28
U103			
Dimethyl sulfate			
Dimethyl sulfate	77-78-1	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
U105			
2,4-Dinitrotoluene			
2,4-Dinitrotoluene	121-14-2	0.32	140
U106			
2,6-Dinitrotoluene			
2,6-Dinitrotoluene	606-20-2	0.55	28
U107			
Di-n-octyl phthalate			
Di-n-octyl phthalate	117-84-0	0.017	28

U108			
1,4-Dioxane			
1,4-Dioxane	123-91-1	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
1,4-Dioxane; alternate[4] standard for nonwastewaters only	123-91-1	NA	170
U109			
1,2-Diphenylhydrazine			
1,2-Diphenylhydrazine	122-66-7	CHOXD; CHRED; CARBN; BIODG; or INCIN	CHOXD; CHRED; or CMBST
1,2-Diphenylhydrazine; alternate[5] standard for wastewaters only	122-66-7	0.087	NA
U110			
Dipropylamine			
Dipropylamine	142-84-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U111			
Di-n-propylnitrosamine			
Di-n-propylnitrosamine	621-64-7	0.40	14
U112			
Ethyl acetate			
Ethyl acetate	141-78-8	0.34	33
U113			
Ethyl acrylate			
Ethyl acrylate	140-88-5	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U114			
Ethylenebisdithiocarbamic acid salts and esters			
Ethylenebisdithiocarbamic acid	111-54-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U115			
Ethylene oxide			
Ethylene oxide	75-21-8	(WETOX or CHOXD) fb CARBN; or INCIN	CHOXD; or INCIN
Ethylene oxide; alternate[6] standard for wastewaters only	75-21-8	0.12	NA
U116			
Ethylene thiourea			

Ethylene thiourea	96-45-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U117 Ethyl ether			
Ethyl ether	60-29-7	0.12	160
U118 Ethyl methacrylate			
Ethyl methacrylate	97-63-2	0.14	160
U119 Ethyl methane sulfonate			
Ethyl methane sulfonate	62-50-0	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U120 Fluoranthene			
Fluoranthene	206-44-0	0.068	3.4
U121 Trichloromonofluoromethane			
Trichloromonofluoro-methane	75-69-4	0.020	30
U122 Formaldehyde			
Formaldehyde	50-00-0	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U123 Formic acid			
Formic acid	64-18-6	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U124 Furan			
Furan	110-00-9	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U125 Furfural			
Furfural	98-01-1	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U126 Glycidylaldehyde			

Glycidylaldehyde	765-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U127 Hexachlorobenzene			
Hexachlorobenzene	118-74-1	0.055	10
U128 Hexachlorobutadiene			
Hexachlorobutadiene	87-68-3	0.055	5.6
U129 Lindane			
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC (Lindane)	58-89-9	0.0017	0.066
U130 Hexachlorocyclopentadiene			
Hexachlorocyclopenta-diene	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 INCIN	INCIN
U133 Hydrazine			
Hydrazine	302-01-2	CHOXD; CHRED; CARBN; BIODG; or INCIN	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 INCIN	CHOXD; CHRED; or INCIN
U136 Cacodylic acid			
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
U137 Indeno(1,2,3-cd)pyrene			
Indeno(1,2,3-cd)pyrene	193-39-5	0.0055	3.4

U138			
Iodomethane			
Iodomethane	74-88-4	0.19	65
U140			
Isobutyl alcohol			
Isobutyl alcohol	78-83-1	5.6	170
U141			
Isosafrole			
Isosafrole	120-58-1	0.081	2.6
U142			
Kepone			
Kepone	143-50-8	0.0011	0.13
U143			
Lasiocarpine			
Lasiocarpine	303-34-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U144			
Lead acetate			
Lead	7439-92-1	0.69	0.37 mg/l TCLP
U145			
Lead phosphate			
Lead	7439-92-1	0.69	0.37 mg/l TCLP
U146			
Lead subacetate			
Lead	7439-92-1	0.69	0.37 mg/l TCLP
U147			
Maleic anhydride			
Maleic anhydride	108-31-6	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U148			
Maleic hydrazide			
Maleic hydrazide	123-33-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U149			
Malononitrile			
Malononitrile	109-77-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U150			
Melphalan			
Melphalan	148-82-3	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN

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 Mercury Contaminated with Radioactive Materials			
Mercury	7439-97-6	NA	AMLGM
U152			
Methacrylonitrile			
Methacrylonitrile	126-98-7	0.24	84
U153			
Methanethiol			
Methanethiol	74-93-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U154			
Methanol			
Methanol	67-56-1	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
Methanol; alternate[6] set of standards for both wastewaters and nonwastewaters	67-56-1	5.6	0.75 mg/l TCLP
U155			
Methapyrilene			
Methapyrilene	91-80-5	0.081	1.5
U156			
Methyl chlorocarbonate			
Methyl chlorocarbonate	79-22-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U157			
3-Methylcholanthrene			
3-Methylcholanthrene	56-49-5	0.0055	15

U158 4,4'-Methylene bis(2-chloroaniline)			
4,4'-Methylene bis(2-chloroaniline)	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 INCIN	CHOXD; CHRED; or CMBST
U161 Methyl isobutyl ketone			
Methyl isobutyl ketone	108-10-1	0.14	33
U162 Methyl methacrylate			
Methyl methacrylate	80-62-6	0.14	160
U163 N-Methyl-N'-nitro-N-nitrosoguanidine			
N-Methyl-N'-nitro-N-nitrosoguanidine	70-25-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U164 Methylthiouracil			
Methylthiouracil	56-04-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U165 Naphthalene			
Naphthalene	91-20-3	0.059	5.6
U166 1,4-Naphthoquinone			
1,4-Naphthoquinone	130-15-4	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U167 1-Naphthlyamine			
1-Naphthlyamine	134-32-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U168 2-Naphthlyamine			
2-Naphthlyamine	91-59-8	0.52	INCIN
U169 Nitrobenzene			
Nitrobenzene	98-95-3	0.068	14

