POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Identification and Listing of Hazardous Waste

2) Code Citation: 35 Ill. Adm. Code 721

3)

Section Numbers:	Proposed Actions:
721.101	Amendment
721.102	Amendment
721.103	Amendment
721.104	Amendment
721.107	Amendment
721.132	Amendment
721.133	Amendment
721.135	Amendment
721.138	Repealed
721.270	New Section
721.271	New Section
721.272	New Section
721.273	New Section
721.275	New Section
721.276	New Section
721.277	New Section
721.279	New Section
721.290	New Section
721.291	New Section
721.293	New Section
721.294	New Section
721.296	New Section
721.297	New Section
721.298	New Section
721.299	New Section
721.300	New Section
721.500	New Section
721.510	New Section
721.511	New Section
721.520	New Section
721.930	New Section
721.931	New Section
721.932	New Section
721.933	New Section
721.934	New Section

Specifically, the amendments to Part 721 implement segments of the federal amendments of January 13, 2015; April 8, 2015; April 17, 2015; and July 2, 2015. The amendments make all of the federal amendments relating to exclusion from the definition of solid waste. The Board has included a limited number of corrections and clarifying amendments that are not directly derived from the instant federal amendments. USEPA suggested many of the included corrections after review of the Illinois hazardous waste regulations for the purpose of authorization of the Illinois RCRA Subtitle C program.

Tables appear in the Board's opinion and order of March 3, 2016 in docket R16-7 that list numerous corrections and amendments that are not based on current federal amendments. The tables contain deviations from the literal text of the federal amendments underlying these amendments, as well as corrections and clarifications that the Board made in the base text involved. Persons interested in the details of those corrections and amendments should refer to the March 3, 2016 opinion and order in docket R16-7.

Section 22.4 of the Environmental Protection Act [415 ILCS 5/22.4] provides that Section 5-35 of the Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the APA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules (JCAR).

6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None.

7) Will these rulemaking replace any emergency rules currently in effect? No

8) Does this rulemaking contain an automatic repeal date? No

9) Does this rulemaking contain incorporations by reference? No

10) Are there any other rulemakings pending on this Part? No

11) Statement of Statewide Policy Objective: These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805].

12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R16-7 and be addressed to:

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

John T. Therriault, Clerk
Illinois Pollution Control Board
State of Illinois Center, Suite 11-500
100 W. Randolph St.
Chicago IL 60601

Please direct inquiries to the following person and reference docket R16-7:

Michael J. McCambridge
Staff Attorney
Illinois Pollution Control Board
100 W. Randolph 11-500
Chicago, IL 60601

312/814-6924
e-mail: michael.mccambridge@illinois.gov

Request copies of the Board's opinion and order at 312-814-3620, or download a copy from the Board's Website at http:\\www.ipcb.state.il.us.

13) Initial Regulatory Flexibility Analysis:

A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations that generate, transport, treat, store, or dispose of hazardous waste. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805].

B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including the preparation of manifests and annual reports, waste analyses and maintenance of operating records. These proposed amendments do not create or enlarge a state mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805].

C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist, and registered professional engineer. These

proposed amendments do not create or enlarge a state mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805].

14) Regulatory agenda on which this rulemaking was summarized: December 4, 2015; 39 Ill. Reg. 15637-39

The full text of the Proposed Amendments begins on the next page:

~~ILLINOIS REGISTER~~ JCAR350721-1603930r01

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

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

PART 721
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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721.101 Purpose and Scope
721.102 Definition of Solid Waste
721.103 Definition of Hazardous Waste
721.104 Exclusions
721.105 Special Requirements for Hazardous Waste Generated by Small Quantity Generators
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~~POLLUTION CONTROL BOARD~~

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SUBPART D: LISTS OF HAZARDOUS WASTE

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721.133 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof
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SUBPART H: FINANCIAL REQUIREMENTS FOR MANAGEMENT OF EXCLUDED HAZARDOUS SECONDARY MATERIALS

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721.240 Applicability
721.241 Definitions of Terms as Used in This Subpart
721.242 Cost Estimate
721.243 Financial Assurance Condition
721.247 Liability Requirements
721.248 Incapacity of Owners or Operators, Guarantors, or Financial Institutions
721.249 Use of State-Required Mechanisms
721.250 State Assumption of Responsibility
721.251 Wording of the Instruments

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

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SUBPART J: TANK SYSTEMS

SUBPART M: EMERGENCY PREPAREDNESS AND RESPONSE FOR MANAGEMENT OF EXCLUDED HAZARDOUS SECONDARY MATERIALS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS

Section

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

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9 at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg.

19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective September 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17490, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17531, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1281, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9108, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6584, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. 12760, effective July 17, 2003; amended in R04-16 at 28 Ill. Reg. 10693, effective July 19, 2004; amended in R05-8 at 29 Ill. Reg. 6003, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 2992, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 791, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 11786, effective July 14, 2008; amended in R09-3 at 33 Ill. Reg. 986, effective December 30, 2008; amended in R09-16/R10-4 at 34 Ill. Reg. 18611, effective November 12, 2010; amended in R11-2/R11-16 at 35 Ill. Reg. 17734, effective October 14, 2011; amended in R13-5 at 37 Ill. Reg. 3213, effective March 4, 2013; amended in R14-13 at 38 Ill. Reg. 12442, effective May 27, 2014; amended in R15-1 at 39 Ill. Reg. 1607, effective January 12, 2015; amended in R16-7 at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~.

SUBPART A: GENERAL PROVISIONS

Section 721.101 Purpose and Scope

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

1) Subpart A of this Part defines the terms "solid waste" and "hazardous waste," identifies those wastes that are excluded from regulation under 35 Ill. Adm. Code 702, 703, and 722 through 728, and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste that is recycled.

2) Subpart B of this Part sets forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes.

3) Subpart C of this Part identifies characteristics of hazardous wastes.

4) Subpart D of this Part lists particular hazardous wastes.

b) Limitations on definition of solid waste.

1) The definition of solid waste contained in this Part applies only to wastes that also are hazardous for purposes of the regulations implementing Subtitle C of RCRA. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles or rubber) that are not otherwise hazardous wastes and that are recycled.

2) This Part identifies only some of the materials that are solid wastes and hazardous wastes under Sections 1004(5), 1004(27) and 7003 of RCRA. A material that is not defined as a solid waste in this Part, or is not a hazardous waste identified or listed in this Part, is still a hazardous waste for purposes of those Sections if, in the case of Section 7003 of RCRA, the statutory elements are established.

c) For the purposes of Sections 721.102 and 721.106 the following definitions apply:

1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

2) ~~"~~"Sludge~~"~~" has the same meaning used in 35 Ill. Adm. Code 720.110.

3) A ~~"~~"by-product~~"~~" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public~~'~~'s use and is ordinarily used in the form it is produced by the process.

4) A material is ~~"~~"reclaimed~~"~~" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. In addition, for purposes of ~~Sections~~SectionSections 721.102(a)(2)(B) and ~~Section~~ 721.104(a)(23) and (a)(24) smelting, melting, and refining furnaces are considered to be solely engaged in metals reclamation if the metal recovery from the hazardous secondary materials meets the same requirements as those specified for metals recovery from hazardous waste found in 35 Ill. Adm. Code 726.200(d)(1) through (d)(3), and if the residuals meet the requirements specified in 35 Ill. Adm. Code 726.212.

5) A material is ~~"~~"used or reused~~"~~" if either of the following is true:

A) It is employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

B) It is employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment).

6) ~~"~~"Scrap metal~~"~~" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, or wire) or metal pieces that may be combined together with bolts

or soldering (e.g., radiators, scrap automobiles, or railroad box cars) that when worn or superfluous can be recycled.

7) A material is ~~"~~"recycled~~"~~" if it is used, reused, or reclaimed.

8) A material is ~~"~~"accumulated speculatively~~"~~" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that, during the calendar year (commencing on January 1), the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under Section 721.104(c) are not to be included in making the calculation. (Materials that are already defined as solid wastes also are not to be included in making the calculation.) Materials are no longer in this category once they are removed from accumulation for recycling, however.

BOARD NOTE: Various segments of this Part and 35 Ill. Adm. Code 720 use the verbal phrase ~~"~~"accumulated speculatively~~"~~" and the noun phrase ~~"~~"speculative accumulation.~~"~~" Some of those segments rely on this subsection (c)(8) definition of ~~"~~"speculatively accumulated~~"~~" for definition of the ~~"~~"speculative accumulation".~~"~~ The Board infers that USEPA intends that the verb phrase define the noun phrase: material that is accumulated speculatively is the subject of speculative accumulation.

9) ~~"~~"Excluded scrap metal~~"~~" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

10) ~~"~~"Processed scrap metal~~"~~" is scrap metal that has been manually or

physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal that has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and fines, drosses and related materials that have been agglomerated. (Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (Section 721.104(a)(14))).

11) ~~"~~"Home scrap metal~~"~~" is scrap metal as generated by steel mills, foundries, and refineries, such as turnings, cuttings, punchings, and borings.

12) ~~"~~"Prompt scrap metal~~"~~" is scrap metal as generated by the metal working/fabrication industries, and it includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap metal is also known as industrial or new scrap metal.

d) The Agency has inspection authority pursuant to Section 3007 of RCRA and Section 4 of the Environmental Protection Act [415 ILCS 5/4].

e) Electronic reporting. The filing of any document pursuant to any provision of this Part as an electronic document is subject to 35 Ill. Adm. Code 720.104.

BOARD NOTE: Subsection (e) of this Section is derived from 40 CFR 3, 271.10(b), 271.11(b), and 271.12(h) (~~2014) (~~2015)(2014).

(Source: Amended at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

Section 721.102 Definition of Solid Waste

a) Solid waste.

1) A solid waste is any discarded material that is not excluded pursuant to Section 721.104(a) or that is not excluded pursuant to 35 Ill. Adm. Code 720.130 and 720.131 or 35 Ill. Adm. Code 720.130 and 720.134.

2) Discarded material.

A) A discarded material is any material that is described as follows:

i) It is abandoned, as described in subsection (b) of this Section;

ii) It is recycled, as described in subsection (c) of this Section;

iii) It is considered inherently waste-like, as described in subsection (d) of this Section; or

iv) It is a military munition identified as a solid waste in 35 Ill. Adm. Code 726.302.

B) A hazardous secondary material is not discarded if each of the following is true with respect to the waste:This subsection (a)(2)(B) corresponds with 40 CFR 261.2(a)(2)(ii), which USEPA has removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations. A hazardous secondary material is not discarded if each of the following is true with respect to the waste:

i) It is generated and reclaimed under the control of the generator, as defined in 35 Ill. Adm. Code 720.110;

ii) It is not speculatively accumulated, as defined in Section 721.101(c)(8);

iii) It is handled only in non-land-based units and is contained in such units;

iv) It is generated and reclaimed within the United States and its territories;

v) It is not otherwise subject to material-specific management conditions pursuant to Section 721.104(a) when reclaimed;

vi) It is not a spent lead acid battery (see 35 Ill. Adm. Code 726.180 and 733.102);

vii) It does not meet either of the listing descriptions for K171 or K172 waste in Section 721.132; and

viii) The reclamation of the material is legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143.

BOARD NOTE: See also the notification requirements of 35 Ill. Adm. Code 720.142. For hazardous secondary materials managed in land-based units, see Section 721.104(a)(23).

b) A material is a solid waste if it is abandoned in one of the following ways:

1) It is disposed of;

2) It is burned or incinerated; or

3) It is accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated~~.~~; or

4) Sham recycled, as explained in subsection (g).

c) A material is a solid waste if it is recycled—or accumulated, stored, or treated before recycling—as specified in subsections (c)(1) through (c)(4) of this Section, if one of the following occurs with regard to the material:

1) The material is used in a manner constituting disposal.

A) A material that is noted with a "yes" in column 1 of the table in Appendix Z of this Part is a solid waste when one of the following occurs :

i) The material is applied to or placed on the land in a manner that constitutes disposal; or

ii) The material is used to produce products that are applied to

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

B) However, a commercial chemical product that is listed in Section 721.133 is not a solid waste if it is applied to the land and that is its ordinary manner of use.

2) The material is burned for energy recovery.

A) A material that is noted with a ~~"~~"yes~~"~~" in column 2 of the table in Appendix Z of this Part is a solid waste when one of the following occurs:

i) It is burned to recover energy;

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

iii) It is contained in fuels (in which case the fuel itself remains a solid waste).

B) However, a commercial chemical product that is listed in Section 721.133 is not a solid waste if it is itself a fuel.

3) Reclaimed. A material noted with a ~~"~~"No~~"~~" in column 3 of the table in Appendix Z of this Part is not a solid waste when reclaimed (except as provided under Section 721.104(a)(17)). A material noted with a ~~"~~"Yes~~"~~" in column 3 of Appendix Z of this Part is a solid waste when reclaimed, unless it meets the requirements of Section 721.102(a)(2)(B) or 721.104(a)(17), (a)(23), (a)(24), or ~~(a)(25)~~ (a)(27)(a)(25).

4) Accumulated speculatively. A material noted with ~~"~~"yes~~"~~" in column 4 of the table in Appendix Z of this Part is a solid waste 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) A secondary material fed to a halogen acid furnace that exhibits a characteristic of a hazardous waste or which is listed as a hazardous waste, as defined in Subpart C or D of this Part, except for brominated material that meets the following criteria:

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

   B) The material must contain less than a total of one percent of toxic organic compounds listed in Appendix H of this Part; and

   C) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).

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

   A) Disposal method or toxicity.

      i) The material is ordinarily disposed of, burned, or incinerated; or

      ii) The material contains toxic constituents listed in Appendix H of this Part and these constituents are not ordinarily found in raw materials or products for which the material substitutes (or are found in raw materials or products in smaller concentrations) and is not used or reused during the recycling process; and

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

e) Materials that are not solid waste when recycled.

1) A material is not a solid waste when it can be shown to be recycled by

fulfilling one of the following conditions:

A) It is used or reused as an ingredient in an industrial process to make a product, provided the material is not being reclaimed; or

B) It is used or reused as effective substitutes for commercial products; or

C) It is returned to the original process from which it is generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the material must be managed in such a manner that there is no placement on the land. In cases where the material is generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at Section 721.104(a)(17) apply rather than this provision.

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

A) A material used in a manner constituting disposal or used to produce a product that is applied to the land; or

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

C) A material accumulated speculatively; or

D) A material listed in subsections (d)(1) and (d)(2) of this Section.

f) Documentation of claims that a material is not a solid waste or is conditionally exempt from regulation. A respondent in an action to enforce regulations implementing Subtitle C of RCRA or Section 21 of the Environmental Protection Act that raises a claim that a certain material is not a solid waste or that the material is conditionally exempt from regulation must demonstrate that there is a known market or disposition for the material and that the material meets the terms

of the exclusion or exemption. In doing so, the person must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste or that the material is exempt from regulation. In addition, an owner or operator of a facility claiming that it actually is recycling a material must show that it has the necessary equipment to recycle that material.

g) Sham recycling. A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling, as defined in 35 Ill. Adm. Code 720.143.

(Source: Amended at 40 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 the following is true of the waste:

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

2) It meets any of the following criteria:

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

for any contaminant exceeded by the nonexempt waste prior to mixture.

B) It is listed in Subpart D of this Part and has not been excluded from the lists in Subpart D of this Part pursuant to 35 Ill. Adm. Code 720.120 and 720.122.

C) This subsection (a)(2)(B) corresponds with 40 CFR 261.3(a)(2)(iii), which USEPA removed and marked as ~~"~~"reserved~~"~~" at 66 Fed. Reg. 27266 (May 16, 2001). This statement maintains structural consistency with the federal regulations.

D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this Part and has not been excluded from this subsection (a)(2) pursuant to 35 Ill. Adm. Code 720.120 and ~~720.122,~~720.122 or, subsection (g) or (h) of this Section, or subsection (h) of this Section ~~or (h)~~; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D of this Part are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B) of this Section) if the generator demonstrates that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities that have eliminated the discharge of wastewater) and the following is true of the waste:

i) It is one or more of the following solvents listed in Section 721.131: benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility~~'~~'s wastewater treatment or pretreatment system does not exceed 1 part per million, or the total measured concentration of these solvents entering the headworks of the facility~~'~~'s wastewater treatment system (at a facility that

is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility~~'~~'s operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(i) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected;

ii) It is one or more of the following spent solvents listed in Section 721.131: methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl

ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2- ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility~~'~~'s wastewater treatment or pretreatment system does not exceed 25 parts per million, or the total measured concentration of these solvents entering the headworks of the facility~~'~~'s wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 25 parts per million on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility~~'~~'s operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(ii) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for

rejection are corrected;

iii) It is one of the following wastes listed in Section 721.132, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation: heat exchanger bundle cleaning sludge from the petroleum refining industry (USEPA hazardous waste number K050), crude oil storage tank sediment from petroleum refining operations (USEPA hazardous waste number K169), clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations (USEPA hazardous waste number K170), spent hydrotreating catalyst (USEPA hazardous waste number K171), and spent hydrorefining catalyst (USEPA hazardous waste number K172);

iv) It is a discarded hazardous waste, commercial chemical product or chemical intermediate listed in Section 721.121, 721.132, or 721.133 arising from de minimis losses of these materials. For purposes of this subsection (a)(2)(D)(iv), "de minimis" losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of a waste listed in Section 721.131 or 721.132, or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in Subpart D of this Part, must either have eliminated the discharge of wastewaters or have included in its federal Clean Water Act (33 USC 1251 et seq.) permit

application or wastewater pretreatment submission to the Agency or the wastewater pretreatment Control Authority pursuant to 35 Ill. Adm. Code 307 of the constituents for which each waste was listed (in Appendix G of this Part); and the constituents in Table T to 35 Ill. Adm. Code 728 for which each waste has a treatment standard (i.e., land disposal restriction constituents). A facility is eligible to claim the exemption once the Agency or Control Authority has been notified of possible de minimis releases via the Clean Water Act permit application or the wastewater pretreatment submission. A copy of the Clean Water Act permit application or the wastewater pretreatment submission must be placed in the facility~~'~~s on-site files;

v) It is wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D of this Part, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility~~'~~s wastewater treatment or pretreatment system or provided that the wastes~~'~~ combined annualized average concentration does not exceed one part per million in the headworks of the facility~~'~~s wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation;

vi) It is one or more of the following wastes listed in Section 721.132: wastewaters from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility~~'~~s wastewater treatment system does not exceed a

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

vii) It is wastewater derived from the treatment of one or more of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K156), provided that the maximum

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

E) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed

in Subpart D of this Part. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of this Part).

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

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

b) A solid waste that is not excluded from regulation pursuant to subsection (a)(1) of this Section becomes a hazardous waste when any of the following events occur:

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

2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D of this Part is first added to the solid waste.

3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C of this Part.

c) Unless and until it meets the criteria of subsection (e) of this Section, a hazardous waste will remain a hazardous waste.

BOARD NOTE: This subsection (c) corresponds with 40 CFR 261.3(c)(1). The

Board has codified 40 CFR 261.3(c)(2) at subsection (e) of this Section.

d) Any solid waste described in subsection (e) of this Section is not a hazardous waste if it meets the following criteria:

1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C of this Part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to 35 Ill. Adm. Code 728, even if they no longer exhibit a characteristic at the point of land disposal.)

2) In the case of a waste that is a listed waste pursuant to Subpart D of this Part, a waste that contains a waste listed pursuant to Subpart D of this Part, or a waste that is derived from a waste listed in Subpart D of this Part, it also has been excluded from subsection (e) of this Section pursuant to 35 Ill. Adm. Code 720.120 and 720.122.

e) Specific inclusions and exclusions.

1) Except as otherwise provided in subsection (e)(2), (g), or (h) of this Section, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

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

A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

B) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(C) and (a)(3)(D).

C) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061, K062, or F006 waste in the units identified in this subsection (e)(2) that are disposed of in non-hazardous waste units, provided that these residues meet the generic exclusion levels identified in the tables in this subsection (e)(2)(C) for all constituents and the residues exhibit no characteristics of hazardous waste. The types of units identified are rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations, or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces); and other furnaces designated by the Agency pursuant to that definition.

i) Testing requirements must be incorporated in a facility~~'~~'s waste analysis plan or a generator~~'~~'s self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and when the process or operation generating the waste changes.

ii) Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements. The generic exclusion levels are the following:

~~Generic exclusion levels for K061 and K062 nonwastewater HTMR residues:~~

Generic exclusion levels for K061 and K062 nonwastewater HTMR residues:

Constituent	Maximum for any single composite sample (mg/ℓ)

Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15
Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Vanadium	1.26
Zinc	70

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

Generic exclusion levels for F006 nonwastewater HTMR residues:

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

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

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

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

D) Biological treatment sludge from the treatment of one of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K156) and wastewaters from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K157).

E) Catalyst inert support media separated from one of the following wastes listed in Section 721.132: spent hydrotreating catalyst (USEPA hazardous waste number K171) and spent hydrorefining catalyst (USEPA hazardous waste number K172).

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

f) Notwithstanding subsections (a) through (e) of this Section and provided the debris, as defined in 35 Ill. Adm. Code 728.102, does not exhibit a characteristic identified at Subpart C of this Part, the following materials are not subject to regulation under 35 Ill. Adm. Code 702, 703, 720, 721 to 726, or 728:

1) Hazardous debris as defined in 35 Ill. Adm. Code 728.102 that has been treated using one of the required extraction or destruction technologies specified in Table F to 35 Ill. Adm. Code 728; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

2) Debris, as defined in 35 Ill. Adm. Code 728.102, that the Agency, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

g) Exclusion of certain wastes listed in Subpart D of this Part solely because they exhibit a characteristic of ignitability, corrosivity, or reactivity.

1) A hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more characteristics of ignitability, as defined under Section 721.121; corrosivity, as defined under Section 721.122; or reactivity, as defined under Section 721.123 is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste identified in Subpart C of this Part.

2) The exclusion described in subsection (g)(1) of this Section also pertains

to the following:

A) Any mixture of a solid waste and a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D) of this Section; and

B) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (e)(1) of this Section.

3) Wastes excluded pursuant to this subsection (g) are subject to 35 Ill. Adm. Code 728 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

4) Any mixture of a solid waste excluded from regulation in Section 721.104(b)(7) and a hazardous waste listed in Subpart D of this Part solely because the listed hazardous waste exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D), is not a hazardous waste if the mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C of this Part for which USEPA listed the hazardous waste listed in Subpart D of this Part.

h) Eligible radioactive mixed waste.

1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of Subpart N of 35 Ill. Adm. Code 726 (i.e., it is "eligible radioactive mixed waste").

2) The exemption described in subsection (h)(1) of this Section also pertains to the following:

A) Any mixture of a solid waste and an eligible radioactive mixed waste; and

B) Any solid waste generated from treating, storing, or disposing of an

eligible radioactive mixed waste.

3) Waste exempted pursuant to this subsection (h) must meet the eligibility criteria and specified conditions in 35 Ill. Adm. Code 726.325 and 726.330 (for storage and treatment) and in 35 Ill. Adm. Code 726.410 and 726.415 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

(Source: Amended at 40 Ill. Reg. ~~—~~ _____, effective _____ ~~_____~~)

Section 721.104 Exclusions

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

1) Sewage.

A) Domestic sewage (untreated sanitary wastes that pass through a sewer system); and

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

2) Industrial wastewater discharges that are point source discharges with National Pollutant Discharge Elimination System (NPDES) permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection Act [415 ILCS 5/12(f)] and 35 Ill. Adm. Code 309.

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

3) Irrigation return flows.

4) Source, by-product, or special nuclear material, as defined by section 11 of the Atomic Energy Act of 1954, as amended (42 USC 2014), incorporated

by reference in 35 Ill. Adm. Code 720.111(b).

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

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

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

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

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

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

   C) The secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

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

9) Wood preserving wastes.

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

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

   C) Prior to reuse, the wood preserving wastewaters and spent wood

preserving solutions described in subsections (a)(9)(A) and (a)(9)(B) of this Section, so long as they meet all of the following conditions:

i) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water-borne plants in the production process for their original intended purpose;

ii) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

iii) Any unit used to manage wastewaters or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

iv) Any drip pad used to manage the wastewaters or spent wood preserving solutions prior to reuse complies with the standards in Subpart W of 35 Ill. Adm. Code 725, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

v) Prior to operating pursuant to this exclusion, the plant owner or operator prepares a one-time notification to the Agency stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records until closure of the facility. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Agency for reinstatement. The Agency must reinstate the exclusion

in writing if it finds that the plant has returned to compliance with all conditions and that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. The applicant under this subsection (a)(9)(C)(v) may appeal the Agency~~'~~s determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

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

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

12) Certain oil-bearing hazardous secondary materials and recovered oil, as follows:

A) Oil-bearing hazardous secondary materials (i.e., sludges, by-products, or spent materials) that are generated at a petroleum refinery (standard industrial classification (SIC) code 2911) and are inserted into the petroleum refining process (SIC code 2911: including, but not limited to, distillation, catalytic cracking, fractionation, gasification (as defined in 35 Ill. Adm. Code 720.110), or thermal cracking units (i.e., cokers)), unless the material is placed on the land, or speculatively accumulated before

being so recycled. Materials inserted into thermal cracking units are excluded under this subsection (a)(12), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where they are generated or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in subsection (a)(12)(B) of this Section, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this Section. Residuals generated from processing or recycling materials excluded under this subsection (a)(12)(A), where such materials as generated would have otherwise met a listing under Subpart D of this Part, are designated as USEPA hazardous waste number F037 listed wastes when disposed of or intended for disposal.

B) Recovered oil that is recycled in the same manner and with the same conditions as described in subsection (a)(12)(A) of this Section. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in Subpart D of this Part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil, as defined in 35 Ill. Adm. Code 739.100.

13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

14) Shredded circuit boards being recycled, provided that they meet the following conditions:

A) The circuit boards are stored in containers sufficient to prevent a release to the environment prior to recovery; and

B) The circuit boards are free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries.

15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with federal Clean Air Act regulation 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

16) ~~Comparable fuels or comparable syngas fuels that meet the requirements of Section 721.138.~~This subsection (a)(16) corresponds with 40 CFR 261.4(a)(16), marked ~~"~~"reserved~~"~~" by USEPA. This statement maintains structural consistency with the federal ~~regualtions.~~regulations.Comparable fuels or comparable syngas fuels that meet the requirements of Section 721.138.

17) Spent materials (as defined in Section 721.101) (other than hazardous wastes listed in Subpart D of this Part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that the following is true:

A) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values;

B) The spent material is not accumulated speculatively;

C) Except as provided in subsection (a)(17)(D) of this Section, the spent material is stored in tanks, containers, or buildings that meet the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except that smelter buildings may have partially earthen floors, provided that the spent material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 35 Ill. Adm. Code 720.110), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a

material suitable for containment of its contents. If a tank or container contains any particulate that may be subject to wind dispersal, the owner or operator must operate the unit in a manner that controls fugitive dust. A tank, container, or building must be designed, constructed, and operated to prevent significant releases to the environment of these materials.

D) The Agency must allow by permit that solid mineral processing spent materials only may be placed on pads, rather than in tanks, containers, or buildings if the facility owner or operator can demonstrate the following: the solid mineral processing secondary materials do not contain any free liquid; the pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment; and the pads provide the same degree of containment afforded by the non-RCRA tanks, containers, and buildings eligible for exclusion.

i) The Agency must also consider whether storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, and air exposure pathways must include the following: the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

ii) Pads must meet the following minimum standards: they must be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material; they must be capable of withstanding physical stresses associated with placement and removal; they must have runon and runoff controls; they must be operated in a manner that controls fugitive dust; and they must have integrity assurance through inspections and maintenance

programs.

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

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

E) The owner or operator provides a notice to the Agency, providing the following information: the types of materials to be recycled, the type and location of the storage units and recycling processes, and the annual quantities expected to be placed in ~~non-~~land-~~based~~ basednon-land-based units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

F) For purposes of subsection (b)(7) of this Section, mineral processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided that both of the following conditions are true of the oil:

A) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in Section 721.121) or toxicity for benzene (Section 721.124, USEPA hazardous waste code D018);

B) The oil generated by the organic chemical manufacturing facility is

not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility for which all of the following is true: its primary SIC code is 2869, but its operations may also include SIC codes 2821, 2822, and 2865; it is physically co-located with a petroleum refinery; and the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid, unless the material is placed on the land or accumulated speculatively, as defined in Section 721.101(c).

20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions are satisfied:

A) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in Section 721.101(c)(8).

B) A generator or intermediate handler of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must fulfill the following conditions:

i) It must submit a one-time notice to the Agency that contains the name, address, and USEPA identification number of the generator or intermediate handler facility, that provides a brief description of the secondary material that will be subject to the exclusion, and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

ii) It must store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and it must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. A tank used for this purpose must be structurally sound and, if outdoors, it must have a roof or cover that prevents contact with wind and rain. A container used for this purpose must be kept closed, except when it is necessary to add or remove material, and it must be in sound condition. Containers that are stored outdoors must be managed within storage areas that fulfill the conditions of subsection (a)(20)(F) of this Section:

iii) With each off-site shipment of excluded hazardous secondary materials, it must provide written notice to the receiving facility that the material is subject to the conditions of this subsection (a)(20).

iv) It must maintain records at the generator's or intermediate handler's facility for no less than three years of all shipments of excluded hazardous secondary materials. For each shipment these records must, at a minimum, contain the information specified in subsection (a)(20)(G) of this Section.

C) A manufacturer of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must fulfill the following conditions:

i) It must store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subsection (a)(20)(B)(ii) of this Section.

ii) It must submit a one-time notification to the Agency that, at a minimum, specifies the name, address, and USEPA identification number of the manufacturing facility and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

iii) It must maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, the name of transporter, and the date on which the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

iv) It must submit an annual report to the Agency that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial processes from which the hazardous secondary materials were generated.

D) Nothing in this Section preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person who generates a solid waste to determine if that waste is a hazardous waste.

E) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in subsection (a)(20)(B)(i) of this Section, and that afterward will be used only to store hazardous secondary materials excluded under this subsection (a)(20), are not subject to the closure requirements of 35 Ill. Adm. Code 724 and 725.

F) A container used to store excluded secondary material must fulfill the following conditions:

i) It must have containment structures or systems sufficiently impervious to contain leaks, spills, and accumulated precipitation;

ii) It must provide for effective drainage and removal of leaks, spills, and accumulated precipitation; and

iii) It must prevent run-on into the containment system.

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

G) Required records of shipments of excluded hazardous secondary materials must, at a minimum, contain the following information:

i) The name of the transporter and date of the shipment;

ii) The name and address of the facility that received the excluded material, along with documentation confirming receipt of the shipment; and

iii) The type and quantity of excluded secondary material in each shipment.

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

21) Zinc fertilizers made from hazardous wastes or hazardous secondary materials that are excluded under subsection (a)(20) of this Section, provided that the following conditions are fulfilled:

A) The fertilizers meet the following contaminant limits:

i) For metal contaminants:

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

ii) For dioxin contaminants, the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

B) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less frequently than once every six months, and for dioxins no less frequently than once every 12 months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the products introduced into commerce.

C) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with subsection (a)(21)(B) of this Section. Such records must at a minimum include the following:

i) The dates and times product samples were taken, and the dates the samples were analyzed;

ii) The names and qualifications of the persons taking the samples;

iii) A description of the methods and equipment used to take the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any cleanup and sample preparation methods; and

vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (a)(21).

22) Used CRTs.

A) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste within the United States, unless they are disposed of or speculatively accumulated, as defined in Section 721.101(c)(8), by a CRT collector or glass processor.

B) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste when exported for recycling, provided that they meet the requirements of Section 721.140.

C) Used, broken CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste, provided that they meet the requirements of Section 721.139.

D) Glass removed from CRTs is not a solid waste provided that it meets the requirements of Section 721.139(c).

23) Hazardous secondary materials ~~managed in land-based units~~ reclaimed under the control of the ~~generator~~generatormanaged in land-based units. Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with subsections (a)(23)(A) and (a)(23)(B)managed in land-based units, as defined in 35 Ill. Adm. Code 720.110, is not a solid waste if the following conditions are fulfilled with regard to the material ~~under the control of the generator, provided that the material complies with subsections (a)(23)(A) and (a)(23)(B)~~:

A) Excluded hazardous secondary materials.

i) The hazardous secondary material is generated and reclaimed at the generating facility. (For purposes of this subsection (a)(23)(A)(i), ~~"~~"generating facility~~"~~" means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator.);

ii) The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in 35 Ill. Adm. Code 720.110, and if the generator provides one of the following certifications:

~~"~~"On behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], which is controlled by [insert generator facility name] and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material.~~"~~

or

~~"~~"On behalf of [insert generator facility name], I certify that this facility will send the indicated

hazardous secondary material to [insert reclaimer facility name], that both facilities are under common control, and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material.""

For purposes of this subsection (a)(23)(A)(ii), ""control"" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person, as defined in 35 Ill. Adm. Code 720.110, cannot be deemed to ""control"" such facilities. The generating and receiving facilities must both maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received under the exclusion. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of USDOT shipping papers, or electronic confirmations); or

iii) The hazardous secondary material is generated pursuant to a written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies as follows:

""On behalf of [insert tolling contractor name], I certify that [insert tolling contractor name] has a written contract with [insert toll manufacturer name] to manufacture [insert name of product or intermediate] which is made from specified unused materials, and that [insert tolling contractor name] will reclaim the hazardous secondary materials generated during this manufacture. On behalf of [insert tolling contractor name], I also certify that [insert tolling contractor name] retains ownership

of, and responsibility for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process.~~"~~

The tolling contractor must maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer must maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of USDOT shipping papers, or electronic confirmations). For purposes of this subsection (a)(23)(A)(ii), ~~"~~"tolling contractor~~"~~ means a person who arranges for the production of a product or intermediate made from specified unused materials through a written contract with a toll manufacturer. ~~"~~"Toll manufacturer~~"~~ means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

B) Management of hazardous secondary materials.

~~A~~iiA) The hazardous secondary material is contained~~;~~, as defined in 35 Ill. Adm. Code 720.110. A hazardous secondary material released to the environment is discarded material and a solid waste unless it is immediately recovered for the purpose of reclamation. Hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases is discarded material and a solid waste.;

B) The material is a hazardous secondary material generated and reclaimed under the control of the generator, as defined in 35 Ill. Adm. Code 720.110;

~~C~~ii) The hazardous secondary material is not speculatively accumulated~~:~~, as defined in Section 721.101(c)(8)~~:~~;

iii) Notice is provided, as required by 35 Ill. Adm. Code 720.142.

~~Div~~v) The hazardous secondary material is not otherwise subject to material-specific management conditions under subsection (a) of this Section when reclaimed, and it is not a spent lead acid battery (see 35 Ill. Adm. Code 726.180 and 733.102), and it does not meet either of the listing descriptions for K171 or K172 waste in Section 721.132;

v) Persons performing the recycling of hazardous secondary materials under this exclusion must maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in 35 Ill. Adm. Code 720.143(a). Documentation must be maintained for three years after the recycling operation has ceased.

vi) The emergency preparedness and response requirements found in Subpart M of this Part are met.

E) The reclamation of the material is legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143; and

F) In addition, a person claiming the exclusion under this subsection (a)(23) must provide notification of regulated waste activity, as required by 35 Ill. Adm. Code 720.142. (For hazardous secondary material managed in a non-land-based unit, see Section 721.102(a)(2)(B)).

24) Hazardous secondary materials transferred for off-site recycling. Hazardous secondary material that is generated and then transferred to

another person a verified reclamation facilityfacilityanother person for the purpose of reclamation is not a solid waste if the management of the material fulfills the conditions of subsections (a)(24)(A) through (a)(24)(G) of this Section:

A) The hazardous secondary material must not be speculatively accumulated, as defined in Section 721.101(c)(8)).

B) No person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility, or a reclaimer manages the material; the hazardous secondary material must not be stored for more than 10 days at a transfer facility, as defined in Section 721.110; and the hazardous secondary material must be packaged according to applicable USDOT regulations codified as 49 CFR 173, 178, and 179, incorporated by reference in 35 Ill. Adm. Code 720.111, while in transport.

C) The hazardous secondary material must not otherwise be subject to material-specific management conditions pursuant to other provisions of this subsection (a) when reclaimed; and the hazardous secondary material must not be a spent lead-acid battery (see 35 Ill. Adm. Code 726.180 and 733.102); and the material must not fulfill either of the listing descriptions for K171 or K172 waste in Section 721.132.

D) The reclamation of the hazardous secondary material must be legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143.

E) The hazardous secondary material generator must satisfy each of the following conditions:

i) The hazardous secondary material must be contained as defined in 35 Ill. Adm. Code 720.110. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in a unit that leaks or whichthat otherwise

continuously releases hazardous secondary material is discarded material and a solid waste.

ii) ThisThe hazardous secondary material generator must arrangeThis subsection (a)(24)(E)(ii) applies when non-RCRA management of hazardous secondary material will occur at a reclamation facility or transfer facility. For the purposes of this subsection (a)(24), ""non-Subtitle C management"" is management of the hazardous secondary material that is not addressed under a RCRA Part B permit or under the interim status facility standards (of 35 Ill. Adm. Code 725 or similar regulations authorized by USEPA as equivalent to 40 CFR 265). Prior to arranging The hazardous secondary material generator must arrange for transport of hazardous secondary materials to a verified reclamation facility in the United States. A ""verified reclamation facility"" is a facility that has been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d), or a reclamation facility when the management of the hazardous secondary material is regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727 where non-Subtitle C management will occur, the hazardous secondary material generator must make reasonable efforts to ensure that the reclaimer intends to properly and legitimately reclaim the hazardous secondary material and not discard it, and that the reclaimer will manage the hazardous secondary material in a manner that is protective of human health and the environment the management of the hazardous secondary material is regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727.. If the hazardous secondary material will pass through an intermediate facility where, the facility must be a ""verified intermediate facility"" that has been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d) or where non-RCRA management of the hazardous secondary materials will occur at that facility must be regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727.727will occur, and the hazardous secondary material generator must make contractual

arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the hazardous secondary material generator, and the hazardous secondary material generator must perform reasonable efforts to ensure that the intermediate facility will manage the hazardous secondary material in a manner that is protective of human health and the environment. Reasonable efforts must be repeated at a minimum of once every three years for the hazardous secondary material generator to claim the exclusion of this subsection (a)(24) and to send the hazardous secondary materials to a reclaimer and any intermediate facility. In making these reasonable efforts, the generator may use any credible evidence available, including information gathered by the hazardous secondary material generator, provided by the reclaimer or intermediate facility, or provided by a third party. The hazardous secondary material generator must make the series of affirmative determinations set forth in subsection (a)(24)(H) of this Section for each reclamation facility and intermediate facility that will manage its waste.

BOARD NOTE: Corresponding 40 CFR 261.4(a)(24)(v)(B) makes it clear that USEPA intends that the generator undertake this determination for each reclaimer that will manage its hazardous secondary material. The Board added a definition of "non-Subtitle C management" and substituted this term for the language "management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards." Although the Board shifted the language for enhanced readability, the Board intends no shift in meaning. The Board moved the material from 40 CFR 261.4(a)(24)(v)(B)(1) through (a)(24)(v)(B)(5) to appear as 35 Ill. Adm. Code 721.104(a)(24)(H)(i) through (a)(24)(H)(v). This movement allowed compliance with codification requirements relating to the maximum permissible indent level.

iii) The hazardous secondary material generator must maintain certain records at the generating facility for a minimum of three years that document every off-site shipment of hazardous secondary materials. The documentation for each shipment must, at a minimum, include the following information about the shipment: the name of the transporter and date of the shipment; the name and address of each reclaimer and intermediate facility to which the hazardous secondary material was sent; and the type and quantity of hazardous secondary material in the shipment.