U170 p-Nitrophenol			
p-Nitrophenol	100-02-7	0.12	29
U171 2-Nitropropane			
2-Nitropropane	79-46-9	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
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 INCIN	INCIN
U177 N-Nitroso-N-methylurea			
N-Nitroso-N-methylurea	684-93-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U178 N-Nitroso-N-methylurethane			
N-Nitroso-N-methyl-urethane	615-53-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U179 N-Nitrosopiperidine			
N-Nitrosopiperidine	100-75-4	0.013	35
U180 N-Nitrosopyrrolidine			
N-Nitrosopyrrolidine	930-55-2	0.013	35
U181 5-Nitro-o-toluidine			
5-Nitro-o-toluidine	99-55-8	0.32	28
U182 Paraldehyde			

Paraldehyde	123-63-7	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U183 Pentachlorobenzene			
Pentachlorobenzene	608-93-5	0.055	10
U184 Pentachloroethane			
Pentachloroethane	76-01-7	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
Pentachloroethane; alternate[6] standards for both wastewaters and nonwastewaters	76-01-7	0.055	6.0
U185 Pentachloronitrobenzene			
Pentachloronitrobenzene	82-68-8	0.055	4.8
U186 1,3-Pentadiene			
1,3-Pentadiene	504-60-9	(WETOX or CHOXD) fb CARBN; or INCIN	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 INCIN	CHOXD; CHRED; or INCIN
U190 Phthalic anhydride			
Phthalic anhydride (measured as Phthalic acid or Terephthalic acid)	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
U191 2-Picoline			
2-Picoline	109-06-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
U194 n-Propylamine			
n-Propylamine	107-10-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U196 Pyridine			
Pyridine	110-86-1	0.014	16
U197 p-Benzoquinone			
p-Benzoquinone	106-51-4	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U200 Reserpine			
Reserpine	50-55-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U201 Resorcinol			
Resorcinol	108-46-3	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST
U202 Saccharin and salts			
Saccharin	81-07-2	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U203 Safrole			
Safrole	94-59-7	0.081	22
U204 Selenium dioxide			
Selenium	7782-49-2	0.82	0.16 mg/l TCLP
U205 Selenium sulfide			
Selenium	7782-49-2	0.82	0.16 mg/l TCLP
U206 Streptozotocin			

Streptozotocin	18883-66-4	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U207 1,2,4,5-Tetrachlorobenzene 1,2,4,5-Tetrachloro-benzene	95-94-3	0.055	14
U208 1,1,1,2-Tetrachloroethane 1,1,1,2-Tetrachloro-ethane	630-20-6	0.057	6.0
U209 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloro-ethane	79-34-5	0.057	6.0
U210 Tetrachloroethylene Tetrachloroethylene	127-18-4	0.056	6.0
U211 Carbon tetrachloride Carbon tetrachloride	56-23-5	0.057	6.0
U213 Tetrahydrofuran Tetrahydrofuran	109-99-9	(WETOX or CHOXD) fb CARBN; or INCIN	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 INCIN	INCIN

U219 Thiourea Thiourea	62-56-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U220 Toluene Toluene	108-88-3	0.080	10
U221 Toluenediamine Toluenediamine	25376-45-8	CARBN; or INCIN	CMBST
U222 o-Toluidine hydrochloride o-Toluidine hydro-chloride	636-21-5	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U223 Toluene diisocyanate Toluene diisocyanate	26471-62-5	CARBN; or INCIN	CMBST
U225 Bromoform (Tribromomethane) Bromoform (Tribromo-methane)	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-Tricloroethane 1,1,2-Tricloroethane	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 INCIN	INCIN
U235 tris-(2,3-Dibromopropyl)-phosphate tris-(2,3-Dibromo-propyl)-phosphate	126-72-7	0.11	0.10
U236 Trypan Blue			

Trypan Blue	72-57-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U237			
Uracil mustard			
Uracil mustard	66-75-1	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U238			
Urethane (Ethyl carbamate)			
Urethane (Ethyl carbamate)	51-79-6	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
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 INCIN	INCIN
U243			
Hexachloropropylene			
Hexachloropropylene	1888-71-7	0.035	30
U244			
Thiram			
Thiram	137-26-8	(WETOX or CHOXD) fb CARBN; or INCIN	INCIN
U246			
Cyanogen bromide			
Cyanogen bromide	506-68-3	CHOXD; WETOX; or INCIN	CHOXD; WETOX; or INCIN
U247			
Methoxychlor			
Methoxychlor	72-43-5	0.25	0.18
U248			
Warfarin, & salts, when present at concentrations of 0.3% or less			
Warfarin	81-81-2	(WETOX or CHOXD) fb CARBN; or INCIN	CMBST

U249			
Zinc phosphide, Zn_3P_2, when present at concentrations of 10% or less			
Zinc Phosphide	1314-84-7	CHOXD; CHRED; or INCIN	CHOXD; CHRED; or INCIN
U328			
o-Toluidine			
o-Toluidine	95-53-4	INCIN; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	INCIN; or Thermal Destruction
U353			
p-Toluidine			
p-Toluidine	106-49-0	INCIN; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	INCIN; or Thermal Destruction
U359			
2-Ethoxyethanol			
2-Ethoxyethanol	110-80-5	INCIN; or CHOXD fb (BIODG or CARBN); or BIODG fb CARBN	CMBST

Notes:

1 The waste descriptions provided in this table do not replace waste descriptions in 35 Ill. Adm. Code 721. Descriptions of Treatment or Regulatory Subcategories are provided, as needed, to distinguish between applicability of different standards.

2 CAS means Chemical Abstract Services. When the waste code and or or regulated constituents are described as a combination of a chemical with its salts and or or esters, the CAS number is given for the parent compound only.

3 Concentration standards for wastewaters are expressed in mg/l are based on analysis of composite samples.

4 All treatment standards expressed as a Technology Code or combination of Technology Codes are explained in detail in 35 Ill. Adm. Code 728.Table C, "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. ";" separates alternative treatement schemes.

5 Except for Metals (EP or TCLP) and Cyanides (Total and Amenable) the nonwastewater treatment standards expressed as a concentration were established, in part, based upon incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart O or 35 Ill. Adm. Code 725.Subpart O, or based upon combustion in fuel substitution units operating in accordance with applicable technical requirements. A facility may comply with these treatment standards according to provisions in 35 Ill. Adm. Code 728.140(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

5 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 and or or nonwastewater) specified for that alternate standard.

7 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", U.S. EPA Publication SW-846, as 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.

NA means not applicable.

(Source: Added at 19 Ill. Reg. _____, effective _____)

Section 728.Table U Universal Treatment Standards (UTS)

Regulated Constituent-Common Name	CAS[1] No.	Wastewater Standard Concentration (in mg/l[2])	Nonwastewater Standard Concentration (in mg/kg[3] unless noted as "mg/l TCLP")
Acenaphthylene	208-96-8	0.059	3.4
Acenaphthene	83-32-9	0.059	3.4
Acetone	67-64-1	0.28	160
Acetonitrile	75-05-8	5.6	1.8
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
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
alpha-BHC	319-84-6	0.00014	0.066
beta-BHC	319-85-7	0.00014	0.066
delta-BHC	319-86-8	0.023	0.066
gamma-BHC	58-89-9	0.0017	0.066

Benzene	71-43-2	0.14	10
Benz(a)anthracene	56-55-3	0.059	3.4
Benzal chloride	98-87-3	0.055	6.0
Benzo(b)fluoranthene (difficult to distinguish from benzo(k)fluoranthene)	205-99-2	0.11	6.8
Benzo(k)fluoranthene (difficult to distinguish from benzo(b)fluoranthene)	207-08-9	0.11	6.8
Benzo(g,h,i)perylene	191-24-2	0.0055	1.8
Benzo(a)pyrene	50-32-8	0.061	3.4
Bromodichloromethane	75-27-4	0.35	15
Methyl bromide (Bromo-methane)	74-83-9	0.11	15
4-Bromophenyl phenyl ether	101-55-3	0.055	15
n-Butyl alcohol	71-36-3	5.6	2.6
Butyl benzyl phthalate	85-68-7	0.017	28
2-sec-Butyl-4,6-dinitro-phenol (Dinoseb)	88-85-7	0.066	2.5
Carbon disulfide	75-15-0	3.8	4.8 mg/l TCLP
Carbon tetrachloride	56-23-5	0.057	6.0
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
Chlorodibromomethane	124-48-1	0.057	15
Chloroethane	75-00-3	0.27	6.0
bis(2-Chloro-ethoxy)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-Chloro-isopropyl)ether	108-60-1	0.055	7.2
p-Chloro-m-cresol	59-50-7	0.018	14
2-Chloroethyl vinyl ether	110-75-8	0.062	NA
Chloromethane (Methyl chloride)	74-87-3	0.19	30
2-Chloronaphthalene	91-58-7	0.055	5.6
2-Chlorophenol	95-57-8	0.044	5.7
3-Chloropropylene	107-05-1	0.036	30
Chrysene	218-01-9	0.059	3.4
o-Cresol	95-48-7	0.11	5.6
m-Cresol (difficult to distinguish from p-cresol)	108-39-4	0.77	5.6
p-Cresol (difficult to distinguish from m-cresol)	106-44-5	0.77	5.6
Cyclohexanone	108-94-1	0.36	0.75 mg/l TCLP
1,2-Dibromo-3-chloro-propane	96-12-8	0.11	15
Ethylene dibromide (1,2-Dibromoethane)	106-93-4	0.028	15
Dibromomethane	74-95-3	0.11	15
2,4-D (2,4-Dichloro-phenoxyacetic acid)	94-75-7	0.72	10
o,p'-DDD	53-19-0	0.023	0.087
p,p'-DDD	72-54-8	0.023	0.087
o,p'-DDE	3424-82-6	0.031	0.087
p,p'-DDE	72-55-9	0.031	0.087
o,p'-DDT	789-02-6	0.0039	0.087
p,p'-DDT	50-29-3	0.0039	0.087
Dibenz(a,h)anthracene	53-70-3	0.055	8.2
Dibenz(a,e)pyrene	192-65-4	0.061	NA
m-Dichlorobenzene	541-73-1	0.036	6.0
o-Dichlorobenzene	95-50-1	0.088	6.0

p-Dichlorobenzene	106-46-7	0.090	6.0
Dichlorodifluoromethane	75-71-8	0.23	7.2
1,1-Dichloroethane	75-34-3	0.059	6.0
1,2-Dichloroethane	107-06-2	0.21	6.0
1,1-Dichloroethylene	75-35-4	0.025	6.0
trans-1,2-Dichloro-ethylene	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-Dichloro-propylene	10061-01-5	0.036	18
trans-1,3-Dichloro-propylene	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
p-Dimethylaminoazo-benzene	60-11-7	0.13	NA
Di-n-propylnitrosamine	621-64-7	0.40	14
1,4-Dioxane	123-91-1	NA	170
Diphenylamine (difficult to distinguish from diphenylnitrosamine)	122-39-4	0.92	13
Diphenylnitrosamine (difficult to distinguishfrom diphenylamine)	86-30-6	0.92	13

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	1-31-07-8	0.029	0.13
Endrin	72-20-8	0.0028	0.13
Endrin aldehyde	7421-93-4	0.025	0.13
Ethyl acetate	141-78-6	0.34	33
Ethyl cyanide (Propanenitrile)	107-12-0	0.24	360
Ethyl benzene	100-41-4	0.057	10
Ethyl ether	60-29-7	0.12	160
bis(2-Ethylhexyl) phthalate	117-81-7	0.28	28
Ethyl methacrylate	97-63-2	0.14	160
Ethylene oxide	75-21-8	0.12	NA
Famphur	52-85-7	0.017	15
Fluoranthene	206-44-0	0.068	3.4
Fluorene	86-73-7	0.059	3.4
Heptachlor	76-44-8	0.0012	0.066
Heptachlor epoxide	1024-57-3	0.016	0.066
Hexachlorobenzene	118-74-1	0.055	10
Hexachlorobutadiene	87-68-3	0.055	5.6
Hexachloro-cyclopentadiene	77-47-4	0.057	2.4
HxCDDs (All Hexachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
HxCDFs (All Hexachloro-dibenzofurans)	NA	0.000063	0.001
Hexachloroethane	67-72-1	0.055	30
Hexachloropropylene	1888-71-7	0.035	30
Indeno (1,2,3-c,d) pyrene	193-39-5	0.0055	3.4
Iodomethane	74-88-4	0.19	65