BOARD NOTE: The Board combined and moved the shipping documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(C) and (a)(24)(v)(C)(1) through (a)(24)(v)(C)(3) to this single subsection (a)(24)(E)(iii). This combination allowed compliance with codification requirements relating to the maximum permissible indent level. The hazardous secondary material generator must execute a certification statement that includes the following language, together with the printed name and official title of an authorized representative of the hazardous secondary material generator, the authorized representative's signature, and the date signed:

"I hereby certify in good faith and to the best of my knowledge that, prior to arranging for transport of excluded hazardous secondary materials to [insert the name of each reclamation facility and any intermediate facility that will manage the materials], reasonable efforts were made in accordance with 35 Ill. Adm. Code 721.104(a)(24)(E)(ii) (and corresponding 40 CFR 261.4(a)(24)(v)(B)) to ensure that the hazardous secondary materials would be recycled legitimately and would be otherwise managed in a manner that is protective of human health and the environment, and that such efforts were based on current and accurate information."

BOARD NOTE: Corresponding 40 CFR 261.4(a)(24)(v)(C) combines the requirements for records retention and availability for inspection with the requirement for certification. The Board combined the certification requirements from 40 CFR 261.4(a)(24)(v)(C), (a)(24)(v)(C)(1), and (a)(24)(v)(C)(2) in this single subsection (a)(24)(E)(iii). This combination allowed compliance with codification requirements relating to the maximum permissible indent level. The Board moved the records retention and availability for inspection requirements from 40 CFR 261.4(a)(24)(v)(C) to subsection (a)(24)(E)(iv) of this Section. This forced renumbering 40 CFR 261.4(a)(24)(v)(D) and (a)(24)(v)(E) as subsections (a)(24)(E)(v) and (a)(24)(E)(vi) of this Section. Although the Board shifted the language for enhanced readability, the Board intends no shift in meaning.

~~viii)~~ ~~The hazardous secondary material generator must maintain certain records at the generating facility for a minimum of three years that document every off-site shipment of hazardous secondary materials. The documentation for each shipment must, at a minimum, include the following information about the shipment: the name of the transporter and date of the shipment; the name and address of each reclaimer and intermediate facility to which the hazardous secondary material was sent; and the type and quantity of hazardous secondary material in the shipment.~~

~~BOARD NOTE: The Board combined and moved the shipping documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(C) and (a)(24)(v)(C)(1) through (a)(24)(v)(C)(3) to this single subsection (a)(24)(E)(iii). This combination allowed compliance with codification requirements relating to the maximum permissible indent level.~~

iv) The hazardous secondary material generator must maintain the following records for a minimum of three years: documentation and certification that the generator made reasonable efforts, prior to transferring hazardous secondary material, for each reclamation facility and, if applicable, intermediate facility where non-Subtitle C management of the hazardous secondary materials will occur. Documentation and certification must be made available, within 72 hours, or within any longer period of time specified by the Agency, upon request by the Agency.

BOARD NOTE: The Board moved the records retention and availability for inspection requirements of corresponding 40 CFR 261.4(a)(24)(v)(C) to this subsection (a)(24)(E)(iv).

v) The hazardous secondary material generator must maintain certain records at the generating facility for a minimum of three years that document every off-site shipment of hazardous secondary materials. The documentation for each shipment must, at a minimum, include the following information about the shipment: the name of the transporter and date of the shipment; the name and address of each reclaimer and intermediate facility to which the hazardous secondary material was sent; and the type and quantity of hazardous secondary material in the shipment.

BOARD NOTE: The Board combined and moved the shipping documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(D) and (a)(24)(v)(D)(1) through (a)(24)(v)(D)(3) to this single subsection (a)(24)(E)(v). This combination allowed compliance with codification requirements relating to the maximum permissible indent level.

~~viiv~~ivvi) The hazardous secondary material generator must maintain at the generating facility, for a minimum of three years, for every off-site shipment of hazardous secondary materials, confirmations of receipt from each reclaimer and intermediate facility to which its hazardous secondary materials were sent. Each confirmation of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received, and the date on which the facility received the hazardous secondary materials. The generator may satisfy this requirement using routine business records (e.g., financial records, bills of lading, copies of ~~USDOT~~USDOTDOT shipping papers, or electronic confirmations of receipt).

BOARD NOTE: The Board moved the shipment confirmation documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(E) to this subsection (a)(24)(E)(vi).

v) The hazardous secondary material generator must comply with the emergency preparedness and response conditions in Subpart M of this Part.

F) The reclaimer of hazardous secondary material or any intermediate facility, as defined in 35 Ill. Adm. Code 720.110, that manages material which is excluded from regulation pursuant to this subsection (a)(24) must satisfy all of the following conditions:

i) The owner or operator of a reclamation or intermediate facility must maintain at its facility for a minimum of three years records of every shipment of hazardous secondary material that the facility received and, if applicable, for every shipment of hazardous secondary material that the facility received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records must, at a minimum, contain the following information: the name of the transporter and date of the shipment; the name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility from which the facility received the hazardous secondary materials; the type and quantity of hazardous secondary material in the shipment; and, for hazardous secondary materials that the facility subsequently transferred off-site for further reclamation after receiving it, the name and address of the (subsequent) reclaimer and any intermediate facility to which the facility sent the hazardous secondary material.

BOARD NOTE: The Board combined the provisions from 40 CFR 261.4(a)(24)(vi)(A) and (a)(24)(vi)(A)(1) through (a)(24)(vi)(A)(3) that enumerate the required information into this single subsection (a)(24)(F)(i). This combination

allowed compliance with codification requirements relating to the maximum permissible indent level.

ii) The intermediate facility must send the hazardous secondary material to the reclaimers designated by the generator of the hazardous secondary materials.

iii) The reclaimer or intermediate facility that receives a shipment of hazardous secondary material must send a confirmation of receipt to the hazardous secondary material generator for each off-site shipment of hazardous secondary materials. A confirmation of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received, and the date on which the facility received the hazardous secondary materials. The reclaimer or intermediate facility may satisfy this requirement using routine business records (e.g., financial records, bills of lading, copies of ~~USDOT~~USDOTDOT shipping papers, or electronic confirmations of receipt).

iv) The reclaimer or intermediate facility must manage the hazardous secondary material in a manner that is at least as protective of human health and the environment as that employed for analogous raw material, and the material must be contained. An ~~"~~""analogous raw material~~"~~"" is a raw material for which the hazardous secondary material substitutes and that serves the same function and has similar physical and chemical properties as the hazardous secondary material.

v) A reclaimer of hazardous secondary materials must manage any residuals that are generated from its reclamation processes in a manner that is protective of human health and the environment. If any residuals of the reclamation process exhibit a characteristic of hazardous waste, as defined in Subpart C of this Part, or if the residuals themselves are specifically listed as hazardous waste in

Subpart D of this Part, those residuals are hazardous waste. The reclaimer and any subsequent persons must manage that hazardous waste in accordance with the applicable requirements of 35 Ill. Adm. Code: Subtitle G or similar regulations authorized by USEPA as equivalent to 40 CFR 260 through 272.

vi) The reclaimer and intermediate facility must have financial assurance that satisfies the requirements of Subpart H of this Part.

vii) The reclaimer and intermediate facility must have been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d), or have a RCRA Part B permit or be subject to interim status standards that address the management of the hazardous secondary materials; and

G) Any person claiming the exclusion for recycled hazardous secondary material pursuant to this subsection (a)(24) must provide notification as required by 35 Ill. Adm. Code 720.142.

H) For the purposes of subsection (a)(24)(E)(ii) of this Section, the hazardous secondary material generator must affirmatively determine that each of the following conditions is true for each reclamation facility and any intermediate facility that will manage the generator~~'~~'s hazardous secondary material:

i) Available information indicates that the reclamation process is legitimate recycling, as determined pursuant to 35 Ill. Adm. Code 720.143. In making this determination, the hazardous secondary material generator may rely on its existing knowledge of the physical and chemical properties of the hazardous secondary material, as well as on information from other sources (e.g., the reclamation facility, audit reports, etc.) about the reclamation process. (By making this determination, the hazardous secondary material generator has also satisfied the requirement in 35 Ill. Adm. Code 720.143(a) that the generator demonstrate that the recycling is legitimate).

ii) Publicly available information indicates that each reclamation facility and any intermediate facility that is used by the hazardous secondary material generator has submitted the notification required by 35 Ill. Adm. Code 720.142, and these facilities have submitted the required proofs of financial assurance as required by the applicable of Section 721.243(a)(1), (b)(1), (c)(1), (d)(1), (e)(3), and (g) and notification of financial assurance pursuant to 35 Ill. Adm. Code 720.142(a)(5). In making this dual determination, the hazardous secondary material generator may rely on the available information documenting the reclamation facility~~'~~s and any intermediate facility~~'~~s compliance with the notification requirements pursuant to 35 Ill. Adm. Code 720.142, including the requirement in 35 Ill. Adm. Code 720.142(a)(5) to notify the Agency whether the reclaimer or intermediate facility has financial assurance.

iii) Publicly available information indicates that each reclamation facility and any intermediate facility that is used by the hazardous secondary material generator has not had any formal enforcement actions taken against the facility within the previous three years for violations of the RCRA hazardous waste regulations, and the facility has not been classified as a significant non-complier (SNC) with RCRA Subtitle C requirements. In making this determination, the hazardous secondary material generator may rely on the publicly available information from USEPA, the Agency, or the Office of the Attorney General. If the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has had a formal enforcement action taken against the facility within the previous three years for violations of the RCRA hazardous waste regulations, or if the facility has been classified as a SNC with RCRA Subtitle C requirements, the hazardous secondary material generator must have credible evidence that the facility will manage the hazardous secondary materials properly. In making this determination, the hazardous secondary material generator can obtain additional information from USEPA, the Agency, the Office of the Attorney General, or the facility itself which indicates that the facility has

addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the generator's hazardous secondary materials.

BOARD NOTE: USEPA or a state may make a formalized determination that a facility is a SNC (pronounced "snick") pursuant to USEPA's "Hazardous Waste Civil Enforcement Response Policy" (most recent version: December 2003, available from USEPA, Envirofacts Data Warehouse (www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf)). USEPA operates the online RCRAInfo database (www.epa.gov/enviro/html/rcris/) from which interested persons can learn whether a facility has significant federal enforcement action against it, or if it is a SNC.

iv) Available information indicates that the reclamation facility and any intermediate facility used by the hazardous secondary material generator have the equipment and trained personnel to safely recycle the hazardous secondary material. In making this determination, the generator may rely on a description made by the reclamation facility or an independent third party of the equipment and trained personnel that the facility will use to manage and recycle the generator's hazardous secondary material.

v) If residuals are generated from the reclamation of the excluded hazardous secondary materials, the reclamation facility has the permits required (if any) to manage the residuals. If the reclamation facility does not have required permits, the facility has a contract with an appropriately permitted facility to dispose of the residuals. If the reclamation facility does not have required permits or a contract with a permitted facility, the hazardous secondary material generator has credible evidence that the residuals will be managed in a manner that is protective of human health and the environment. In making these determinations, the hazardous secondary material generator may rely on publicly available information from USEPA or the Agency, or on information provided by the facility itself.

BOARD NOTE: The Board moved 40 CFR 261.4(a)(24)(v)(B)(1) through (a)(24)(v)(B)(5) to appear as 35 Ill. Adm. Code 721.104(a)(24)(H)(i) through (a)(24)(H)(v), which set forth the determinations mandated for the purposes of subsection (a)(24)(E)(ii). This movement allowed compliance with codification requirements relating to the maximum permissible indent level.

25) This subsection (a)(25) corresponds with 40 CFR 261.4(a)(25), which USEPA removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.Hazardous secondary materials exported for recycling. Hazardous secondary material that is exported from the United States and reclaimed at a reclamation facility located in a foreign country is not a solid waste, so long as the hazardous secondary material generator complies with the applicable requirements of subsections (a)(24)(A) through (a)(24)(E) of this Section, except that the requirements of subsection (a)(24)(H)(ii) of this Section (requiring the use of publicly available information to verify that the facility has submitted required notifications) do not apply to foreign reclaimers and intermediate facilities, and the hazardous secondary material generator also complies with the following requirements:

A) The generator must notify the Agency and USEPA of an intended export before the hazardous secondary material is scheduled to leave the United States. The generator must submit a complete notification at least 60 days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a period up to 12 months in duration, but not longer. The notification must be in writing and signed by the hazardous secondary material generator, and must include the following information:

i) The name, mailing address, telephone number and USEPA identification number (if applicable) of the hazardous secondary material generator;

ii) A description of the hazardous secondary material; the USEPA hazardous waste number that would apply were the hazardous secondary material to be managed as hazardous waste; and the USDOT proper shipping name, hazard class, and identification number (UN or NA number) for each hazardous secondary material, as identified in 49 CFR 171 through 173, each incorporated by reference in 35 Ill. Adm. Code 720.111;

iii) The estimated frequency or rate at which the hazardous secondary material is to be exported, and the period of time over which the hazardous secondary material is to be exported;

iv) The estimated total quantity of hazardous secondary material;

v) All points of entry to and departure from each foreign country through which the hazardous secondary material will pass;

vi) A description of the means by which each shipment of the hazardous secondary material will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), and the types of container (drums, boxes, tanks, etc.));

vii) A description of the manner in which the hazardous secondary material will be reclaimed in the receiving country;

viii) The name and address of each reclaimer, any intermediate facility, and any alternative reclaimer and intermediate facilities; and

ix) The name of any transit countries through which the hazardous secondary material will be sent, together with a description of the approximate length of time the material will remain in each transit country and the nature of the handling of the material while in the country (for purposes of this Section, the meanings of the terms "Acknowledgement of Consent," "receiving country," and "transit country" are as defined in 35 Ill. Adm. Code 722.151, with the exception that the terms in this Section refer to hazardous secondary materials, rather than hazardous waste).

B) Submission of notification of intent to export hazardous secondary material. Whether delivered by mail or hand delivery, the following words must prominently appear on the front of the envelope: "Attention: Notification of Intent to Export."

i) A notification that is submitted by mail must be sent to the following mailing addresses:

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

Permits Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

ii) A notification that is hand-delivered must be delivered to the following addresses:

Office of Enforcement and Compliance Assurance
Office of Federal Activities
International Compliance Assurance Division
Environmental Protection Agency
Ariel Rios Bldg., Room 6144
12th St. and Pennsylvania Ave., NW.
Washington, DC 20004

Permits Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

C) Except for a change in the telephone number submitted pursuant to subsection (a)(25)(A)(i) of this Section or a decrease in the quantity of hazardous secondary material indicated pursuant to subsection (a)(25)(A)(iv) of this Section, when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous secondary material specified in the original notification), the hazardous secondary material generator must provide the Agency and USEPA with a written re-notification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to subsection (a)(25)(A)(ix) of this Section and in the ports of entry to and departure from transit countries pursuant to subsection (a)(25)(A)(v) of this Section) has been obtained and the hazardous secondary material generator receives from USEPA an Acknowledgment of Consent reflecting the receiving country's consent to the changes.

D) Upon request from the Agency or USEPA, the hazardous secondary material generator must furnish to the Agency and USEPA any additional information that a receiving country requests in order to respond to a notification.

E) USEPA has stated in corresponding 40 CFR 261.4(a)(25)(v) that it will provide a complete notification to the receiving country and any transit countries. A notification is complete when USEPA determines that the notification satisfies the requirements of subsection (a)(25)(A) of this Section. When a claim of confidentiality is asserted with respect to any notification information required by subsection (a)(25)(A) of this Section, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(v) that it may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.

F) The export of hazardous secondary material pursuant to this subsection (a)(25) is prohibited, unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the hazardous secondary

material, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(vi) that it will send an Acknowledgment of Consent to the hazardous secondary material generator. When the receiving country objects to receipt of the hazardous secondary material or withdraws a prior consent, USEPA has stated that it will notify the hazardous secondary material generator in writing. USEPA has stated that it will also notify the hazardous secondary material generator of any responses from transit countries.

G) For exports to OECD Member countries, the receiving country may respond to the notification using tacit consent. If no objection has been lodged by any receiving country or transit countries to a notification provided pursuant to subsection (a)(25)(A) of this Section within 30 days after the date of issuance of the acknowledgement of receipt of notification by the competent authority of the receiving country, the trans-boundary movement may commence. In such cases, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(vii) that it will send an Acknowledgment of Consent to inform the hazardous secondary material generator that the receiving country and any relevant transit countries have not objected to the shipment, and are thus presumed to have consented tacitly. Tacit consent expires one calendar year after the close of the 30-day period; re-notification and renewal of all consents is required for exports after that date.

H) A copy of the Acknowledgment of Consent must accompany the shipment. The shipment must conform to the terms of the Acknowledgment of Consent.

I) If a shipment cannot be delivered for any reason to the reclaimer, intermediate facility or the alternate reclaimer or alternate intermediate facility, the hazardous secondary material generator must re-notify the Agency and USEPA of a change in the conditions of the original notification to allow shipment to a new reclaimer in accordance with subsection (a)(25)(C) of this Section and obtain another Acknowledgment of Consent.

J) The hazardous secondary material generator must keep a copy of each notification of intent to export and each Acknowledgment of Consent for a period of three years following receipt of the Acknowledgment of Consent.

K) Annual reporting of hazardous secondary material exports. A hazardous secondary material generator must file with the Agency and USEPA, no later than March 1 of each year, a report that summarizes the types, quantities, frequency, and ultimate destinations of all hazardous secondary materials exported during the previous calendar year. Annual reports must be sent to the addresses listed in subsection (a)(25)(B) of this Section (for mail or hand delivery, as appropriate) for submission notification of intent to export hazardous secondary material. The annual reports must include the following information:

i) The name, mailing and site addresses, and USEPA identification number (if applicable) of the hazardous secondary material generator;

ii) The calendar year covered by the report;

iii) The name and site address of each reclaimer and intermediate facility that received exported hazardous secondary material from the generator;

iv) By reclaimer and intermediate facility, for each hazardous secondary material exported, a description of the hazardous secondary material and the USEPA hazardous waste number that would apply were the hazardous secondary material to be managed as hazardous waste; the USDOT hazard class for the material, as determined pursuant to 49 CFR 171 through 173, each incorporated by reference in 35 Ill. Adm. Code 720.111; the name and USEPA identification number (where applicable) for each transporter used; the total amount of hazardous secondary material shipped; and the number of shipments pursuant to each notification;

v) A certification signed by the hazardous secondary material generator that states as follows:

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

L) Any person that claims an exclusion under this subsection (a)(25) must provide notification as required by 35 Ill. Adm. Code 720.142.

~~25)~~ ~~This subsection (a)(25) corresponds with 40 CFR 261.4(a)(25), which USEPA removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.~~

26) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that all of the following conditions are fulfilled:

A) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled ~~"~~"Excluded Solvent-Contaminated Wipes.~~"~~" The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

B) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;

C) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes must contain no free liquids, as defined in 35 Ill. Adm. Code 720.110;

D) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in this Part and 35 Ill. Adm. Code 720, 722 through 728, and 733;

E) Generators must maintain at their site the following documentation:

i) The name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;

ii) The documentation that the 180-day accumulation time limit in 35 Ill. Adm. Code 721.104(a)(26)(B) is being met; and

iii) A description of the process the generator is using to ensure that the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning; and

F) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the federal Clean Water Act (33 USC 1311 and 1341 or 33 USC 1317) or equivalent Illinois or sister-state requirements approved by USEPA pursuant to 33 USC 1311 through 1346 and 1370.

27) Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste, provided that the following conditions are fulfilled:

BOARD NOTE: The North American Industrial Classification System (NAICS) codes used in this subsection (a)(27) are defined in the NAICS Manual, available from the Office of Management and Budget and incorporated by reference in 35 Ill. Adm. Code 720.111.

A) The hazardous secondary material consists of one or more of the following spent solvents: toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloromethane, methyl isobutyl ketone, N,N-dimethylformamide, tetrahydrofuran, n-butyl alcohol, ethanol, or methanol.

B) The hazardous secondary material originated from using one or more of the solvents listed in subsection (a)(27)(A) in a commercial grade for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), or the paints and coatings manufacturing sectors (NAICS 325510).

C) The hazardous secondary material generator sends the hazardous secondary material spent solvents listed in subsection (a)(27)(A) to a remanufacturer in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), or the paints and coatings manufacturing sectors (NAICS 325510).

D) After remanufacturing one or more of the solvents listed in subsection (a)(27)(A), the use of the remanufactured solvent must be limited to reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and

resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510) or to using them as ingredients in a product. These allowed uses correspond to chemical functional uses enumerated in 40 CFR 711.15(b)(4)(i)(C) (Reporting Information to EPA), incorporated by reference in 35 Ill. Adm. Code 720.111, including Industrial Function Category Codes U015 (solvents consumed in a reaction to produce other chemicals) and U030 (solvents that become part of the mixture);

BOARD NOTE: The Board observes that the citation to Toxic Substances Control Act function categories and use of the word "including" to preface specific example Industrial Function Category Codes does not expand the range of permissible uses beyond the express limitations recited in the first segment of this subsection (a)(27)(D) and subsection (a)(27)(E).

E) After remanufacturing one or more of the solvents listed in subsection (a)(27)(i), the use of the remanufactured solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles. (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Category Code U029 (solvents (for cleaning and degreasing)) in 40 CFR 711.15(b)(4)(i)(C), incorporated by reference in 35 Ill. Adm. Code ~~720.111; and~~720.111.

F) Both the hazardous secondary material generator and the remanufacturer must fulfill the following requirements:

i) The generator and remanufacturer must notify USEPA Region 5 and the Agency, and update the notification every two years per 35 Ill. Adm. Code 720.142;

ii) The generator and remanufacturer must develop and maintain an up-to-date remanufacturing plan ~~which~~that identifies the information enumerated in subsection (a)(27)(G)~~:~~;

BOARD NOTE: The Board moved corresponding 40 CFR 261.4(a)(27)(vi)(B)(1) through (a)(27)(vi)(B)(1) to appear as subsections (a)(27)(G)(i) through (a)(27)(G)(v) to comport with codification requirements.

iii) The generator and remanufacturer must maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;

iv) The generator and remanufacturer must, prior to remanufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards found in Subparts I and J of this Part, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;

v) The generator and remanufacturer must, during remanufacturing, and during storage of the hazardous secondary materials prior to remanufacturing, the remanufacturer certifies that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the applicable Clean Air Act regulations of 40 CFR 60, 61 and 63, incorporated by reference in 35 Ill. Adm. Code 720.111; or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in subparts AA (vents), BB (equipment) and CC (tank storage) of this Part; and

vi) The generator and remanufacturer must meet the requirements prohibiting speculative accumulation in Section 721.101(c)(8).

G) The following information items are required elements for a remanufacturing plan.

i) The name, address and USEPA ID number of the generators and the remanufacturers;

ii) The types and estimated annual volumes of spent solvents to be remanufactured;

iii) The processes and industry sectors that generate the spent solvents;

iv) The specific uses and industry sectors for the remanufactured solvents; and

v) A certification from the remanufacturer stating as follows: "On behalf of [insert remanufacturer facility name], I certify that this facility is a remanufacturer under pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510), and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) or for use as product ingredient(s). I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63, or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in Section 721, subparts AA (vents), BB (equipment) and CC (tank storage)."

BOARD NOTE: Subsections (a)(27)(G)(i) through (a)(27)(G)(v) correspond with 40 CFR 261.4(a)(27)(vi)(B)(1) through (a)(27)(vi)(B)(1), moved to

this subsection (a)(27)(G) to comport with codification requirements.

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

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

A) The facility receives and burns only the following waste:

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

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

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

BOARD NOTE: The U.S. Supreme Court determined, in City of Chicago v. Environmental Defense Fund, Inc., 511 U.S. 328, 114 S. Ct. 1588, 128 L. Ed. 2d 302 (1994), that this exclusion and RCRA section 3001(i) (42 USC 6921(i)) do not exclude the ash from facilities covered by this subsection (b)(1) from regulation as a hazardous waste. At 59 Fed. Reg. 29372 (June 7, 1994), USEPA granted facilities managing ash from such facilities that is determined a hazardous waste under Subpart C of this Part until

December 7, 1994 to file a Part A permit application pursuant to 35 Ill. Adm. Code 703.181. At 60 Fed. Reg. 6666 (Feb. 3, 1995), USEPA stated that it interpreted that the point at which ash becomes subject to RCRA Subtitle C regulation is when that material leaves the combustion building (including connected air pollution control equipment).

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

A) The growing and harvesting of agricultural crops, or

B) The raising of animals, including animal manures.

3) Mining overburden returned to the mine site.

4) Coal and fossil fuel combustion waste.

~~4~~A4) 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.

B) The following wastes generated primarily from processes that support the combustion of coal or other fossil fuels that are co-disposed with the wastes in subsection (b)(4)(A), except as provided by 35 Ill. Adm. Code 726.112 for facilities that burn or process hazardous waste:

i) Coal pile run-off. For purposes of this subsection (b)(4), coal pile run-off means any precipitation that drains off coal piles.

ii) Boiler cleaning solutions. For purposes of this subsection (b)(4), boiler cleaning solutions means water solutions and chemical solutions used to clean the fire-side and waterside of the boiler.

iii) Boiler blowdown. For purposes of this subsection (b)(4), boiler blowdown means water purged from boilers used to generate steam.

iv) Process water treatment and demineralizer regeneration wastes. For purposes of this subsection (b)(4), process water treatment and demineralizer regeneration wastes means sludges, rinses, and spent resins generated from processes to remove dissolved gases, suspended solids, and dissolved chemical salts from combustion system process water.

v) Cooling tower blowdown. For purposes of this subsection (b)(4), cooling tower blowdown means water purged from a closed cycle cooling system. Closed cycle cooling systems include cooling towers, cooling ponds, or spray canals.

vi) Air heater and precipitator washes. For purposes of this subsection (b)(4), air heater and precipitator washes means wastes from cleaning air preheaters and electrostatic precipitators.

vii) Effluents from floor and yard drains and sumps. For purposes of this subsection (b)(4), effluents from floor and yard drains and sumps means wastewaters, such as wash water, collected by or from floor drains, equipment drains, and sumps located inside the power plant building; and wastewaters, such as rain runoff, collected by yard drains and sumps located outside the power plant building.

viii) Wastewater treatment sludges. For purposes of this subsection (b)(4), wastewater treatment sludges refers to sludges generated from the treatment of wastewaters specified in subsections (b)(4)(B)(~~I~~i) through (vi).

5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

6) Chromium wastes.

A) Wastes that fail the test for the toxicity characteristic (Section 721.124 and Appendix B to this Part) because chromium is present or which are listed in Subpart D of this Part due to the presence of chromium, that do not fail the test for the toxicity characteristic for any other constituent or which are not listed due to the presence of any other constituent, and that do not fail the test for any other characteristic, if the waste generator shows the following:

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

ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

iii) The waste is typically and frequently managed in non-oxidizing environments.

B) The following are specific wastes that meet the standard in subsection (b)(6)(A) of this Section (so long as they do not fail the test for the toxicity characteristic for any other constituent and do not exhibit any other characteristic):

i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue;

iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;

vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; and

viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.

7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

A) For purposes of this subsection (b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting;

sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting; autoclaving or chlorination in preparation for leaching (except where the roasting (or autoclaving or chlorination) and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; floatation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat tank, and in situ leaching.

B) For the purposes of this subsection (b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:

i) Slag from primary copper processing;

ii) Slag from primary lead processing;

iii) Red and brown muds from bauxite refining;

iv) Phosphogypsum from phosphoric acid production;

v) Slag from elemental phosphorus production;

vi) Gasifier ash from coal gasification;

vii) Process wastewater from coal gasification;

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

ix) Slag tailings from primary copper processing;

x) Fluorogypsum from hydrofluoric acid production;

xi) Process wastewater from hydrofluoric acid production;

xii) Air pollution control dust or sludge from iron blast

furnaces;

xiii) Iron blast furnace slag;

xiv) Treated residue from roasting and leaching of chrome ore;

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

xvi) Process wastewater from phosphoric acid production;

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

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

xix) Chloride processing waste solids from titanium tetrachloride production; and

xx) Slag from primary zinc production.

C) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under this subsection (b) if the following conditions are fulfilled:

i) The owner or operator processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and

ii) The owner or operator legitimately reclaims the secondary mineral processing materials.

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

9) Solid waste that consists of discarded arsenical-treated wood or wood

products that fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons that utilize the arsenical-treated wood and wood products for these materials~~?~~, intended end use.

10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of Section 721.124 (hazardous waste codes D018 through D043 only) and which are subject to corrective action regulations under 35 Ill. Adm. Code 731.

11) This subsection (b)(11) corresponds with 40 CFR 261.4(b)(11), which expired by its own terms on January 25, 1993. This statement maintains structural parity with USEPA regulations.

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

13) Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this Part, if these oil filters have been gravity hot-drained using one of the following methods:

A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;

B) Hot-draining and crushing;

C) Dismantling and hot-draining; or

D) Any other equivalent hot-draining method that will remove used oil.

14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed of, under the following circumstances:

A) The following conditions must be fulfilled:

i) The solid wastes disposed of would meet one or more of the listing descriptions for the following USEPA hazardous waste numbers that are generated after the effective date listed for the waste:

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

ii) The solid wastes described in subsection (b)(15)(A)(i) of this Section were disposed of prior to the effective date of the listing (as set forth in that subsection);

iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor is derived from any other listed hazardous waste; and

iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under section 307(b) or 402 of the federal Clean Water Act (33 USC 1317(b) or 1342).

B) Leachate or gas condensate derived from K169, K170, K171, K172, K176, K177, K178, or K181 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to

discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subsection (b)(15) after the emergency ends.

16) This subsection (b)(16) corresponds with 40 CFR 261.4(b)(16), which USEPA has marked "reserved." This statement maintains structural parity with USEPA regulations.

17) This subsection (b)(17) corresponds with 40 CFR 261.4(b)(17), which pertains exclusively to waste generated by a specific facility outside Illinois. This statement maintains structural parity with USEPA regulations.

18) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that all of the following conditions are fulfilled:

A) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes". The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

B) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;

C) At the point of being transported for disposal, the solvent-contaminated wipes must contain no free liquids, as defined in 35 Ill. Adm. Code 720.110;

D) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in this Part and 35 Ill. Adm. Code 720, 722 through 728, and 733;

E) Generators must maintain at their site the following documentation:

i) The name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;

ii) The documentation that the 180 day accumulation time limit in 35 Ill. Adm. Code 721.104(b)(18)(B) is being met; and

iii) A description of the process the generator is using to ensure that the solvent-contaminated wipes contain no free liquids at the point of being transported for disposal; and

F) The solvent-contaminated wipes are sent for disposal at one of the following facilities:

i) A municipal solid waste landfill regulated under RCRA Subtitle D regulations: 35 Ill. Adm. Code 810 through 815, including the landfill design criteria of 35 Ill. Adm. Code 811.303 through 811.309, 811.315 through 811.317, and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402; 40 CFR 258, including the landfill design criteria of 40 CFR 258.40; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6943 and 6947; or

ii) A hazardous waste landfill regulated under RCRA Subtitle C regulations: 35 Ill. Adm. Code 724 or 725; 40 CFR 264 or 265; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6926; or

iii) A municipal waste combustor or other combustion facility regulated under section 129 of the Clean Air Act (42 USC 7429) or equivalent Illinois or sister-state regulations approved by USEPA pursuant to 42 USC 7429; or

iv) A hazardous waste combustor, boiler, or industrial furnace regulated under RCRA Subtitle C regulations: 35 Ill. Adm. Code 724 or 725 or Subpart H of 35 Ill. Adm. Code 726; 40 CFR 264 or 265 or subpart H of 40 CFR 266; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6926.

c) Hazardous wastes that are exempted from certain regulations. A hazardous waste that is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit, or an associated non-waste-treatment manufacturing unit, is not subject to regulation under 35 Ill. Adm. Code 702, 703, and 722 through 728 or to the notification requirements of section 3010 of RCRA (42 USC 6930) until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing or for storage or transportation of product or raw materials.

d) Samples.

1) Except as provided in subsection (d)(2) of this Section, a sample of solid waste or a sample of water, soil, or air that is collected for the sole purpose of testing to determine its characteristics or composition is not subject to any requirements of this Part or 35 Ill. Adm. Code 702, 703, and 722 through 728. The sample qualifies when it fulfills one of the following conditions:

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

testing;

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

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

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

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

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

2) In order to qualify for the exemption in subsection (d)(1)(A) or (d)(1)(B) of this Section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must do the following:

A) Comply with USDOT, U.S. Postal Service (USPS), or any other applicable shipping requirements; or

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

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

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

3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1) of this Section.

e) Treatability study samples.

1) Except as is provided in subsection (e)(2) of this Section, a person that generates or collects samples for the purpose of conducting treatability studies, as defined in 35 Ill. Adm. Code 720.110, are not subject to any requirement of 35 Ill. Adm. Code 721 through 723 or to the notification requirements of section 3010 of the Resource Conservation and Recovery Act. Nor are such samples included in the quantity determinations of Section 721.105 and 35 Ill. Adm. Code 722.134(d) when:

A) The sample is being collected and prepared for transportation by the generator or sample collector;

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

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

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

A) The generator or sample collector uses (in ~~"~~"treatability studies~~"~~") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1,000 kg of non-acute hazardous waste other than contaminated media, 1 kg of acute hazardous waste, or 2,500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;

B) The mass of each shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute

hazardous waste, or may include 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of hazardous waste, and 1 kg of acute hazardous waste;

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

i) The transportation of each sample shipment complies with USDOT, USPS, or any other applicable shipping requirements; or

ii) If the USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number;

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

E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

i) Copies of the shipping documents;

ii) A copy of the contract with the facility conducting the treatability study; and

iii) Documentation showing the following: The amount of waste shipped under this exemption; the name, address, and USEPA identification number of the laboratory or testing

facility that received the waste; the date the shipment was made; and whether or not unused samples and residues were returned to the generator; and

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

3) The Agency may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsections (e)(2)(A), (e)(2)(B), and (f)(4) of this Section, for up to an additional 5,000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, and 1 kg of acute hazardous waste under the circumstances set forth in either subsection (e)(3)(A) or (e)(3)(B) of this Section, subject to the limitations of subsection (e)(3)(C) of this Section:

A) In response to requests for authorization to ship, store, and conduct further treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), the size of the unit undergoing testing (particularly in relation to scale-up considerations), the time or quantity of material required to reach steady-state operating conditions, or test design considerations, such as mass balance calculations.

B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies when the following occurs: There has been an equipment or mechanical failure during the conduct of the treatability study, there is need to verify the results of a previously-conducted treatability study, there is a need to study and analyze alternative techniques within a previously-evaluated treatment process, or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for

treatment.

C) The additional quantities allowed and timeframes allowed in subsections (e)(3)(A) and (e)(3)(B) of this Section are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (e)(2)(F) of this Section. The generator or sample collector must apply to the Agency and provide in writing the following information:

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

ii) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies, including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

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

iv) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

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

4) Final Agency determinations pursuant to this subsection (e) may be appealed to the Board.

f) Samples undergoing treatability studies at laboratories or testing facilities.

Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 722 through 726, and 728 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (42 USC 6930), provided that the requirements of subsections (f)(1) through (f)(11) of this Section are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11) of this Section. Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11) of this Section apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

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

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

3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including non-hazardous solid waste) added to "as received" hazardous waste.

5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or

sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

A) The name, address, and USEPA identification number of the generator or sample collector of each waste sample;

B) The date the shipment was received;

C) The quantity of waste accepted;

D) The quantity of "as received" waste in storage each day;

E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

F) The date the treatability study was concluded;

G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.

8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

9) The facility prepares and submits a report to the Agency, by March 15 of each year, that includes the following information for the previous calendar year:

A) The name, address, and USEPA identification number of the facility conducting the treatability studies;

B) The types (by process) of treatability studies conducted;

C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);

D) The total quantity of waste in storage each day;

E) The quantity and types of waste subjected to treatability studies;

F) When each treatability study was conducted; and

G) The final disposition of residues and unused sample from each treatability study.

10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703, and 721 through 728, unless the residues and unused samples are returned to the sample originator under the exemption of subsection (e) of this Section.

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

g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under section 404 of the Federal Water Pollution Control Act (33 USC 1344) is not a hazardous waste. For the purposes of this subsection (g), the following definitions apply:

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

~~"~~"Permit"~~"~~ means any of the following:

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

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

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

h) Carbon dioxide stream injected for geologic sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI carbon sequestration injection wells, including the requirements in 35 Ill. Adm. Code 704 and 730, are not a hazardous waste, provided the following conditions are met:

1) Transportation of the carbon dioxide stream must be in compliance with U.S. Department of Transportation requirements, including the pipeline safety laws (chapter 601 of subtitle VIII of 49 USC, incorporated by reference in 35 Ill. Adm. Code 720.111) and regulations (49 CFR 190 through 199, incorporated by reference in 35 Ill. Adm. Code 720.111) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 USC 60105, incorporated by reference in 35 Ill. Adm. Code 720.111, and 49 CFR 171 through 180, incorporated by reference in 35 Ill. Adm. Code 720.111, as applicable.

BOARD NOTE: The parenthetical language relating to pipeline transportation does not preclude transportation by air, water, highway, or rail that complies with U.S. Department of Transportation regulations at 49 CFR 171 through 180. For this reason, the Board has added citations of those regulations.

2) Injection of the carbon dioxide stream must be in compliance with the applicable requirements for Class VI carbon sequestration injection wells, including the applicable requirements in 35 Ill. Adm. Code 704 and 730;

3) No hazardous wastes ~~shall may~~mayshall be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

4) Required Certifications.

A) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this subsection (h), must have an authorized representative (as defined in 35 Ill. Adm. Code 720.110) sign a certification statement worded as follows:

> "I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 35 Ill. Adm. Code 721.104(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with) U.S. Department of Transportation requirements, including the pipeline safety laws (49 USC 60101 et seq.) and regulations (49 CFR Parts 190 through 199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 USC 60105, as applicable, for injection into a well subject to the requirements for the Class VI Underground Injection Control Program of the federal Safe Drinking Water Act (42 USC 300f et seq.)."

B) Any Class VI carbon sequestration injection well owner or operator, who claims that a carbon dioxide stream is excluded under this subsection (h), must have an authorized representative (as defined in 35 Ill. Adm. Code 720.110) sign a certification statement worded as follows:

> ~~"~~"I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 35 Ill. Adm. Code 721.104(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the UIC Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 35 Ill. Adm. Code 704 and 730.~~"~~"

C) The signed certification statement must be kept on-site for no less than three years, and must be made available within 72 hours after a written request from the Agency or USEPA, or their designee. The signed certification statement must be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in 35 Ill. Adm. Code 720.110) annually prepare and sign a new copy of the certification statement within one year after the date of the previous statement. The signed certification statement must also be readily accessible on the facility~'~s publicly-available website (if such website exists) as a public notification with the title of ~~"~~"Carbon Dioxide Stream Certification~~"~~" at the time the exclusion is claimed.