Isobutyl alcohol	78-83-1	5.6	170
Isodrin	465-73-6	0.021	0.066
Isosafrole	120-58-1	0.081	2.6
Kepone	143-50-8	0.0011	0.13
Methacrylonitrile	126-98-7	0.24	84
Methanol	67-56-1	5.6	0.75 mg/l TCLP
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-chloroaniline)	101-14-4	0.50	30
Methylene chloride	75-09-2	0.089	30
Methyl ethyl ketone	78-93-3	0.28	36
Methyl isobutyl ketone	108-10-1	0.14	33
Methyl methacrylate	80-62-6	0.14	160
Methyl methansulfonate	66-27-3	0.018	NA
Methyl parathion	298-00-0	0.014	4.6
Naphthalene	91-20-3	0.059	5.6
2-Naphthylamine	91-59-8	0.52	NA
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-butyl-amine	924-16-3	0.40	17
N-Nitrosomethylethyl-amine	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
Parathion	56-38-2	0.014	4.6
Total PCBs (sum of all PCB isomers, or all Aroclors)	1336-36-3	0.10	10
Pentachlorobenzene	608-93-5	0.055	10
PeCDDs (All Pentachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
PeCDFs (All Pentachloro-dibenzofurans)	NA	0.000035	0.001
Pentachloroethane	76-01-7	0.055	6.0
Pentachloronitrobenzene	82-68-8	0.055	4.8
Pentachlorophenol	87-86-5	0.089	7.4
Phenacetin	62-44-2	0.081	16
Phenanthrene	85-01-8	0.059	5.6
Phenol	108-95-2	0.039	6.2
Phorate	298-02-2	0.021	4.6
Phthalic acid	100-21-0	0.055	28
Phthalic anhydride	85-44-9	0.055	28
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 (2,4,5-Trichloro-phenoxyacetic acid)	93-76-5	0.72	7.9
1,2,4,5-Tetrachloro-benzene	95-94-3	0.055	14
TCDDs (All Tetrachloro-dibenzo-p-dioxins)	NA	0.000063	0.001
TCDFs (All Tetrachloro-dibenzofurans)	NA	0.000063	0.001
1,1,1,2-Tetrachloro-ethane	630-20-6	0.057	6.0
1,1,2,2-Tetrachloro-ethane	79-34-6	0.057	6.0

Tetrachloroethylene	127-18-4	0.056	6.0
2,3,4,6-Tetrachloro-phenol	58-90-2	0.030	7.4
Toluene	108-88-3	0.080	10
Toxaphene	8001-35-2	0.0095	2.6
Bromoform (Tribromo-methane)	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
Trichloromonofluoro-methane	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-trifluoroethane	76-13-1	0.057	30
tris-(2,3-Dibromopropyl) phosphate	126-72-7	0.11	0.10
Vinyl chloride	75-01-4	0.27	6.0
Xylenes-mixed isomers (sum of o-, m-, and p-xylene concentrations)	1330-20-7	0.32	30
Antimony	7440-36-0	1.9	2.1 mg/l TCLP
Arsenic	7440-38-2	1.4	5.0 mg/l TCLP
Barium	7440-39-3	1.2	7.6 mg/l TCLP
Beryllium	7440-41-7	0.82	0.014 mg/l TCLP
Cadmium	7440-43-9	0.69	0.19 mg/l TCLP
Chromium (Total)	7440-47-3	2.77	0.86 mg/l TCLP
Cyanides (Total)[4]	57-12-5	1.2	590
Cyanides (Amenable)[4]	57-12-5	0.86	30
Fluoride	16964-48-8	35	NA
Lead	7439-92-1	0.69	0.37 mg/l TCLP

Mercury-Nonwastewater from Retort	7439-97-6	NA	0.20 mg/l TCLP
Mercury-All Others	7439-97-6	0.15	0.025 mg/l TCLP
Nickel	7440-02-0	3.98	5.0 mg/l TCLP
Selenium	7782-49-2	0.82	0.16 mg/l TCLP
Silver	7440-22-4	0.43	0.30 mg/l TCLP
Sulfide	8496-25-8	14	NA
Thallium	7440-28-0	1.4	0.078 mg/l TCLP
Vanadium[5]	7440-62-2	4.3	0.23 mg/l TCLP
Zinc[5]	7440-66-6	2.61	5.3 mg/l TCLP

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.

3 Except for metals (EP or TCLP) and cyanides (total and amenable), the nonwastewater treatment standards expressed as a concentration were established, in part, based on incineration in units operated in accordance with the technical requirements of 35 Ill. Adm. Code 724.Subpart O or 35 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 40 CFR 268.40(d). All concentration standards for nonwastewaters are based on analysis of grab samples.

4 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", U.S. EPA 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.

5 Vanadium and zinc are not "underlying hazardous constituents" in characteristic wastes, according to the definition at 268.2(i).

Note: NA means not applicable.