(Source: Amended at 40 Ill. Reg. ~~—~~ _____, effective _____~~———~~)

Section 721.107 Residues of Hazardous Waste in Empty Containers

a) Applicability of rules.

1) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in subsection (b) of this Section, is not subject to regulation under 35 Ill. Adm. Code 702, 703, or 721 through 728, or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

2) Any hazardous waste in either a container that is not empty or an inner liner that is removed from a container that is not empty, as defined in subsection (b) of this Section, is subject to regulations under 35 Ill. Adm.

Code 702, 703, and 721 through 728 and to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

b) Definition of ~~"~~"empty"~~"~~:

1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Section 721.131 or 721.133(e), is empty if the conditions of subsections (b)(1)(A) and (b)(1)(B) of this Section exist, subject to the limitations of subsection (b)(1)(C) of this Section:

A) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and

B) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

C) Weight limits.

i) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to ~~110~~ ~~119~~119110 gallons (~~416~~ ~~450~~450416 liters) in size; or

ii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than ~~110~~ ~~119~~119110 gallons (~~416~~ ~~450~~450416 liters) in size.

2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches ambient atmospheric pressure.

3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in Section 721.131 or 721.133(e) is empty if any of the following occurs:

A) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;

B) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

(Source: Amended at 40 Ill. Reg. ~~—~~ _____, effective _____ ~~_____~~)

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.132 Hazardous Waste from Specific Sources

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

USEPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
	Wood Preservation Process Wastes:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
	Inorganic Pigments Production Wastes:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)

K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)

Organic Chemicals Production Wastes:

K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)

K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of	(T)

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

	the production of ethylene dibromide via bromination of ethene.	
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K157	Wastewaters (including scrubber waters, condenser waters, washwaters, and separation waters) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K158	Baghouse dusts and filter/separation solids from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)
K159	Organics from the treatment of thiocarbamate wastes.	(T)
K161	Purification solids (including filtration, evaporation, and centrifugation solids), bag house dust, and floor sweepings from the production of dithiocarbamate acids and their salts. (This listing does not include K125 or K126.)	(R, T)
K174	Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (including sludges that result from commingled ethylene dichloride or vinyl chloride monomer wastewater and other	(T)

	wastewater), unless the sludges meet the following conditions: (1) the sludges are disposed of in a RCRA Subtitle C (42 USC 6921-6939e) or non-hazardous landfill licensed or permitted by a state or the federal government; (2) the sludges are not otherwise placed on the land prior to final disposal; and (3) the generator maintains documentation demonstrating that the waste was either disposed of in an on-site landfill or consigned to a transporter or disposal facility that provided a written commitment to dispose of the waste in an off-site landfill. Upon a showing by the government that a respondent in any enforcement action brought to enforce the requirements of Subtitle C of this Part managed wastewater treatment sludges from the production of vinyl chloride monomer or ethylene dichloride, the respondent must demonstrate that it meets the conditions of the exclusion that are set forth above. In doing so, the respondent must provide appropriate documentation that the terms of the exclusion were met (e.g., contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.).	
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)
	Inorganic Chemicals Production Wastes:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process	(T)

	using graphite anodes in chlorine production.	
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed of, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	(T)
K181	Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (c) of this Section that are equal to or greater than the corresponding subsection (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are managed in one of the following ways: 1) They are disposed of in a municipal solid waste landfill unit that is subject to the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402; 2) They are disposed of in a hazardous waste	(T)

landfill unit that is subject to either 35 Ill. Adm. Code 724.401 or 725.401;

3) They are disposed of in other municipal solid waste landfill units that meet the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402, 35 Ill. Adm. Code 724.401, or 35 Ill. Adm. Code 725.401; or

4) They are treated in a combustion unit that is permitted under 415 ILCS 5/39(d), or an onsite combustion unit that is permitted under 415 ILCS 5/39.5.

For the purposes of this listing, dyes or pigments production is defined in subsection (b)(1) of this Section. Subsection (d) of this Section describes the process for demonstrating that a facility~~'~~'s nonwastewaters are not K181 waste. This listing does not apply to wastes that are ~~otherwise identified as hazardous under Sections 721.121 through 721.124 and 721.131 through 721.133 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met, as set forth in subsection (c) of this Section.~~
otherwise identified as hazardous under Sections 721.121 through 721.124 and 721.131 through 721.133 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met, as set forth in subsection (c) of this Section.

Pesticides Production Wastes:

K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)

K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)
	Explosives Production Wastes:	
K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)
	Petroleum Refining Wastes:	
K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum	(T)

	refining industry.	
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations.	(T)
K170	Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations.	(T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
	Iron and Steel Production Wastes:	
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332) (as defined in 35 Ill. Adm. Code 720.110).	(C, T)
	Primary Aluminum Production Wastes:	
K088	Spent potliners from primary aluminum reduction.	(T)
	Secondary Lead Production Wastes:	
K069	Emission control dust/sludge from secondary lead smelting.	(T)

BOARD NOTE: This listing is administratively stayed for sludge generated from secondary acid scrubber systems. The stay will remain in effect until this note is removed.

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

Veterinary Pharmaceuticals Production Wastes:

K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)

Ink Formulation Wastes:

K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, dryers, soaps and stabilizers containing chromium and lead.	(T)

Coke Production Wastes:

K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal	(T)

	or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)
K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	(T)
K149	Distillation bottoms from the production of α-(or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated	(T)

during the treatment of wastewaters from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.

b) Listing-specific definition: For the purposes of the K181 hazardous waste listing in subsection (a) of this Section, ~~"~~"dyes or pigments production"~~"~~ includes manufacture of the following product classes: dyes, pigments, and FDA-certified colors that are in the azo, triarylmethane, perylene, and anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes or pigments manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes or pigments, are not included in the K181 listing.

c) K181 listing levels. Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 hazardous waste listing in subsection (a) of this Section, unless the conditions in the K181 hazardous waste listing are met:

Constituent	Chemical Abstracts No.	Mass Levels (kg/yr)
Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

d) Procedures for demonstrating that dyes or pigments nonwastewaters are not K181 waste. The procedures described in subsections (d)(1) through (d)(3) and (d)(5) of this Section establish when nonwastewaters from the production of dyes or pigments would not be hazardous. (These procedures apply to wastes that are not disposed of in landfill units or treated in combustion units, as specified in subsection (a) of this Section). If the nonwastewaters are disposed of in landfill

units or treated in combustion units as described in subsection (a) of this Section, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 waste listing description, the generator must maintain documentation as described in subsection (d)(4) of this Section.

1) Determination based on no K181 waste constituents. A generator that has knowledge (e.g., knowledge of constituents in wastes based on prior sampling and analysis data or information about raw materials used, production processes used, and reaction and degradation products formed) that its waste contains none of the K181 waste constituents (see subsection (c) of this Section) can use its knowledge to determine that its waste is not K181 waste. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

2) Determination for generated quantities of 1,000 tonnes (1,000 metric tons) per year or less for wastes that contain K181 waste constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is 1,000 tonnes or less, the generator can use knowledge of the wastes (e.g., knowledge of constituents in wastes based on prior analytical data or information about raw materials used, production processes used, and reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of subsection (c) of this Section. To make this determination, the generator must fulfill the following conditions:

   A) Each year, the generator must document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 tonnes;

   B) The generator must track the actual quantity of nonwastewaters generated from January 1 through December 31 of each calendar year. If, at any time within the year, the actual waste quantity exceeds 1,000 tonnes, the generator must comply with the requirements of subsection (d)(3) of this Section for the remainder of that calendar year;

C) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year; and

D) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations were made:

i) The quantity of dyes or pigments nonwastewaters generated;

ii) The relevant process information used; and

iii) The calculations performed to determine annual total mass loadings for each K181 waste constituent in the nonwastewaters during the year.

3) Determination for generated quantities greater than 1,000 tonnes per year for wastes that contain K181 constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is greater than 1,000 tonnes, the generator must perform each of the following steps in order to make a determination that its waste is not K181 waste:

A) The generator must determine which K181 waste constituents (see subsection (c) of this Section) are reasonably expected to be present in the wastes based on knowledge of the wastes (e.g., based on prior sampling and analysis data or information about raw materials used, production processes used, and reaction and degradation products formed);

B) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge of the wastes or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge of the wastes, the generator must comply with the procedures for using knowledge of the wastes described in subsection (d)(2) of this Section and keep the records described in subsection (d)(2)(D) of this Section. For determinations based on sampling and analysis, the generator must

comply with the sampling and analysis and recordkeeping requirements described in subsection (d)(3)(C) of this Section;

C) The generator must develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 waste constituents reasonably expected to be present in the wastes. At a minimum, the plan must include the following elements:

i) A discussion of the number of samples needed to characterize the wastes fully;

ii) The planned sample collection method to obtain representative waste samples;

iii) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes; and

iv) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods;

D) The generator must collect and analyze samples in accordance with the waste sampling and analysis plan, and the plan must fulfill the following requirements:

i) The sampling and analysis must be unbiased, precise, and representative of the wastes; and

ii) The analytical measurements must be sufficiently sensitive, accurate, and precise to support any claim that the constituent mass loadings are below the listing levels of subsection (c) of this Section;

E) The generator must record the analytical results;

F) The generator must record the waste quantity represented by the sampling and analysis results;

G) The genrator must calculate constituent-specific mass loadings (product of concentrations and waste quantity);

H) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year;

I) The generator must determine whether the mass of any of the K181 waste constituents listed in subsection (c) of this Section generated between January 1 and December 31 of any calendar year is below the K181 waste listing levels;

J) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

i) The sampling and analysis plan;

ii) The sampling and analysis results (including quality assurance or quality control data);

iii) The quantity of dyes or pigments nonwastewaters generated; and

iv) The calculations performed to determine annual mass loadings; and

K) The generator must conduct non-hazardous waste determinations annually to verify that the wastes remain non-hazardous.

i) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are non-hazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

ii) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the

wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

iii) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a non-hazardous determination. If testing is reinstated, the generator must retain a description of the process change.

4) Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 waste listing description in subsection (a) of this Section, the generator must maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or which meets the landfill design standards set out in the listing description or that the waste was treated in combustion units, as specified in the listing description in subsection (a) of this Section.

5) Waste holding and handling. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator must store the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the hazardous waste storage requirements of 35 Ill. Adm. Code 722.134 during the interim period, the generator could be subject to an enforcement action for improper hazardous waste management.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.133 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof

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

a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) of this Section.

b) Any off-specification commercial chemical product or manufacturing chemical intermediate that, if it met specifications, would have the generic name listed in subsection (e) or (f) of this Section.

c) Any residue remaining in a container or inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) of this Section, unless the container is empty, as defined in Section 721.107(b)(3).

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

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

BOARD NOTE: The phrase ~~"~~"commercial chemical product or manufacturing chemical intermediate having the generic name listed in ..."~~"~~" refers to a chemical substance that is manufactured or formulated for commercial or manufacturing use that consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. It does not refer to a material,

such as a manufacturing process waste, that contains any of the substances listed in subsection (e) or (f) of this Section. Where a manufacturing process waste is deemed to be a hazardous waste because it contains a substance listed in subsection (e) or (f) of this Section, such waste will be listed in either Sections 721.131 or 721.132 or will be identified as a hazardous waste by the characteristics set forth in Subpart C of this Part.

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

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

Alphabetical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
P023	107-20-0	Acetaldehyde, chloro-	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)	
P057	640-19-7	Acetamide, 2-fluoro-	
P058	62-74-8	Acetic acid, fluoro-, sodium salt	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P070	116-06-3	Aldicarb	
P203	1646-88-4	Aldicarb sulfone	
P004	309-00-2	Aldrin	
P005	107-18-6	Allyl alcohol	

P006	20859-73-8	Aluminum phosphide	(R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P008	504-24-5	4-Aminopyridine	
P009	131-74-8	Ammonium picrate	(R)
P119	7803-55-6	Ammonium vanadate	
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium	
P010	7778-39-4	Arsenic acid H_3AsO_4	
P012	1327-53-3	Arsenic oxide As_2O_3	
P011	1303-28-2	Arsenic oxide As_2O_5	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic trioxide	
P038	692-42-2	Arsine, diethyl-	
P036	696-28-6	Arsonous dichloride, phenyl-	
P054	151-56-4	Aziridine	
P067	75-55-8	Aziridine, 2-methyl	
P013	542-62-1	Barium cyanide	
P024	106-47-8	Benzenamine, 4-chloro-	
P077	100-01-6	Benzenamine, 4-nitro-	
P028	100-44-7	Benzene, (chloromethyl)-	
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl) -, (R)-	
P046	122-09-8	Benzeneethanamine, α,α-dimethyl-	
P014	108-98-5	Benzenethiol	
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1, 3a,8-trimethylpyrrolo(2,3-b) indol-5-yl methylcarbamate ester (1:1)	
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3	

		percent
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-6	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl) oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl) -5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl

P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5α,8α,8aβ)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-, and metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	α,α-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol and salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramide, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton

P049	541-53-7	Dithiobiuret	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime	
P050	115-29-7	Endosulfan	
P088	145-73-3	Endothall	
P051	72-20-8	Endrin	
P051	72-20-8	Endrin, and metabolites	
P042	51-43-4	Epinephrine	
P031	460-19-5	Ethanedinitrile	
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	
P066	16752-77-5	Ethanimidothioic acid, N-(((methylamino)carbonyl)oxy)-, methyl ester	
P101	107-12-0	Ethyl cyanide	
P054	151-56-4	~~Ethylenimine~~~~Ethyleneimine~~Ethyleneimine~~Ethylenimine	
P097	52-85-7	Famphur	
P056	7782-41-4	Fluorine	
P057	640-19-7	Fluoroacetamide	
P058	62-74-8	Fluoroacetic acid, sodium salt	
P198	23422-53-9	Formetanate hydrochloride	
P197	17702-57-7	Formparanate	
P065	628-86-4	Fulminic acid, mercury (2+) salt	(R, T)
P059	76-44-8	Heptachlor	
P062	757-58-4	Hexaethyl tetraphosphate	
P116	79-19-6	Hydrazinecarbothioamide	
P068	60-34-4	Hydrazine, methyl-	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P096	7803-51-2	Hydrogen phosphide	
P060	465-73-6	Isodrin	
P192	119-38-0	Isolan	
P202	64-00-6	3-Isopropylphenyl-N-methylcarbamate	
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	

P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-	
P196	15339-36-3	Manganese dimethyldithiocarbamate	
P092	62-38-4	Mercury, (acetato-O)phenyl-	
P065	628-86-4	Mercury fulminate	(R, T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P064	624-83-9	Methane, isocyanato-	
P016	542-88-1	Methane, oxybis(chloro-	
P112	509-14-8	Methane, tetranitro-	(R)
P118	75-70-7	Methanethiol, trichloro-	
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride	
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino)carbonyl)oxy)phenyl)-	
P199	2032-65-7	Methiocarb	
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	
P066	16752-77-5	Methomyl	
P068	60-34-4	Methyl hydrazine	
P064	624-83-9	Methyl isocyanate	
P069	75-86-5	2-Methyllactonitrile	
P071	298-00-0	Methyl parathion	
P190	1129-41-5	Metolcarb	
P128	315-18-4	Mexacarbate	
P072	86-88-4	α-Naphthylthiourea	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel cyanide $Ni(CN)_2$	
P075	54-11-5*	Nicotine, and salts	

P076	10102-43-9	Nitric oxide	
P077	100-01-6	p-Nitroaniline	
P078	10102-44-0	Nitrogen dioxide	
P076	10102-43-9	Nitrogen oxide NO	
P078	10102-44-0	Nitrogen oxide NO_2	
P081	55-63-0	Nitroglycerine	(R)
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P085	152-16-9	Octamethylpyrophosphoramide	
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	
P194	23135-22-0	Oxamyl	
P089	56-38-2	Parathion	
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-	
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	
P048	51-28-5	Phenol, 2,4-dinitro-	
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts	
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P092	62-38-4	Phenylmercury acetate	
P093	103-85-5	Phenylthiourea	
P094	298-02-2	Phorate	
P095	75-44-5	Phosgene	
P096	7803-51-2	Phosphine	

P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	
P097	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	
P204	57-47-6	Physostigmine	
P188	57-64-7	Physostigmine salicylate	
P110	78-00-2	Plumbane, tetraethyl-	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide KCN	
P099	506-61-6	Potassium silver cyanide	
P201	2631-37-0	Promecarb	
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl) oxime	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	
P101	107-12-0	Propanenitrile	
P027	542-76-7	Propanenitrile, 3-chloro-	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)
P017	598-31-2	2-Propanone, 1-bromo-	
P102	107-19-7	Propargyl alcohol	

P003	107-02-8	2-Propenal	
P005	107-18-6	2-Propen-1-ol	
P067	75-55-8	1,2-Propylenimine	
P102	107-19-7	2-Propyn-1-ol	
P008	504-24-5	4-Pyridinamine	
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and salts	
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	
P114	12039-52-0	Selenious acid, dithallium (1+) salt	
P103	630-10-4	Selenourea	
P104	506-64-9	Silver cyanide	
P104	506-64-9	Silver cyanide AgCN	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide NaCN	
P108	57-24-9*	Strychnidin-10-one, and salts	
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	
P108	57-24-9*	Strychnine and salts	
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Tetranitromethane	(R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium oxide Tl_2O_3	
P114	12039-52-0	Thallium (I) selenite	
P115	7446-18-6	Thallium (I) sulfate	
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	
P045	39196-18-4	Thiofanox	
P049	541-53-7	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	
P014	108-98-5	Thiophenol	

P116	79-19-6	Thiosemicarbazide	
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P093	103-85-5	Thiourea, phenyl-	
P123	8001-35-2	Toxaphene	
P185	26419-73-8	Tirpate	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Vanadic acid, ammonium salt	
P120	1314-62-1	Vanadium oxide V_2O_5	
P120	1314-62-1	Vanadium pentoxide	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P001	81-81-2*	Warfarin, and salts, when present at concentrations greater than 0.3 percent	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-	
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10 percent	(R, T)
P205	137-30-4	Ziram	

Numerical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
~~USEPA Hazardous Waste No.~~	~~Chemical Abstracts No. (CAS No.)~~	~~Substance~~	~~Hazard Code~~
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3 percent	
P001	81-81-2*	Warfarin, and salts, when present at	

		concentrations greater than 0.3 percent	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P003	107-02-8	2-Propenal	
P004	309-00-2	Aldrin	
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexa hydro-, (1α,4α,4aβ,5α,8α,8aβ)-	
P005	107-18-6	Allyl alcohol	
P005	107-18-6	2-Propen-1-ol	
P006	20859-73-8	Aluminum phosphide~~(R, T)~~	(R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	
P008	504-24-5	4-Aminopyridine	
P008	504-24-5	4-Pyridinamine	
P009	131-74-8	Ammonium picrate	(R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P010	7778-39-4	Arsenic acid H_3AsO_4	
P011	1303-28-2	Arsenic oxide As_2O_5	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic oxide As_2O_3	
P012	1327-53-3	Arsenic trioxide	
P013	542-62-1	Barium cyanide	
P014	108-98-5	Benzenethiol	
P014	108-98-5	Thiophenol	
P015	7440-41-7	Beryllium powder	
P016	542-88-1	Dichloromethyl ether	
P016	542-88-1	Methane, oxybis(chloro-	
P017	598-31-2	Bromoacetone	
P017	598-31-2	2-Propanone, 1-bromo-	
P018	357-57-3	Brucine	
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	
P020	88-85-7	Dinoseb	
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	
P021	592-01-8	Calcium cyanide	
P021	592-01-8	Calcium cyanide $Ca(CN)_2$	
P022	75-15-0	Carbon disulfide	

P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-28-6	Arsonous dichloride, phenyl-
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-