(Source: Added at 19 Ill. Reg. _____, effective _____)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER d: UNDERGROUND INJECTION CONTROL AND UNDERGROUND STORAGE TANK PROGRAMS

PART 730
UNDERGROUND INJECTION CONTROL OPERATING REQUIREMENTS

SUBPART A: GENERAL

Section

SUBPART B: CRITERIA AND STANDARDS APPLICABLE TO CLASS I NON-HAZARDOUS WELLS

Section

SUBPART C: CRITERIA AND STANDARDS APPLICABLE TO CLASS II WELLS

Section

SUBPART D: CRITERIA AND STANDARDS APPLICABLE TO CLASS III WELLS

Section

SUBPART F: CRITERIA AND STANDARDS APPLICABLE TO CLASS V INJECTION WELLS

Section

SUBPART G: CRITERIA AND STANDARDS APPLICABLE TO CLASS I HAZARDOUS WELLS

Section

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

SOURCE: Adopted in R81-32, 47 PCB 93, at 6 Ill. Reg. 12479, effective March 3, 1984; amended in R82-19, 53 PCB 131 at 7 Ill. Reg. 14426 effective March 3,

1984; recodified at 10 Ill. Reg. 14174; amended in R89-2 at 14 Ill. Reg. 3130, effective February 20, 1990; amended in R89-11 at 14 Ill. Reg. 11959, effective July 9, 1990; amended in R93-6 at 17 Ill. Reg. 15646, effective September 14, 1993; amended in R94-5 at 18 Ill. Reg. 18391, effective December 20, 1994; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL

Section 730.104 Criteria for Exempted Aquifers

An aquifer or a portion thereof ~~which~~that meets the criteria for an "underground source of drinking water" in Section 730.103 may be determined by the Board under 35 Ill. Adm. Code 704.103, 704.123, and 702.105 to be an "exempted aquifer" if it meets the following criteria:

a) It does not currently serve as a source of drinking water; and

b) It cannot now and will not in the future serve as a source of drinking water because:

1) It is mineral, hydrocarbon, or geothermal energy producing, or ~~can be demonstrated by~~ a permit applicant can demonstrate, as part of a permit application for a Class II or III ~~operation~~injection well, that the aquifer ~~to~~ contains minerals or hydrocarbons that ~~considering their quantity and location~~ are expected to be commercially producible considering their quantity and location;

2) It is situated at a depth or location ~~which~~that makes recovery of water for drinking water purposes economically or technologically impractical;

3) It is so contaminated that it would be economically or technologically impractical to render that water fit for human consumption; or

4) It is located over a Class III well mining area subject to subsidence or catastrophic collapse; or

c) The total dissolved solids content of the groundwater is more than 3,000 and less than 10,000 mg/l and the aquifer is not reasonably expected to supply a public water system.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 730.105 Classification of Injection Wells

Injection wells are classified as follows:

a) Class I.

1) Wells used by generators of hazardous wastes or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing~~, within 402 meters (1/4 mile) of the well bore,~~ an underground source of drinking water within 402 meters (1/4 mile) of the well bore.

2) Other industrial and municipal disposal wells ~~which~~that inject fluids beneath the lowermost formation containing~~, within 402 meters (1/4 mile) of the well bore,~~ an underground source of drinking water within 402 meters (1/4 mile) of the well bore.

b) Class II. Wells ~~which~~that inject fluids:

1) ~~Which~~That are brought to the surface in connection with conventional oil or natural gas production and which may be commingled with wastewaters from gas plants ~~which~~that are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection;

2) For enhanced recovery of oil or natural gas; and

3) For storage of hydrocarbons ~~which~~that are liquid at standard temperature and pressure.

c) Class III. Wells ~~which~~that inject for extraction of minerals, including:

1) Mining of sulfur by the Frasch process;

2) In situ production of uranium or other metals. This category includes only in situ production from ore bodies ~~which~~that have not been conventionally mined. Solution mining of conventional mines, such as stopes leaching, is included in Class V.

3) Solution mining of salts or potash.

~~(Board Note~~BOARD NOTE: Class III wells include the recovery of geothermal energy to produce electric power but do not include wells used in heating or aquaculture ~~which~~that fall under Class V.)

d) Class IV.

1) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation ~~which~~that ~~within 402 meters (1/4 mile) of the well~~ contains an underground source of drinking water within 402 meters (1/4 mile) of the well.

2) Wells used by generators of hazardous waste or of radioactive waste, by owners or operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste above a formation ~~which~~that ~~within 402 meters (1/4 mile) of the well~~ contains an underground source of drinking water within 402 meters (1/4 mile) of the well.

3) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste~~, which~~that cannot be classified under ~~35 Ill. Adm. Code 730.105~~ subsection (a)(1), ~~or 730.105~~(d)(1), ~~and~~or (d)(2) above (e.g., wells used to dispose of hazardous wastes into or above a formation

~~which~~that contains an aquifer ~~which~~that has been exempted pursuant to ~~35 Ill. Adm. Code~~Section 730.104~~)~~.

e) Class V. Injection wells not included in Class I, Class II, Class III, or Class IV. Class V wells include:

1) Air conditioning return flow wells used to return the water used in a heat pump for heating or cooling to the ~~supply aquifer the water used for heating or cooling in a heat pump~~;

2) Cesspools, including multiple dwelling, community, or regional cesspools, or other devices that receive wastes, ~~which~~that have an open bottom and sometimes have perforated sides. The UIC requirements do not apply to single family residential cesspools or to non-residential cesspools ~~which~~that receive solely sanitary wastes and have the capacity to serve fewer than 20 persons a day;

3) Cooling water return flow wells used to inject water previously used for cooling;

4) Drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation;

5) Dry wells used for the injection of wastes into a subsurface formation;

6) Recharge wells used to replenish the water in an aquifer;

7) Salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water;

8) Sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings, or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not;

9) Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community, or regional business establishment septic tank. The UIC requirements do not apply to single family residential septic system wells, or to nonresidential septic system wells ~~which~~that are used solely for the disposal of sanitary waste and which have the capacity to serve fewer than 20 persons a day.

10) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water;

11) Radioactive waste disposal wells other than Class IV wells;

12) Injection wells associated with the recovery of geothermal energy for heating, aquaculture or production of electric power;

13) Wells used for solution mining of conventional mines such as stopes leaching;

14) Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts; and

15) Injection wells used in experimental technologies.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 730.110 Plugging and Abandoning Class I and Class III Wells

a) Prior to abandoning a Class I or Class III well, the well shall be plugged with cement in a manner ~~which~~that will not allow the movement of fluids either into or between underground sources of drinking water. The Agency may allow Class III wells to use other plugging materials if it is satisfied that such materials will prevent movement of fluids into or between underground sources of drinking water.

b) Placement of the cement plugs shall be accomplished by one of the following:

1) The Balance Method;

2) The Dump Bailer Method; ~~or~~

3) The Two-Plug Method; or

4) An alternative method approved by the Agency in the permit, ~~which~~that will reliably provide a comparable level of protection to underground sources of drinking water.

c) The well to be abandoned ~~shall~~must be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the Agency, prior to the placement of the cement plug.

d) The plugging and abandonment required in 35 Ill. Adm. Code 704.188 and 704.187 ~~shall,~~must also demonstrate adequate protection of USDWs in the case of a Class III ~~project~~well ~~which~~that underlies or is in an aquifer ~~which~~that has been exempted under Section 730.104~~, also demonstrate adequate protection of USDWs~~. The Agency shall prescribe aquifer cleanup and monitoring where it deems it necessary and feasible to insure adequate protection of USDWs.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART D: CRITERIA AND STANDARDS APPLICABLE TO CLASS III WELLS

Section 730.132 Construction Requirements

a) All new Class III wells ~~shall~~must be cased and cemented to prevent the migration of fluids into or between underground sources of drinking water. The Agency may waive the cementing requirements for new wells in existing projects or portions of existing projects where it has substantial evidence that no contamination of underground sources of drinking water would result. The casing and cement used in the construction of each newly drilled well ~~shall~~must be designed for the life expectancy of the well. In determining and specifying casing and cementing requirements, the

following factors ~~shall~~must be considered:

1) Depth to the injection zone;

2) Injection pressure, external pressure, internal pressure, axial loading, etc.;

3) Hole size;

4) Size and grade of all casing strings (wall thickness, diameter, nominal weight, length, joint specification, and construction material);

5) Corrosiveness of injected fluids and formation fluids;

6) Lithology of injection and confining zones; and

7) Type and grade of cement.

b) Appropriate logs and other tests ~~shall~~must be conducted during the drilling and construction of new Class III wells. A descriptive report interpreting the results of such logs and tests ~~shall~~must be prepared by a knowledgeable log analyst and submitted to the Agency. The logs and tests appropriate to each type of Class III well ~~shall~~must be determined based on the intended function, depth, construction, and other characteristics of the well; availability of similar data in the area of the drilling site; and the need for additional information that may arise from time to time as the construction of the well progresses. Deviation checks ~~shall~~must be conducted on all holes where pilot holes and reaming are used, unless the hole will be cased and cemented by circulating cement to the surface. Where deviation checks are necessary they ~~shall~~must be conducted at sufficiently frequent intervals to assure that vertical avenues for fluid migration in the form of diverging holes are not created during drilling.

c) Where the injection zone is a formation ~~which~~that is naturally water-bearing, the following information concerning the injection zone ~~shall~~must be determined or calculated for new Class III wells or projects:

1) Fluid pressure;

2) Fracture pressure; and

3) Physical and chemical characteristics of the formation fluids.

d) Where the injection formation is not a water-bearing formation, the information in ~~paragraph~~subsection (c)(2) above must be submitted.

e) Where injection is into a formation ~~which~~that contains water with less than 10,000 mg/l TDS, monitoring wells shall be completed into the injection zone and into any underground sources of drinking water above the injection zone ~~which~~that could be affected by the mining operation. These wells shall be located in such a fashion as to detect any excursion of injection fluids, process by-products, or formation fluids outside the mining area or zone. If the operation may be affected by subsidence or catastrophic collapse, the monitoring wells shall be located so that they will not be physically affected.

f) Where injection is into a formation ~~which~~that does not contain water with less than 10,000 mg/l TDS, no monitoring wells are necessary in the injection stratum.

g) Where the injection wells penetrate an USDW in an area subject to subsidence or catastrophic collapse, an adequate number of monitoring wells ~~shall~~must be completed into the USDW to detect any movement of injected fluids, process by-products, or formation fluids into the USDW. The monitoring wells ~~shall~~must be located outside the physical influence of the subsidence or catastrophic collapse.

h) In determining the number, location, construction and frequency of monitoring of the monitoring wells the following criteria ~~shall~~must be considered:

1) The population relying on the USDW affected or potentially affected by the injection operation;

2) The proximity of the injection operation to points of withdrawal of drinking water;

3) The local geology and hydrology;

4) The operating pressures and whether a negative pressure gradient is being maintained;

5) The nature and volume of the injected fluid, the formation water, and the process by-products; and

6) The injection well density.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

Section 730.133 Operating, Monitoring, and Reporting Requirements

a) Operating Requirements. Operating requirements prescribed ~~shall~~must, at a minimum, specify that:

1) Except during well stimulation, injection pressure at the wellhead ~~shall~~must be calculated so as to assure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone. In no case shall injection pressure initiate fractures in the confining zone or cause the migration of injection or formation fluids into an underground source of drinking water.

2) Injection between the outermost casing protecting underground sources of drinking water and the well bore is prohibited.

b) Monitoring Requirements. Monitoring requirements shall, at a minimum, specify:

1) Monitoring of the nature of injected fluids with sufficient frequency to yield representative data on its characteristics. Whenever the injection fluid is modified to the extent that the analysis required by Section 730.134(a)(7)(C) is incorrect or incomplete, the owner or operator shall provide the Agency with a new analysis as required by Section 730.134(a)(7)(C);

2) Monitoring of injection pressure and either flow rate or volume semimonthly, or metering and daily recording of injected and produced fluid volumes, as appropriate;

3) Demonstration of mechanical integrity pursuant to Section 730.108 at least once every five years during the life of the well for salt solution mining;

4) Monitoring of the fluid level in the injection zone semi-monthly, where appropriate, and monitoring of the parameters chosen to measure water quality in the monitoring wells required by Section 730.132(e) semi-monthly; and

5) Quarterly monitoring of wells required by Section 730.132(g).

6) All Class III wells may be monitored on a field or project basis, rather than on an individual well basis, by manifold monitoring. Manifold monitoring may be used in cases of facilities consisting of more than one injection well, operating with a common manifold. Separate monitoring systems for each well are not required provided the owner/ or operator demonstrates that manifold monitoring is comparable to individual well monitoring.

c) Reporting Requirements. Reporting requirements shall, at a minimum, include:

1) Quarterly reporting to the Agency on required monitoring;

2) Results of mechanical integrity and any other periodic test required by the Agency reported with the first regular quarterly report after the completion of the test; and

3) Monitoring may be reported on a project or field basis rather than individual well basis where manifold monitoring is used.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBPART F: CRITERIA AND STANDARDS APPLICABLE TO CLASS V INJECTION WELLS

Section 730.151 Applicability

This Subpart sets forth criteria and standards for underground injection control programs to regulate all injection not regulated in 730.Subparts B, D, and E. Class II wells, however, are not regulated by this Subpart.

a) Generally, wells covered by this Subpart inject non-hazardous fluids into or above formations that contain underground sources of drinking water. It includes all wells listed in Section 730.105(e) but is not limited to those types of injection wells.

b) It also includes wells not covered in Class IV that inject radioactive materials listed in 10 CFR 20, Appendix B, Table II, Column 2.

(Source: Amended at 19 Ill. Reg. _____, effective _____)

SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER d: UNDERGROUND INJECTION CONTROL AND UNDERGROUND STORAGE TANK PROGRAMS

PART 738
HAZARDOUS WASTE INJECTION RESTRICTIONS

SUBPART A: GENERAL

Section
738.101 Purpose Scope and Applicability
738.102 Definitions
738.103 Dilution Prohibited as a Substitute for Treatment
738.104 Case-by-Case Extensions of an Effective Date
738.105 Waste Analysis

SUBPART B: PROHIBITIONS ON INJECTION

Section
738.110 Waste Specific Prohibitions - Solvent Wastes
738.111 Waste Specific Prohibitions - Dioxin-Containing Wastes
738.112 Waste Specific Prohibitions - California List Wastes
738.114 Waste Specific Prohibitions - First Third Wastes
738.115 Waste Specific Prohibitions - Second Third Wastes
738.116 Waste Specific Prohibitions - Third Third Wastes
738.117 Waste Specific Prohibitions - Newly-Listed Wastes

SUBPART C: PETITION STANDARDS AND PROCEDURES

Section
738.120 Petitions to Allow Injection of a Prohibited Waste
738.121 Required Information to Support Petitions
738.122 Submission, Review and Approval or Denial of Petitions
738.123 Review of Adjusted Standards
738.124 Termination of Adjusted Standards

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

SOURCE: Adopted in R89-2 at 14 Ill. Reg. 3059, effective February 20, 1990; amended in R89-11 at 14 Ill. Reg. 11948, effective July 9, 1990; amended in R90-14 at 15 Ill. Reg. 11425, effective July 24, 1991; amended in R92-13 at 17 Ill. Reg. 6190, effective April 5, 1993; amended in R93-6 at 17 Ill. Reg. 15461, effective September 14, 1993; amended in R95-6 at 19 Ill. Reg. _____, effective _____.

SUBPART B: PROHIBITIONS ON INJECTION

Section 738.117 Waste Specific Prohibitions - Newly-Listed Wastes

a) The wastes specified in 35 Ill. Adm. Code 721.Subpart D by the following U.S. EPA Hhazardous Wwaste numbers are prohibited from underground injection:

F037
F038
K107
K108
K109
K110
K111
K112
K117

K118
K123
K124
K125
K126
K131
K136
U328
U353
U359

b) The wastes specified in 35 Ill. Adm. Code 721.Subpart D by the following U.S. EPA hazardous waste numbers are prohibited from underground injection:

K141
K142
K143
K144
K145
K147
K148
K149
K150
K151

c) Effective September 19, 1995, the wastes specified in 35 Ill. Adm. Code 721.Subpart C by the following U.S. EPA hazardous waste numbers are prohibited from underground injection:

D001 (high TOC subcategory, as specified at 35 Ill. Adm. Code 728.I40)
D012
D013
D014
D015
D016
D017

~~b~~d) Effective June 30, 1995, the wastes specified in 35 Ill. Adm. Code 721.Subpart D by the following U.S. EPA ~~H~~hazardous W~~w~~aste numbers are prohibited from underground injection:

K117
K118
K131
K132

~~c~~e) The requirements of subsections (a) and (b) above do not apply:

1) If the wastes meet or are treated to meet the applicable standards specified in 35 Ill. Adm. Code 728.Subpart D; or

2) If an adjusted standard has been granted in response to a petition under 738.Subpart C ~~of this Part~~; or

3) During the period of extension of the applicable effective date, if an extension is granted under Section 738.104.

BOARD NOTE: Derived from 40 CFR 148.17, as added at 57 Fed. Reg. 37263 (Aug. 18, 1992).

(Source: Amended at 19 Ill. Reg. _____, effective _____)

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

PART 739
STANDARDS FOR THE MANAGEMENT OF USED OIL

SUBPART A: DEFINITIONS

Section
739.100 Definitions

SUBPART B: APPLICABILITY

Section
739.110 Applicability
739.111 Used oil specifications
739.112 Prohibitions

SUBPART C: STANDARDS FOR USED OIL GENERATORS

Section
739.120 Applicability
739.121 Hazardous waste mixing
739.122 Used oil storage
739.123 On-site burning in space heaters
739.124 Off-site shipments

SUBPART D: STANDARDS FOR USED OIL COLLECTION CENTERS AND AGGREGATION POINTS

Section
739.130 Do-it-yourselfer used oil collection centers
739.131 Used oil collection centers
739.132 Used oil aggregate points owned by the generator

SUBPART E: STANDARDS FOR USED OIL TRANSPORTER AND TRANSFER FACILITIES

Section
739.140 Applicability
739.141 Restrictions on transporters that are not also processors
739.142 Notification
739.143 Used oil transportation
739.144 Rebuttable presumption for used oil
739.145 Used oil storage at transfer facilities
739.146 Tracking
739.147 Management of residues

SUBPART F: STANDARDS FOR USED OIL PROCESSORS

Section
739.150 Applicability
739.151 Notification
739.152 General facility standards
739.153 Rebuttable presumption for used oil
739.154 Used oil management
739.155 Analysis plan
739.156 Tracking
739.157 Operating record and reporting
739.158 Off-site shipments of used oil
739.159 Management of residues

SUBPART G: STANDARDS FOR USED OIL BURNERS THAT BURN

OFF-SPECIFICATION USED OIL FOR ENERGY RECOVERY

SUBPART H: STANDARDS FOR USED OIL FUEL MARKETERS

SUBPART I: STANDARDS FOR USE AS A DUST SUPPRESSANT DISPOSAL OF USED OIL

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

SOURCE: Adopted in R93-4 at 17 Ill. Reg. 20954, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6931, effective April 26, 1994; amended in R94-17 at 18 Ill. Reg. 17616, effective November 23, 1994.