P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester
P045	39196-18-6	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl) oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine, α,α-dimethyl-
P046	122-09-8	α,α-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol and salts
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$
P050	115-29-7	Endosulfan
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-, and metabolites
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P054	151-56-4	Aziridine
P054	151-56-4	~~Ethylenimine~~~~Ethyleneimine~~EthyleneimineEthylenimine
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P058	62-74-8	Fluoroacetic acid, sodium salt

P059	76-44-8	Heptachlor	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-	
P060	465-73-6	Isodrin	
P062	757-58-4	Hexaethyl tetraphosphate	
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P064	624-83-9	Methane, isocyanato-	
P064	624-83-9	Methyl isocyanate	
P065	628-86-4	Fulminic acid, mercury (2+) salt	(R, T)
P065	628-86-4	Mercury fulminate	(R, T)
P066	16752-77-5	Ethanimidothioic acid, N-(((methylamino)carbonyl)oxy)-, methyl ester	
P066	16752-77-5	Methomyl	
P067	75-55-8	Aziridine, 2-methyl	
P067	75-55-8	1,2-Propylenimine	
P068	60-34-4	Hydrazine, methyl-	
P068	60-34-4	Methyl hydrazine	
P069	75-86-5	2-Methyllactonitrile	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P070	116-06-3	Aldicarb	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	
P071	298-00-0	Methyl parathion	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	
P072	86-88-4	α-Naphthylthiourea	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel cyanide $Ni(CN)_2$	

P075	54-11-5*	Nicotine, and salts	
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and salts	
P076	10102-43-9	Nitric oxide	
P076	10102-43-9	Nitrogen oxide NO	
P077	100-01-6	Benzenamine, 4-nitro-	
P077	100-01-6	p-Nitroaniline	
P078	10102-44-0	Nitrogen dioxide	
P078	10102-44-0	Nitrogen oxide NO_2	
P081	55-63-0	Nitroglycerine	(R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P085	152-16-9	Diphosphoramide, octamethyl-	
P085	152-16-9	Octamethylpyrophosphoramide	
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	Endothall	
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	
P089	56-38-2	Parathion	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	
P092	62-38-4	Mercury, (acetato-O)phenyl-	
P092	62-38-4	Phenylmercury acetate	
P093	103-85-5	Phenylthiourea	
P093	103-85-5	Thiourea, phenyl-	
P094	298-02-2	Phorate	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	
P095	75-44-5	Carbonic dichloride	
P095	75-44-5	Phosgene	
P096	7803-51-2	Hydrogen phosphide	
P096	7803-51-2	Phosphine	
P097	52-85-7	Famphur	
P097	52-85-7	Phosphorothioic acid,	

		O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide KCN	
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium	
P099	506-61-6	Potassium silver cyanide	
P101	107-12-0	Ethyl cyanide	
P101	107-12-0	Propanenitrile	
P102	107-19-7	Propargyl alcohol	
P102	107-19-7	2-Propyn-1-ol	
P103	630-10-4	Selenourea	
P104	506-64-9	Silver cyanide	
P104	506-64-9	Silver cyanide AgCN	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide NaCN	
P108	57-24-9*	Strychnidin-10-one, and salts	
P108	57-24-9*	Strychnine and salts	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	
P110	78-00-2	Plumbane, tetraethyl-	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Diphosphoric acid, tetraethyl ester	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Methane, tetranitro-	(R)
P112	509-14-8	Tetranitromethane	(R)
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium oxide Tl_2O_3	
P114	12039-52-0	Selenious acid, dithallium (1+) salt	
P114	12039-52-0	Thallium (I) selenite	
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt	
P115	7446-18-6	Thallium (I) sulfate	
P116	79-19-6	Hydrazinecarbothioamide	
P116	79-19-6	Thiosemicarbazide	
P118	75-70-7	Methanethiol, trichloro-	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Ammonium vanadate	
P119	7803-55-6	Vanadic acid, ammonium salt	

P120	1314-62-1	Vanadium oxide V_2O_5	
P120	1314-62-1	Vanadium pentoxide	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10 percent	(R, T)
P123	8001-35-2	Toxaphene	
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	
P127	1563-66-2	Carbofuran	
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	
P128	315-18-4	Mexacarbate	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime	
P185	26419-73-8	Tirpate	
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	
P188	57-64-7	Physostigmine salicylate	
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	
P189	55285-14-8	Carbosulfan	
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester	
P190	1129-41-5	Metolcarb	
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl)-5-methyl-1H-pyrazol-3-yl ester	
P191	644-64-4	Dimetilan	
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	
P192	119-38-0	Isolan	

P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino)carbonyl)oxy)phenyl)-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate
P202	64-00-6	3-Isopropylphenyl-N-methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	1646-88-4	Aldicarb sulfone
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl) oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P205	137-30-4	Ziram

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

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

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

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
U394	30558-43-1	A2213	
U001	75-07-0	Acetaldehyde	(I)
U034	75-87-6	Acetaldehyde, trichloro-	
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-	
U240	P 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U112	141-78-6	Acetic acid, ethyl ester	(I)
U144	301-04-2	Acetic acid, lead (2+) salt	
U214	563-68-8	Acetic acid, thallium (1+) salt	
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	
U002	67-64-1	Acetone	(I)
U003	75-05-8	Acetonitrile	(I, T)
U004	98-86-2	Acetophenone	
U005	53-96-3	2-Acetylaminofluorene	
U006	75-36-5	Acetyl chloride	(C, R, T)
U007	79-06-1	Acrylamide	
U008	79-10-7	Acrylic acid	(I)
U009	107-13-1	Acrylonitrile	
U011	61-82-5	Amitrole	

U012	62-53-3	Aniline	(I, T)
U136	75-60-5	Arsinic acid, dimethyl-	
U014	492-80-8	Auramine	
U015	115-02-6	Azaserine	
U010	50-07-7	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-	
U280	101-27-9	Barban	
U278	22781-23-3	Bendiocarb	
U364	22961-82-6	Bendiocarb phenol	
U271	17804-35-2	Benomyl	
U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	
U016	225-51-4	Benz(c)acridine	
U017	98-87-3	Benzal chloride	
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	
U018	56-55-3	Benz(a)anthracene	
U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-	
U012	62-53-3	Benzenamine	(I, T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-	
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride	
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	
U328	95-53-4	Benzenamine, 2-methyl-	
U353	106-49-0	Benzenamine, 4-methyl-	
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-	
U019	71-43-2	Benzene	(I, T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	

U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-	
U037	108-90-7	Benzene, chloro-	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	
U070	95-50-1	Benzene, 1,2-dichloro-	
U071	541-73-1	Benzene, 1,3-dichloro-	
U072	106-46-7	Benzene, 1,4-dichloro-	
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	
U017	98-87-3	Benzene, (dichloromethyl)-	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R, T)
U239	1330-20-7	Benzene, dimethyl-	(I)
U201	108-46-3	1,3-Benzenediol	
U127	118-74-1	Benzene, hexachloro-	
U056	110-82-7	Benzene, hexahydro-	(I)
U220	108-88-3	Benzene, methyl-	
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-	
U055	98-82-8	Benzene, (1-methylethyl)-	(I)
U169	98-95-3	Benzene, nitro-	(I, T)
U183	608-93-5	Benzene, pentachloro-	
U185	82-68-8	Benzene, pentachloronitro-	
U020	98-09-9	Benzenesulfonic acid chloride	(C, R)
U020	98-09-9	Benzenesulfonyl chloride	(C, R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	

U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	
U023	98-07-7	Benzene, (trichloromethyl)-	(C, R, T)
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R, T)
U021	92-87-5	Benzidene	
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-	
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	
U064	189-55-9	Benzo(rst)pentaphene	
U248	P 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3 percent or less	
U022	50-32-8	Benzo(a)pyrene	
U197	106-51-4	p-Benzoquinone	
U023	98-07-7	Benzotrichloride	(C, R, T)
U085	1464-53-5	2,2'-Bioxirane	(I, T)
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U225	75-25-2	Bromoform	
U030	101-55-3	4-Bromophenyl phenyl ether	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	
U031	71-36-3	1-Butanol	(I)
U159	78-93-3	2-Butanone	(I, T)
U160	1338-23-4	2-Butanone, peroxide	(R, T)

U053	4170-30-3	2-Butenal	
U074	764-41-0	2-Butene, 1,4-dichloro-	(I, T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S-(1α(Z), 7(2S*,3R*), 7aα))-	
U031	71-36-3	n-Butyl alcohol	(I)
U136	75-60-5	Cacodylic acid	
U032	13765-19-0	Calcium chromate	
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	
U271	17804-35-2	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	
U238	51-79-6	Carbamic acid, ethyl ester	
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester	
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester	
U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl))bis-, dimethyl ester	
U097	79-44-7	Carbamic chloride, dimethyl-	
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	
U279	63-25-2	Carbaryl	
U372	10605-21-7	Carbendazim	
U367	1563-38-8	Carbofuran phenol	
U215	6533-73-9	Carbonic acid, dithallium (1+) salt	
U033	353-50-4	Carbonic difluoride	(R, T)

U156	79-22-1	Carbonochloridic acid, methyl ester	(I, T)
U033	353-50-4	Carbon oxyfluoride	(R, T)
U211	56-23-5	Carbon tetrachloride	
U034	75-87-6	Chloral	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, α and γ isomers	
U026	494-03-1	Chlornaphazin	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	p-Chloro-m-cresol	
U042	110-75-8	2-Chloroethyl vinyl ether	
U044	67-66-3	Chloroform	
U046	107-30-2	Chloromethyl methyl ether	
U047	91-58-7	β-Chloronaphthalene	
U048	95-57-8	o-Chlorophenol	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt	
U050	218-01-9	Chrysene	
U051		Creosote	
U052	1319-77-3	Cresol (Cresylic acid)	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Cumene	(I)
U246	506-68-3	Cyanogen bromide CNBr	
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione	
U056	110-82-7	Cyclohexane	(I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-	
U057	108-94-1	Cyclohexanone	(I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	
U058	50-18-0	Cyclophosphamide	
U240	P 94-75-7	2,4-D, salts and esters	
U059	20830-81-3	Daunomycin	
U060	72-54-8	DDD	
U061	50-29-3	DDT	
U062	2303-16-4	Diallate	
U063	53-70-3	Dibenz(a,h)anthracene	
U064	189-55-9	Dibenzo(a,i)pyrene	

U066	96-12-8	1,2-Dibromo-3-chloropropane	
U069	84-74-2	Dibutyl phthalate	
U070	95-50-1	o-Dichlorobenzene	
U071	541-73-1	m-Dichlorobenzene	
U072	106-46-7	p-Dichlorobenzene	
U073	91-94-1	3,3'-Dichlorobenzidine	
U074	764-41-0	1,4-Dichloro-2-butene	(I, T)
U075	75-71-8	Dichlorodifluoromethane	
U078	75-35-4	1,1-Dichloroethylene	
U079	156-60-5	1,2-Dichloroethylene	
U025	111-44-4	Dichloroethyl ether	
U027	108-60-1	Dichloroisopropyl ether	
U024	111-91-1	Dichloromethoxy ethane	
U081	120-83-2	2,4-Dichlorophenol	
U082	87-65-0	2,6-Dichlorophenol	
U084	542-75-6	1,3-Dichloropropene	
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I, T)
U395	5952-26-1	Diethylene glycol, dicarbamate	
U108	123-91-1	1,4-Diethyleneoxide	
U028	117-81-7	Diethylhexyl phthalate	
U086	1615-80-1	N,N'-Diethylhydrazine	
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	3,3'-Dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(I)
U093	60-11-7	p-Dimethylaminoazobenzene	
U094	57-97-6	7,12-Dimethylbenz(a)anthracene	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	α, α-Dimethylbenzylhydroperoxide	(R)
U097	79-44-7	Dimethylcarbamoyl chloride	
U098	57-14-7	1,1-Dimethylhydrazine	
U099	540-73-8	1,2-Dimethylhydrazine	
U101	105-67-9	2,4-Dimethylphenol	
U102	131-11-3	Dimethyl phthalate	
U103	77-78-1	Dimethyl sulfate	
U105	121-14-2	2,4-Dinitrotoluene	

U106	606-20-2	2,6-Dinitrotoluene	
U107	117-84-0	Di-n-octyl phthalate	
U108	123-91-1	1,4-Dioxane	
U109	122-66-7	1,2-Diphenylhydrazine	
U110	142-84-7	Dipropylamine	(I)
U111	621-64-7	Di-n-propylnitrosamine	
U041	106-89-8	Epichlorohydrin	
U001	75-07-0	Ethanal	(I)
U404	121-44-8	Ethanamine, N,N-diethyl-	
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-	
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N~~'~~'-2-pyridinyl-N~~'~~'-(2-thienylmethyl)-	
U067	106-93-4	Ethane, 1,2-dibromo-	
U076	75-34-3	Ethane, 1,1-dichloro-	
U077	107-06-2	Ethane, 1,2-dichloro-	
U131	67-72-1	Ethane, hexachloro-	
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	
U117	60-29-7	Ethane, 1,1'-oxybis-	(I)
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	
U184	76-01-7	Ethane, pentachloro-	
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	
U218	62-55-5	Ethanethioamide	
U226	71-55-6	Ethane, 1,1,1-trichloro-	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U410	59669-26-0	Ethanimidothioic acid, N,N~~'~~'-(thiobis((methylimino)carbonyloxy))bis-, dimethyl ester	
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	
U359	110-80-5	Ethanol, 2-ethoxy-	
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate	
U004	98-86-2	Ethanone, 1-phenyl-	
U043	75-01-4	Ethene, chloro-	

U042	110-75-8	Ethene, (2-chloroethoxy)-	
U078	75-35-4	Ethene, 1,1-dichloro-	
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	
U210	127-18-4	Ethene, tetrachloro-	
U228	79-01-6	Ethene, trichloro-	
U112	141-78-6	Ethyl acetate	(I)
U113	140-88-5	Ethyl acrylate	(I)
U238	51-79-6	Ethyl carbamate (urethane)	
U117	60-29-7	Ethyl ether	(I)
U114	P 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	
U067	106-93-4	Ethylene dibromide	
U077	107-06-2	Ethylene dichloride	
U359	110-80-5	Ethylene glycol monoethyl ether	
U115	75-21-8	Ethylene oxide	(I, T)
U116	96-45-7	Ethylenethiourea	
U076	75-34-3	Ethylidene dichloride	
U118	97-63-2	Ethyl methacrylate	
U119	62-50-0	Ethyl methanesulfonate	
U120	206-44-0	Fluoranthene	
U122	50-00-0	Formaldehyde	
U123	64-18-6	Formic acid	(C, T)
U124	110-00-9	Furan	(I)
U125	98-01-1	2-Furancarboxaldehyde	(I)
U147	108-31-6	2,5-Furandione	
U213	109-99-9	Furan, tetrahydro-	(I)
U125	98-01-1	Furfural	(I)
U124	110-00-9	Furfuran	(I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl)amino)-	
U126	765-34-4	Glycidylaldehyde	
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	Hexachlorobutadiene	
U130	77-47-4	Hexachlorocyclopentadiene	

U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorophene	
U243	1888-71-7	Hexachloropropene	
U133	302-01-2	Hydrazine	(R, T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	
U134	7664-39-3	Hydrofluoric acid	(C, T)
U134	7664-39-3	Hydrogen fluoride	(C, T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H_2S	
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U116	96-45-7	2-Imidazolidinethione	
U137	193-39-5	Indeno(1,2,3-cd)pyrene	
U190	85-44-9	1,3-Isobenzofurandione	
U140	78-83-1	Isobutyl alcohol	(I, T)
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U143	303-34-4	Lasiocarpene	
U144	301-04-2	Lead acetate	
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-	
U145	7446-27-7	Lead phosphate	
U146	1335-32-6	Lead subacetate	
U129	58-89-9	Lindane	
U163	70-25-7	MNNG	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U149	109-77-3	Malononitrile	
U150	148-82-3	Melphalan	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I, T)
U092	124-40-3	Methanamine, N-methyl-	(I)
U029	74-83-9	Methane, bromo-	
U045	74-87-3	Methane, chloro-	(I, T)
U046	107-30-2	Methane, chloromethoxy-	
U068	74-95-3	Methane, dibromo-	
U080	75-09-2	Methane, dichloro-	

U075	75-71-8	Methane, dichlorodifluoro-	
U138	74-88-4	Methane, iodo-	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U211	56-23-5	Methane, tetrachloro-	
U153	74-93-1	Methanethiol	(I, T)
U225	75-25-2	Methane, tribromo-	
U044	67-66-3	Methane, trichloro-	
U121	75-69-4	Methane, trichlorofluoro-	
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	
U154	67-56-1	Methanol	(I)
U155	91-80-5	Methapyrilene	
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	
U247	72-43-5	Methoxychlor	
U154	67-56-1	Methyl alcohol	(I)
U029	74-83-9	Methyl bromide	
U186	504-60-9	1-Methylbutadiene	(I)
U045	74-87-3	Methyl chloride	(I, T)
U156	79-22-1	Methyl chlorocarbonate	(I, T)
U226	71-55-6	Methylchloroform	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U068	74-95-3	Methylene bromide	
U080	75-09-2	Methylene chloride	
U159	78-93-3	Methyl ethyl ketone (MEK)	(I, T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R, T)
U138	74-88-4	Methyl iodide	
U161	108-10-1	Methyl isobutyl ketone	(I)
U162	80-62-6	Methyl methacrylate	(I, T)
U161	108-10-1	4-Methyl-2-pentanone	(I)
U164	56-04-2	Methylthiouracil	
U010	50-07-7	Mitomycin C	
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy-α-L-	

		lyxo-hexapyranosyl)oxyl)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	
U167	134-32-7	1-Naphthalenamine	
U168	91-59-8	2-Naphthalenamine	
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-	
U165	91-20-3	Naphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U166	130-15-4	1,4-Naphthalenedione	
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt	
U279	63-25-2	1-Naphthalenol, methylcarbamate	
U166	130-15-4	1,4-Naphthoquinone	
U167	134-32-7	α-Naphthylamine	
U168	91-59-8	β-Naphthylamine	
U217	10102-45-1	Nitric acid, thallium (1+) salt	
U169	98-95-3	Nitrobenzene	(I, T)
U170	100-02-7	p-Nitrophenol	
U171	79-46-9	2-Nitropropane	(I, T)
U172	924-16-3	N-Nitrosodi-n-butylamine	
U173	1116-54-7	N-Nitrosodiethanolamine	
U174	55-18-5	N-Nitrosodiethylamine	
U176	759-73-9	N-Nitroso-N-ethylurea	
U177	684-93-5	N-Nitroso-N-methylurea	
U178	615-53-2	N-Nitroso-N-methylurethane	
U179	100-75-4	N-Nitrosopiperidine	
U180	930-55-2	N-Nitrosopyrrolidine	
U181	99-55-8	5-Nitro-o-toluidine	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	
U115	75-21-8	Oxirane	(I, T)
U126	765-34-4	Oxiranecarboxyaldehyde	
U041	106-89-8	Oxirane, (chloromethyl)-	

U182	123-63-7	Paraldehyde	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Pentachloronitrobenzene (PCNB)	
See F027	87-86-5	Pentachlorophenol	
U161	108-10-1	Pentanol, 4-methyl-	(I)
U186	504-60-9	1,3-Pentadiene	(I)
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U048	95-57-8	Phenol, 2-chloro-	
U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U081	120-83-2	Phenol, 2,4-dichloro-	
U082	87-65-0	Phenol, 2,6-dichloro-	
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U101	105-67-9	Phenol, 2,4-dimethyl-	
U052	1319-77-3	Phenol, methyl-	
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate	
U170	100-02-7	Phenol, 4-nitro-	
See F027	87-86-5	Phenol, pentachloro-	
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	
See F027	95-95-4	Phenol, 2,4,5-trichloro-	
See F027	88-06-2	Phenol, 2,4,6-trichloro-	
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	
U145	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)	
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester	
U189	1314-80-3	Phosphorus sulfide	(R)
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U179	100-75-4	Piperidine, 1-nitroso-	
U192	23950-58-5	Pronamide	
U194	107-10-8	1-Propanamine	(I, T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	
U110	142-84-7	1-Propanamine, N-propyl-	(I)