SUBPART B: APPLICABILITY

Section 739.110 Applicability

This Section identifies those materials which are subject to regulation as used oil under this Part. This Section also identifies some materials that are not subject to regulation as used oil under this Part, and indicates whether these materials may be subject to regulation as hazardous waste under Parts 702, 703, 720 through 726, and 728.

a) Used oil. U.S. EPA presumes that used oil is to be recycled unless a used oil handler disposes of used oil, or sends used oil for disposal. Except as provided in Section 739.111, the regulations of this Part apply to used oil, and to materials identified in this Section as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C.

b) Mixtures of used oil and hazardous waste.

1) Listed hazardous waste.

A) A mixture of used oil and hazardous waste that is listed in 35 Ill. Adm. Code 721.Subpart D is subject to regulation as hazardous waste under 35 Ill. Adm. Code 703, 720 through 726, and 728, rather than as used oil under this Part.

B) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 35 Ill. Adm. Code 721.Appendix H). U.S. EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, (202) 783-3238 (document number 955-001-00000-1).

i) The rebuttable presumption does not apply to metalworking oils or fluids containing chlorinated paraffins, if they are processed, through a tolling arrangement as described in Section 739.124(c), to reclaim metalworking oils or fluids. The presumption does apply to metalworking oils or fluids if such oils or fluids are recycled in any other manner, or disposed.

ii) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

2) Characteristic hazardous waste. A mixture of used oil and hazardous waste that exhibits a hazardous waste characteristic identified in 35 Ill. Adm. Code 721.Subpart C and a mixture of used oil and hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more of the characteristics of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C is subject to:

A) Except as provided in subsection (b)(2)(C) of this Section, regulation as hazardous waste under 35 Ill. Adm. Code 703, 720 through 726, and 728 rather than as used oil under this Part, if the resultant mixture exhibits any characteristics of hazardous waste identified in 35 Ill. Adm. Code 721.Subpart C; or

B) Except as provided in subsection (b)(2)(C) of this Section, regulation as used oil under this Part, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under 35 Ill. Adm. Code 721.Subpart C.

C) Regulation as used oil under this Part, if the mixture is of used oil and a waste which is hazardous solely because it exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability under 35 Ill. Adm. Code

721.121.

3) Conditionally exempt small quantity generator hazardous waste. A mixture of used oil and conditionally exempt small quantity generator hazardous waste regulated under 35 Ill. Adm. Code 721.105 is subject to regulation as used oil under this Part.

c) Materials containing or otherwise contaminated with used oil.

1) Except as provided in subsection (c)(2) of this Section, a material containing or otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material:

A) Is not used oil, and thus, it is not subject to this Part, and

B) If applicable, is subject to the hazardous waste regulations of 35 Ill. Adm. Code 703, 705, 720 through 726, and 728.

2) A material containing or otherwise contaminated with used oil that is burned for energy recovery is subject to regulation as used oil under this Part.

3) Used oil drained or removed from materials containing or otherwise contaminated with used oil is subject to regulation as used oil under this Part.

d) Mixtures of used oil with products.

1) Except as provided in subsection (d)(2) below, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under this Part.

2) Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to this Part once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to the requirements of Subpart C of this Part.

e) Materials derived from used oil.

1) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:

A) Not used oil and thus are not subject to this Part, and

B) Not solid wastes and are thus not subject to the hazardous waste regulations of Parts 35 Ill. Adm. Code 703, 720 through 726, and 728 as provided in 35 Ill. Adm. Code 721.103(~~e~~e)(~~2~~1)(~~A~~).

2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under this Part.

3) Except as provided in subsection (e)(4) below, materials derived from used oil that are disposed of or used in a manner constituting disposal are:

A) Not used oil and thus are not subject to this Part, and

B) Are solid wastes and thus are subject to the hazardous waste regulations of 35 Ill. Adm. Code 703, 720 through 726, and 728 if the materials are listed or identified as hazardous waste.

4) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to this Part.

f) Wastewater. Wastewater, the discharge of which is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil are not subject to the requirements of this Part. For purposes of this subsection, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception will not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.

g) Used oil introduced into crude oil pipelines or a petroleum refining facility.

1) Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from the requirements of this Part. The used oil is subject to the requirements of this Part prior to the mixing of used oil with crude oil or natural gas liquids.

2) Mixtures of used oil and crude oil or natural gas liquids containing less than 1% used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from the requirements of this Part.

3) Used oil that is inserted into the petroleum refining process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from the requirements of this Part, provided that the used oil contains less than 1% of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining process, the used oil is subject to the requirements of this Part.

4) Except as provided in subsection (g)(5) below, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from the requirements of this Part only if the used oil meets the specification of Section 739.111. Prior to

insertion into the petroleum refining facility process, the used oil is subject to the requirements of this Part.

5) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from the requirements of this Part. This exemption does not extend to used oil that is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).

6) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from the requirements of this Part.

h) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to this Part until it is transported ashore.

i) Used oil containing PCBs. In addition to the requirements of this Part, a marketer or burner of used oil that markets used oil containing any quantifiable level of PCBs is subject to the requirements of 40 CFR 761.20(e).

(Source: Amended at 19 Ill. Reg. _____, effective _____)