U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	
U083	78-87-5	Propane, 1,2-dichloro-	
U149	109-77-3	Propanedinitrile	
U171	79-46-9	Propane, 2-nitro-	(I, T)
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	
U193	1120-71-4	1,3-Propane sultone	
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U140	78-83-1	1-Propanol, 2-methyl-	(I, T)
U002	67-64-1	2-Propanone	(I)
U007	79-06-1	2-Propenamide	
U084	542-75-6	1-Propene, 1,3-dichloro-	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U009	107-13-1	2-Propenenitrile	
U152	126-98-7	2-Propenenitrile, 2-methyl-	(I, T)
U008	79-10-7	2-Propenoic acid	(I)
U113	140-88-5	2-Propenoic acid, ethyl ester	(I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	(I, T)
U373	122-42-9	Propham	
U411	114-26-1	Propoxur	
See F027	93-72-1	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	
U194	107-10-8	n-Propylamine	(I, T)
U083	78-87-5	Propylene dichloride	
U387	52888-80-9	Prosulfocarb	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	
U196	110-86-1	Pyridine	
U191	109-06-8	Pyridine, 2-methyl-	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl) amino)-	
U164	~~58-04-2~~ 56-04-~~2~~2258-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	
U180	930-55-2	Pyrrolidine, 1-nitroso-	
U200	50-55-5	Reserpine	
U201	108-46-3	Resorcinol	

U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	(R, T)
U205	7488-56-4	Selenium sulfide SeS_2	(R, T)
U015	115-02-6	L-Serine, diazoacetate (ester)	
See F027	93-72-1	Silvex (2,4,5-TP)	
U206	18883-66-4	Streptozotocin	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U189	1314-80-3	Sulfur phosphide	(R)
See F027	93-76-5	2,4,5-T	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	1,1,1,2-Tetrachloroethane	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Tetrachloroethylene	
See F027	58-90-2	2,3,4,6-Tetrachlorophenol	
U213	109-99-9	Tetrahydrofuran	(I)
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	
U216	7791-12-0	Thallium chloride TlCl	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Thioacetamide	
U410	59669-26-0	Thiodicarb	
U153	74-93-1	Thiomethanol	(I, T)
U244	137-26-8	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	
U409	23564-05-8	Thiophanate-methyl	
U219	62-56-6	Thiourea	
U244	137-26-8	Thiram	
U220	108-88-3	Toluene	
U221	25376-45-8	Toluenediamine	
U223	26471-62-5	Toluene diisocyanate	(R, T)
U328	95-53-4	o-Toluidine	
U353	106-49-0	p-Toluidine	
U222	636-21-5	o-Toluidine hydrochloride	
U389	2303-17-5	Triallate	

U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U227	79-00-5	1,1,2-Trichloroethane	
U228	79-01-6	Trichloroethylene	
U121	75-69-4	Trichloromonofluoromethane	
See F027	95-95-4	2,4,5-Trichlorophenol	
See F027	88-06-2	2,4,6-Trichlorophenol	
U404	121-44-8	Triethylamine	
U234	99-35-4	1,3,5-Trinitrobenzene	(R, T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U235	126-72-7	Tris (2,3-dibromopropyl) phosphate	
U236	72-57-1	Trypan blue	
U237	66-75-1	Uracil mustard	
U176	759-73-9	Urea, N-ethyl-N-nitroso-	
U177	684-93-5	Urea, N-methyl-N-nitroso-	
U043	75-01-4	Vinyl chloride	
U248	P 81-81-2	Warfarin, and salts, when present at concentrations of 0.3 percent or less	
U239	1330-20-7	Xylene	(I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10 percent or less	

Numerical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
~~USEPA Hazardous Waste No.~~	~~Chemical Abstracts No. (CAS No.)~~	~~Substance~~	~~Hazard Code~~
U001	75-07-0	Acetaldehyde	(I)
U001	75-07-0	Ethanal	(I)

U002	67-64-1	Acetone	(I)
U002	67-64-1	2-Propanone	(I)
U003	75-05-8	Acetonitrile	(I, T)
U004	98-86-2	Acetophenone	
U004	98-86-2	Ethanone, 1-phenyl-	
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-	
U005	53-96-3	2-Acetylaminofluorene	
U006	75-36-5	Acetyl chloride	(C, R, T)
U007	79-06-1	Acrylamide	
U007	79-06-1	2-Propenamide	
U008	79-10-7	Acrylic acid	(I)
U008	79-10-7	2-Propenoic acid	(I)
U009	107-13-1	Acrylonitrile	
U009	107-13-1	2-Propenenitrile	
U010	50-07-7	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-	
U010	50-07-7	Mitomycin C	
U011	61-82-5	Amitrole	
U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U012	62-53-3	Aniline	(I, T)
U012	62-53-3	Benzenamine	(I, T)
U014	492-80-8	Auramine	
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-	
U015	115-02-6	Azaserine	
U015	115-02-6	L-Serine, diazoacetate (ester)	
U016	225-51-4	Benz(c)acridine	
U017	98-87-3	Benzal chloride	
U017	98-87-3	Benzene, (dichloromethyl)-	
U018	56-55-3	Benz(a)anthracene	
U019	71-43-2	Benzene	(I, T)
U020	98-09-9	Benzenesulfonic acid chloride	(C, R)
U020	98-09-9	Benzenesulfonyl chloride	(C, R)
U021	92-87-5	Benzidene	
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	

U022	50-32-8	Benzo(a)pyrene	
U023	98-07-7	Benzene, (trichloromethyl)-	(C, R, T)
U023	98-07-7	Benzotrichloride	(C, R, T)
U024	111-91-1	Dichloromethoxy ethane	
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	
U025	111-44-4	Dichloroethyl ether	
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	
U026	494-03-1	Chlornaphazin	
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-	
U027	108-60-1	Dichloroisopropyl ether	
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	
U028	117-81-7	Diethylhexyl phthalate	
U029	74-83-9	Methane, bromo-	
U029	74-83-9	Methyl bromide	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	
U030	101-55-3	4-Bromophenyl phenyl ether	
U031	71-36-3	1-Butanol	(I)
U031	71-36-3	n-Butyl alcohol	(I)
U032	13765-19-0	Calcium chromate	
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt	
U033	353-50-4	Carbonic difluoride	(R, T)
U033	353-50-4	Carbon oxyfluoride	(R, T)
U034	75-87-6	Acetaldehyde, trichloro-	
U034	75-87-6	Chloral	
U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, α and γ isomers	
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	
U037	108-90-7	Benzene, chloro-	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Benzeneacetic acid,	

		4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	p-Chloro-m-cresol	
U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U041	106-89-8	Epichlorohydrin	
U041	106-89-8	Oxirane, (chloromethyl)-	
U042	110-75-8	2-Chloroethyl vinyl ether	
U042	110-75-8	Ethene, (2-chloroethoxy)-	
U043	75-01-4	Ethene, chloro-	
U043	75-01-4	Vinyl chloride	
U044	67-66-3	Chloroform	
U044	67-66-3	Methane, trichloro-	
U045	74-87-3	Methane, chloro-	(I, T)
U045	74-87-3	Methyl chloride	(I, T)
U046	107-30-2	Chloromethyl methyl ether	
U046	107-30-2	Methane, chloromethoxy-	
U047	91-58-7	β-Chloronaphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U048	95-57-8	o-Chlorophenol	
U048	95-57-8	Phenol, 2-chloro-	
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U050	218-01-9	Chrysene	
U051		Creosote	
U052	1319-77-3	Cresol (Cresylic acid)	
U052	1319-77-3	Phenol, methyl-	
U053	4170-30-3	2-Butenal	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Benzene, (1-methylethyl)-	(I)
U055	98-82-8	Cumene	(I)
U056	110-82-7	Benzene, hexahydro-	(I)
U056	110-82-7	Cyclohexane	(I)
U057	108-94-1	Cyclohexanone	(I)
U058	50-18-0	Cyclophosphamide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,	

		2-oxide
U059	20830-81-3	Daunomycin
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy)-α-L-lyxo-hexapyranosyl)oxyl)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-
U060	72-54-8	DDD
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-
U061	50-29-3	DDT
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz(a,h)anthracene
U064	189-55-9	Benzo(rst)pentaphene
U064	189-55-9	Dibenzo(a,i)pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U067	106-93-4	Ethane, 1,2-dibromo-
U067	106-93-4	Ethylene dibromide
U068	74-95-3	Methane, dibromo-
U068	74-95-3	Methylene bromide
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	Benzene, 1,2-dichloro-
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	Benzene, 1,3-dichloro-
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	Benzene, 1,4-dichloro-
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
U073	91-94-1	3,3'-Dichlorobenzidine

U074	764-41-0	2-Butene, 1,4-dichloro-	(I, T)
U074	764-41-0	1,4-Dichloro-2-butene	(I, T)
U075	75-71-8	Dichlorodifluoromethane	
U075	75-71-8	Methane, dichlorodifluoro-	
U076	75-34-3	Ethane, 1,1-dichloro-	
U076	75-34-3	Ethylidene dichloride	
U077	107-06-2	Ethane, 1,2-dichloro-	
U077	107-06-2	Ethylene dichloride	
U078	75-35-4	1,1-Dichloroethylene	
U078	75-35-4	Ethene, 1,1-dichloro-	
U079	156-60-5	1,2-Dichloroethylene	
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	
U080	75-09-2	Methane, dichloro-	
U080	75-09-2	Methylene chloride	
U081	120-83-2	2,4-Dichlorophenol	
U081	120-83-2	Phenol, 2,4-dichloro-	
U082	87-65-0	2,6-Dichlorophenol	
U082	87-65-0	Phenol, 2,6-dichloro-	
U083	78-87-5	Propane, 1,2-dichloro-	
U083	78-87-5	Propylene dichloride	
U084	542-75-6	1,3-Dichloropropene	
U084	542-75-6	1-Propene, 1,3-dichloro-	
U085	1464-53-5	2,2'-Bioxirane	(I, T)
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I, T)
U086	1615-80-1	N,N'-Diethylhydrazine	
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate	
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine,	

		3,3'-dimethoxy-	
U091	119-90-4	3,3'-Dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(I)
U092	124-40-3	Methanamine, N-methyl-	(I)
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	
U093	60-11-7	p-Dimethylaminoazobenzene	
U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-	
U094	57-97-6	7,12-Dimethylbenz(a)anthracene	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	α, α-Dimethylbenzylhydroperoxide	(R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U097	79-44-7	Carbamic chloride, dimethyl-	
U097	79-44-7	Dimethylcarbamoyl chloride	
U098	57-14-7	1,1-Dimethylhydrazine	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	1,2-Dimethylhydrazine	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U101	105-67-9	2,4-Dimethylphenol	
U101	105-67-9	Phenol, 2,4-dimethyl-	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U102	131-11-3	Dimethyl phthalate	
U103	77-78-1	Dimethyl sulfate	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	
U105	121-14-2	2,4-Dinitrotoluene	
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-	
U106	606-20-2	2,6-Dinitrotoluene	
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	
U107	117-84-0	Di-n-octyl phthalate	
U108	123-91-1	1,4-Diethyleneoxide	
U108	123-91-1	1,4-Dioxane	
U109	122-66-7	1,2-Diphenylhydrazine	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	

U110	142-84-7	Dipropylamine	(I)
U110	142-84-7	1-Propanamine, N-propyl-	(I)
U111	621-64-7	Di-n-propylnitrosamine	
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	
U112	141-78-6	Acetic acid, ethyl ester	(I)
U112	141-78-6	Ethyl acetate	(I)
U113	140-88-5	Ethyl acrylate	(I)
U113	140-88-5	2-Propenoic acid, ethyl ester	(I)
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	
U114	P 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	
U115	75-21-8	Ethylene oxide	(I, T)
U115	75-21-8	Oxirane	(I, T)
U116	96-45-7	Ethylenethiourea	
U116	96-45-7	2-Imidazolidinethione	
U117	60-29-7	Ethane, 1,1'-oxybis-	(I)
U117	60-29-7	Ethyl ether	(I)
U118	97-63-2	Ethyl methacrylate	
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U119	62-50-0	Ethyl methanesulfonate	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U120	206-44-0	Fluoranthene	
U121	75-69-4	Methane, trichlorofluoro-	
U121	75-69-4	Trichloromonofluoromethane	
U122	50-00-0	Formaldehyde	
U123	64-18-6	Formic acid	(C, T)
U124	110-00-9	Furan	(I)
U124	110-00-9	Furfuran	(I)
U125	98-01-1	2-Furancarboxaldehyde	(I)
U125	98-01-1	Furfural	(I)
U126	765-34-4	Glycidylaldehyde	
U126	765-34-4	Oxiranecarboxyaldehyde	
U127	118-74-1	Benzene, hexachloro-	
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U128	87-68-3	Hexachlorobutadiene	
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,	

		(1α,2α,3β,4α,5α,6β)-	
U129	58-89-9	Lindane	
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	
U130	77-47-4	Hexachlorocyclopentadiene	
U131	67-72-1	Ethane, hexachloro-	
U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorophene	
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	
U133	302-01-2	Hydrazine	(R, T)
U134	7664-39-3	Hydrofluoric acid	(C, T)
U134	7664-39-3	Hydrogen fluoride	(C, T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H_2S	
U136	75-60-5	Arsinic acid, dimethyl-	
U136	75-60-5	Cacodylic acid	
U137	193-39-5	Indeno(1,2,3-cd)pyrene	
U138	74-88-4	Methane, iodo-	
U138	74-88-4	Methyl iodide	
U140	78-83-1	Isobutyl alcohol	(I, T)
U140	78-83-1	1-Propanol, 2-methyl-	(I, T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S-(1α(Z), 7(2S*,3R*), 7aα))-	
U143	303-34-4	Lasiocarpene	
U144	301-04-2	Acetic acid, lead (2+) salt	
U144	301-04-2	Lead acetate	
U145	7446-27-7	Lead phosphate	
U145	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)	

U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-	
U146	1335-32-6	Lead subacetate	
U147	108-31-6	2,5-Furandione	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	
U149	109-77-3	Malononitrile	
U149	109-77-3	Propanedinitrile	
U150	148-82-3	Melphalan	
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I, T)
U152	126-98-7	2-Propenenitrile, 2-methyl-	(I, T)
U153	74-93-1	Methanethiol	(I, T)
U153	74-93-1	Thiomethanol	(I, T)
U154	67-56-1	Methanol	(I)
U154	67-56-1	Methyl alcohol	(I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienylmethyl)-	
U155	91-80-5	Methapyrilene	
U156	79-22-1	Carbonochloridic acid, methyl ester	(I, T)
U156	79-22-1	Methyl chlorocarbonate	(I, T)
U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U159	78-93-3	2-Butanone	(I, T)
U159	78-93-3	Methyl ethyl ketone (MEK)	(I, T)
U160	1338-23-4	2-Butanone, peroxide	(R, T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R, T)
U161	108-10-1	Methyl isobutyl ketone	(I)
U161	108-10-1	4-Methyl-2-pentanone	(I)
U161	108-10-1	Pentanol, 4-methyl-	(I)
U162	80-62-6	Methyl methacrylate	(I, T)

U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	(I, T)
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	
U163	70-25-7	MNNG	
U164	56-04-2	Methylthiouracil	
U164	~~58-04-2~~ 56-04-~~2~~2258-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	
U165	91-20-3	Naphthalene	
U166	130-15-4	1,4-Naphthalenedione	
U166	130-15-4	1,4-Naphthoquinone	
U167	134-32-7	1-Naphthalenamine	
U167	134-32-7	α-Naphthylamine	
U168	91-59-8	2-Naphthalenamine	
U168	91-59-8	β-Naphthylamine	
U169	98-95-3	Benzene, nitro-	(I, T)
U169	98-95-3	Nitrobenzene	(I, T)
U170	100-02-7	p-Nitrophenol	
U170	100-02-7	Phenol, 4-nitro-	
U171	79-46-9	2-Nitropropane	(I, T)
U171	79-46-9	Propane, 2-nitro-	(I, T)
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	
U172	924-16-3	N-Nitrosodi-n-butylamine	
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	
U173	1116-54-7	N-Nitrosodiethanolamine	
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-	
U174	55-18-5	N-Nitrosodiethylamine	
U176	759-73-9	N-Nitroso-N-ethylurea	
U176	759-73-9	Urea, N-ethyl-N-nitroso-	
U177	684-93-5	N-Nitroso-N-methylurea	
U177	684-93-5	Urea, N-methyl-N-nitroso-	
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester	
U178	615-53-2	N-Nitroso-N-methylurethane	
U179	100-75-4	N-Nitrosopiperidine	
U179	100-75-4	Piperidine, 1-nitroso-	
U180	930-55-2	N-Nitrosopyrrolidine	
U180	930-55-2	Pyrrolidine, 1-nitroso-	
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-	
U181	99-55-8	5-Nitro-o-toluidine	

U182	123-63-7	Paraldehyde	
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U183	608-93-5	Benzene, pentachloro-	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Ethane, pentachloro-	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Benzene, pentachloronitro-	
U185	82-68-8	Pentachloronitrobenzene (PCNB)	
U186	504-60-9	1-Methylbutadiene	(I)
U186	504-60-9	1,3-Pentadiene	(I)
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U189	1314-80-3	Phosphorus sulfide	(R)
U189	1314-80-3	Sulfur phosphide	(R)
U190	85-44-9	1,3-Isobenzofurandione	
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U191	109-06-8	Pyridine, 2-methyl-	
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	
U192	23950-58-5	Pronamide	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U193	1120-71-4	1,3-Propane sultone	
U194	107-10-8	1-Propanamine	(I, T)
U194	107-10-8	n-Propylamine	(I, T)
U196	110-86-1	Pyridine	
U197	106-51-4	p-Benzoquinone	
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione	
U200	50-55-5	Reserpine	
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	
U201	108-46-3	1,3-Benzenediol	
U201	108-46-3	Resorcinol	

U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	
U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	(R, T)
U205	7488-56-4	Selenium sulfide SeS_2	(R, T)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl)amino)-	
U206	18883-66-4	Streptozotocin	
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	
U208	630-20-6	1,1,1,2-Tetrachloroethane	
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Ethene, tetrachloro-	
U210	127-18-4	Tetrachloroethylene	
U211	56-23-5	Carbon tetrachloride	
U211	56-23-5	Methane, tetrachloro-	
U213	109-99-9	Furan, tetrahydro-	(I)
U213	109-99-9	Tetrahydrofuran	(I)
U214	563-68-8	Acetic acid, thallium (1+) salt	
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Carbonic acid, dithallium (1+) salt	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	
U216	7791-12-0	Thallium chloride TlCl	
U217	10102-45-1	Nitric acid, thallium (1+) salt	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Ethanethioamide	
U218	62-55-5	Thioacetamide	
U219	62-56-6	Thiourea	
U220	108-88-3	Benzene, methyl-	

U220	108-88-3	Toluene	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U221	25376-45-8	Toluenediamine	
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U222	636-21-5	o-Toluidine hydrochloride	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R, T)
U223	26471-62-5	Toluene diisocyanate	(R, T)
U225	75-25-2	Bromoform	
U225	75-25-2	Methane, tribromo-	
U226	71-55-6	Ethane, 1,1,1-trichloro-	
U226	71-55-6	Methylchloroform	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U227	79-00-5	1,1,2-Trichloroethane	
U228	79-01-6	Ethene, trichloro-	
U228	79-01-6	Trichloroethylene	
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R, T)
U234	99-35-4	1,3,5-Trinitrobenzene	(R, T)
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate	
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt	
U236	72-57-1	Trypan blue	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	
U237	66-75-1	Uracil mustard	
U238	51-79-6	Carbamic acid, ethyl ester	
U238	51-79-6	Ethyl carbamate (urethane)	
U239	1330-20-7	Benzene, dimethyl-	(I, T)
U239	1330-20-7	Xylene	(I, T)
U240	P 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U240	P 94-75-7	2,4-D, salts and esters	
U243	1888-71-7	Hexachloropropene	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U244	137-26-8	Thioperoxydicarbonic diamide	

		$((H_2N)C(S))_2S_2$, tetramethyl-
U244	137-26-8	Thiram
U246	506-68-3	Cyanogen bromide CNBr
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-
U247	72-43-5	Methoxychlor
U248	P 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3 percent or less
U248	P 81-81-2	Warfarin, and salts, when present at concentrations of 0.3 percent or less
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10 percent or less
U271	17804-35-2	Benomyl
U271	17804-35-2	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester
U278	22781-23-3	Bendiocarb
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine
U359	110-80-5	Ethanol, 2-ethoxy-
U359	110-80-5	Ethylene glycol monoethyl ether
U364	22961-82-6	Bendiocarb phenol
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563-38-8	Carbofuran phenol

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

(Source: Amended at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

~~SUBPART E: EXCLUSIONS AND EXEMPTIONS~~

Section 721.135 Wood Preserving Wastes

a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (b) and (c) of this Section. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

b) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.

1) Generators must do one of the following:

A) Prepare and follow an equipment cleaning plan and clean equipment in accordance with ~~this Section~~ subsection (b)(2)this Section; or

B) Prepare and follow an equipment replacement plan and replace equipment in accordance with ~~this Section~~ subsection (b)(3)this Section; or

C) Document cleaning and replacement in accordance with ~~this Section~~ subsections (b)(2) and (b)(3)this Section, carried out after termination of use of chlorophenolic preservatives.

2) Cleaning requirements.

A) The generator must prepare and sign a written equipment cleaning plan that describes the following:

i) The equipment to be cleaned;

ii) How the equipment will be cleaned;

iii) The solvent to be used in cleaning;

iv) How solvent rinses will be tested; and

v) How cleaning residues will be disposed of.

B) Equipment must be cleaned as follows:

i) Remove all visible residues from process equipment; and

ii) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

C) Analytical requirements.

i) Rinses must be tested by using an appropriate method.

ii) ~~"~~"Not detected"~~"~~ means at or below the following lower method calibration limit (MCL): the 2,3,7,8-TCDD-based MCL is 0.01 parts per trillion (ppt), using a sample weight of 1000 g, an IS spiking level of 1 ppt, and a final extraction volume of 10 to 50 µℓ. For other congeners, multiply the values by 1 for TCDF, PeCDD, or PeCDF; by 2.5 for HxCDD, HxCDF, HpCDD, or HpCDF; or by 5 for OCDD or OCDF.

D) The generator must manage all residues from the cleaning process as F032 waste.

3) Replacement requirements.

A) ~~Prepare~~ The generator must ~~prepare~~preparePrepare and sign a written equipment replacement plan that describes the following:

i) The equipment to be replaced;

ii) How the equipment will be replaced; and

iii) How the equipment will be disposed of.

B) The generator must manage the discarded equipment as F032 waste.

4) Documentation requirements. Document The generator must documentdocumentDocument that previous equipment cleaning and replacement was performed in accordance with subsections (b)(2) and (b)(3) of this Section and ocurred that the equipment cleaning and replacement occurredoccurredocurred after cessation of use of chlorophenolic preservatives.

c) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

1) The name and address of the facility;

2) Formulations previously used and the date on which their use ceased in each process at the plant;

3) Formulations currently used in each process at the plant;

4) The equipment cleaning or replacement plan;

5) The name and address of any persons who conducted the cleaning and replacement;

6) The dates on which cleaning and replacement were accomplished;

7) The dates of sampling and testing;

8) A description of the sample handling and preparation techniques used for extraction, containerization, preservation and chain-of-custody of the samples;

9) A description of the tests performed, the date the tests were performed and the results of the tests;

10) The name and model numbers of the instruments used in performing the tests;

11) QA/QC documentation; and

12) The following statement signed by the generator or the generator~~'~~'s authorized representative:

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

(Source: Amended at 40 Ill. Reg. ~~—~~ _____, effective _____~~_____~~)

SUBPART E: EXCLUSIONS AND EXEMPTIONS

Section 721.138 Exclusion of Comparable Fuel and Syngas Fuel (Repealed)

a) Specifications for excluded fuels. Wastes that meet specifications for comparable fuel or syngas fuel under subsection (a)(1) or (a)(2) of this Section, respectively, and the other requirements of this Section, are not solid wastes:

1) Comparable fuel specifications.

A) Physical specifications.

i) Heating value. The heating value must exceed 5,000 Btu/lb (11,500 J/g).

ii) Viscosity. The viscosity must not exceed 50 cS, as fired.

B) Constituent specifications. For the compounds listed, the constituent specification levels and minimum required detection limits (where non-detect is the constituent specification) are set forth in the table in Appendix Y to this Part.

2) Synthesis gas fuel specifications. Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must fulfill the following requirements:

A) It must have a minimum Btu value of 100 Btu/Scf;

B) It must contain less than 1 ppmv of total halogen;

C) It must contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N_2);

D) It must contain less than 200 ppmv of hydrogen sulfide; and

E) It must contain less than 1 ppmv of each hazardous constituent in the target list of constituents listed in Appendix H of this Part.

3) Blending to meet the specifications.

A) Hazardous waste shall not be blended to meet the comparable fuel specification under subsection (a)(1) of this Section, except as provided by subsection (a)(3)(B) of this Section.

B) Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification for comparable fuel must fulfill the following requirements:

i) As generated, and prior to any blending, manipulation, or processing, the hazardous waste must meet the constituent and heating value specifications of subsections (a)(1)(A)(i) and (a)(1)(B) of this Section;

ii) The hazardous waste must be blended at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727; and

iii) The hazardous waste must not violate the dilution prohibition of subsection (a)(6) of this Section.

4) Treatment to meet the comparable fuel specifications.

A) A hazardous waste may be treated to meet the specifications for comparable fuel set forth in subsection (a)(1) of this Section, provided the treatment fulfills the following requirements:

i) The treatment destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

ii) The treatment is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727; and

iii) The treatment does not violate the dilution prohibition of subsection (a)(6) of this Section.

B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a comparable fuel remain a hazardous waste.

5) Generation of a syngas fuel.

A) A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of subsection (a)(2) of this Section, provided the processing fulfills the following requirements:

i) The processing destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;

ii) The processing is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727 or is an exempt recycling unit pursuant to 35 Ill. Adm. Code 721.106(c); and

iii) The processing does not violate the dilution prohibition of subsection (a)(6) of this Section.

B) Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a syngas fuel remain a hazardous waste.

6) Dilution prohibition. A generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must not in any way dilute a hazardous waste to

meet the specifications of subsections (a)(1)(A)(i) or (a)(1)(B) of this Section for comparable fuel, or subsection (a)(2) of this section for Syngas.

b) Implementation.

1) General.

A) Wastes that meet the specifications provided by subsection (a) of this Section for comparable fuel or syngas fuel are excluded from the definition of solid waste provided that the following requirements are met. For purposes of this Section, such materials are called "excluded fuel," the person claiming and qualifying for the exclusion is called the "excluded fuel generator," and the person burning the excluded fuel is called the "excluded fuel burner."

B) The person who generates the excluded fuel must claim the exclusion by complying with the conditions of this Section and keeping records necessary to document compliance with those conditions.

2) Notices.

A) Notice to the Agency.

i) The generator must submit a one-time notice, except as provided by subsection (b)(2)(A)(iii) of this Section, to the Agency, certifying compliance with the conditions of the exclusion and providing documentation, as required by subsection (b)(2)(C) of this Section;

BOARD NOTE: This subsection (b)(2)(A)(i) corresponds with 40 CFR 261.38(c)(2)(i)(A) (2009). Due to limitations on the maximum indent levels allowed in the Illinois Administrative Code, the Board found it necessary to move 40 CFR 261.38(c)(2)(i)(A)(1) through (c)(2)(i)(A)(5) to appear as subsections (c)(2)(C)(i) through (c)(2)(C)(v) of this Section.

ii) If there is a substantive change in the information provided in the one-time notice required under this subsection (b)(2)(A), the generator must submit a revised notification.

iii) An excluded fuel generator must include an estimate of the average and maximum monthly and annual quantity of material for which an exclusion would be claimed in

notices for newly excluded fuel or for revised notices as required by subsection (b)(2)(A)(ii) of this Section.

B) Public notice. Prior to burning an excluded fuel, the burner must publish in a major newspaper of general circulation, local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:

i) The name, address, and USEPA identification number of the generating facility;

ii) The name and address of the burner and identification of the units that will burn the excluded fuel;

iii) A brief, general description of the manufacturing, treatment, or other process generating the excluded fuel;

iv) An estimate of the average and maximum monthly and annual quantity of the excluded fuel to be burned; and

v) The name and mailing address of the Agency office to which the generator submitted a claim for the exclusion.

C) The one-time notice required by subsection (b)(2)(A)(i) of this Section must certify compliance with the conditions of the exclusion and provide documentation, as follows:

i) The name, address, and USEPA identification number of the person or facility claiming the exclusion;

ii) The applicable USEPA hazardous waste codes for the hazardous waste;

iii) The name and address of the units that meet the requirements of subsections (b)(3) and (c) of this Section that will burn the excluded fuel;

iv) An estimate of the average and maximum monthly and annual quantity of material for which an exclusion would be claimed, except as provided by subsection (b)(2)(A)(iii) of this Section; and

v) The following statement must be signed and submitted by the person claiming the exclusion or its authorized representative:

Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 35 Ill. Adm. Code 721.138 have been met for all waste identified in this notification. Copies of the records and information required by 35 Ill. Adm. Code 721.138(b)(8) are available at the comparable or syngas fuel generator~~2~~'s facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BOARD NOTE: Subsections (b)(2)(C)(i) through (c)(2)(C)(v) are derived from 40 CFR 261.138(b)(2)(i)(A)(*1*) through (b)(2)(i)(A)(*5*), which the Board has codified here to comport with Illinois Administrative Code format requirements.

3) Burning. The exclusion applies only if the fuel is burned in the following units that also must be subject to federal, State, and local air emission requirements, including all applicable federal hazardous air pollutant emissions requirements implementing section 112 of the Clean Air Act (CAA) (42 USC 7412):

A) Industrial furnaces, as defined in 35 Ill. Adm. Code 720.110;

B) Boilers, as defined in 35 Ill. Adm. Code 720.110, that are further defined as follows:

i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

C) Hazardous waste incinerators subject to regulation pursuant to Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 and applicable CAA MACT standards.

D) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

4) Fuel analysis plan for generators. The generator of an excluded fuel must develop and follow a written fuel analysis plan that describes the procedures for sampling and analysis of the material to be excluded. The plan must be followed and retained at the site of the generator claiming the exclusion.

A) At a minimum, the plan must specify the following:

i) The parameters for which each excluded fuel will be analyzed and the rationale for the selection of those parameters;

ii) The test methods that will be used to test for these parameters;

iii) The sampling method that will be used to obtain a representative sample of the excluded fuel to be analyzed;

iv) The frequency with which the initial analysis of the excluded fuel will be reviewed or repeated to ensure that the analysis is accurate and up to date; and

v) If process knowledge is used in the determination, any information prepared by the generator in making such determination.

B) For each analysis, the generator must also document the following:

i) The dates and times that waste samples were obtained, and the dates the samples were analyzed;

ii) The names and qualifications of the persons who obtained the samples;

iii) A description of the temporal and spatial locations of the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any clean-up and sample preparation methods;

vi) All quantitation limits achieved and all other quality control results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;

vii) All laboratory results demonstrating whether the exclusion specifications have been met; and

viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (b)(9) of this Section and also provides for the availability of the documentation to the claimant upon request.

C) A syngas fuel generator must submit for approval, prior to performing sampling, analysis, or any management of an excluded syngas fuel, a fuel analysis plan containing the elements of subsection (b)(4)(A) of this Section to the Agency. The approval of a fuel analysis plan must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the fuel analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.

5) Excluded fuel sampling and analysis.

A) General. For each waste for which an exclusion is claimed under the specifications provided by subsection (a)(1) or (a)(2) of this Section, the generator of the waste must test for all the constituents in Appendix H of this Part, except for those constituents that the generator determines, based on testing or knowledge, should not be present in the fuel. The generator is required to document the basis of each determination that a constituent with an applicable specification should not be present. The generator may not determine that any of the following categories of constituents with a specification in the table in Appendix Y to this Part should not be present:

i) A constituent that triggered the toxicity characteristic for the constituents that were the basis for listing the secondary material as a hazardous waste, or constituents for which there is a treatment standard for the waste code in 35 Ill. Adm. Code 728.140;

ii) A constituent detected in previous analysis of the waste;

iii) Constituents introduced into the process that generates the waste; or

iv) Constituents that are byproducts or side reactions to the process that generates the waste.

B) Use of process knowledge. For each waste for which the comparable fuel or syngas exclusion is claimed where the generator of the excluded fuel is not the original generator of the hazardous waste, the generator of the comparable or syngas fuel may not use process knowledge pursuant to subsection (b)(5)(A) of this Section and must test to determine that all of the constituent specifications of subsections (a)(1) and (a)(2) of this Section, as applicable, have been met.

C) The excluded fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the excluded fuel. For the fuel to be eligible for exclusion, a generator must demonstrate the following:

i) That the 95% upper confidence limit of the mean concentration for each constituent of concern is not above the specification level; and

ii) That the analyses could have detected the presence of the constituent at or below the specification level.

D) Nothing in this subsection (b)(5) preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person that generates a solid waste to determine if that waste is a hazardous waste.

E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification must be on the generator claiming the exclusion.

F) The generator must conduct sampling and analysis in accordance with the fuel its waste analysis plan developed pursuant to subsection (b)(4) of this Section.

G) Viscosity condition for comparable fuel.

i) Excluded comparable fuel that has not been blended to meet the kinematic viscosity specification must be analyzed as generated.

ii) If hazardous waste is blended to meet the kinematic viscosity specification for comparable fuel, the generator must analyze the hazardous waste as generated to ensure that it meets the constituent and heating value specifications of subsection (a)(1) of this Section, and after blending, analyze the fuel again to ensure that the blended fuel meets all comparable fuel specifications.

BOARD NOTE: The Board found it necessary to combine the text of 40 CFR 261.38(b)(5)(vii)(B)(1) and (b)(5)(vii)(B)(2) together with the text of 40 CFR 261.38(b)(5)(vii)(B) to comport with the maximum indent level allowed by Illinois Administrative Code codification requirements.

H) Excluded fuel must be retested, at a minimum, annually and must be retested after a process change that could change its chemical or physical properties in a manner that may affect conformance with the specifications.

BOARD NOTE:- Any claim pursuant to this Section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.

6) This subsection (b)(6) corresponds with 40 CFR 261.38(b)(6), which USEPA has marked "reserved." This statement maintains structural parity with the corresponding federal regulations.

7) Speculative accumulation. Excluded fuel must not be accumulated speculatively, as such is defined in 35 Ill. Adm. Code 721.101(c)(8).

8) Operating record. The generator must maintain an operating record on site containing the following information:

A) All information required to be submitted to the implementing authority as part of the notification of the claim:

i) The owner or operator name, address, and USEPA identification number of the person claiming the exclusion;

ii) For each excluded fuel, the USEPA hazardous waste codes that would be applicable if the material were discarded; and

iii) The certification signed by the person claiming the exclusion or his authorized representative;

B) A brief description of the process that generated the excluded fuel. If the comparable fuel generator is not the generator of the original hazardous waste, provide a brief description of the process that generated the hazardous waste;

C) The monthly and annual quantities of each fuel claimed to be excluded;

D) Documentation for any claim that a constituent is not present in the excluded fuel, as required pursuant to subsection (b)(5)(A) of this Section;

E) The results of all analyses and all detection limits achieved, as required pursuant to subsection (b)(5) of this Section;

F) If the comparable fuel was generated through treatment or blending, documentation of compliance with the applicable provisions of subsections (a)(3) and (a)(4) of this Section;

G) If the excluded fuel is to be shipped off-site, a certification from the burner, as required pursuant to subsection (b)(10) of this Section;

H) The fuel analysis plan and documentation of all sampling and analysis- results as required by subsection (b)(4) of this Section; and

I) If the generator ships excluded fuel off-site for burning, the generator must retain for each shipment the following information on-site:

i) The name and address of the facility receiving the excluded fuel for burning;

ii) The quantity of excluded fuel shipped and delivered;

iii) The date of shipment or delivery;

iv) A cross-reference to the record of excluded fuel analysis or other information used to make the determination that the excluded fuel meets the specifications, as required pursuant to subsection (b)(5)- of this Section; and

v) A one-time certification by the burner, as required pursuant to subsection (b)(10) of this Section.

9) Records retention. Records must be maintained for a period of three years.

10) Burner certification to the generator. Prior to submitting a notification to the Agency, a generator of excluded fuel that intends to ship the excluded fuel off-site for burning must obtain a one-time written, signed statement from the burner that includes the following:

A) A certification that the excluded fuel will only be burned in an industrial furnace, industrial boiler, utility boiler, or hazardous waste incinerator, as required pursuant to subsection (b)(3) of this Section;

B) Identification of the name and address of the facility that will burn the excluded fuel; and

C) A certification that the state in which the burner is located is authorized to exclude wastes as excluded fuel under the provisions of 40 CFR 261.38.

11) Ineligible waste codes. Wastes that are listed as hazardous waste because of the presence of dioxins or furans, as set out in Appendix G of this Part, are not eligible for these exclusions, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to the full RCRA hazardous waste management requirements.

12) Regulatory status of boiler residues. Burning excluded fuel that was otherwise a hazardous waste listed under Sections 721.131 through 721.133 of this Part does not subject boiler residues, including bottom ash and emission control residues, to regulation as derived from hazardous wastes.

13) Residues in containers and tank systems upon cessation of operations.

A) Liquid and accumulated solid residues that remain in a container or tank system for more than 90 days after the container or tank system ceases to be operated for storage or transport of excluded fuel product are subject to regulation under 35 Ill. Adm. Code 702, 703, 722 through 725, 727, and 728.

B) Liquid and accumulated solid residues that are removed from a container or tank system after the container or tank system ceases to be operated for storage or transport of excluded fuel product are solid wastes subject to regulation as hazardous waste if the waste exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124 or if the fuel were otherwise a hazardous waste listed under Sections 721.131 through 721.133 when the exclusion was claimed.

C) Liquid and accumulated solid residues that are removed from a container or tank system and which do not meet the specifications for exclusion under subsection (a)(1) or (a)(2) of this Section are solid wastes subject to regulation as hazardous waste if either of the following conditions exist with regard to the residues:

i) The waste exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124; or

ii) The fuel was otherwise a hazardous waste listed under Sections 721.131 through 721.133. The hazardous waste code for the listed waste applies to these liquid and accumulated solid residues.

14) Waiver of RCRA closure requirements. Interim status and permitted storage and combustion units, and generator storage units exempt from the permit requirements under 35 Ill. Adm. Code 722.134, are not subject to the closure requirements of 35 Ill. Adm. Code 724, 725, or 727, provided that the storage and combustion unit has been used to manage only hazardous waste that is subsequently excluded under the conditions of this Section, and that afterward will be used only to manage fuel excluded under this Section.

15) Spills and leaks.

A) Excluded fuel that is spilled or leaked and that therefore no longer meets the conditions of the exclusion is discarded and must be managed as a hazardous waste if it exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124 or if the fuel were otherwise a hazardous waste listed in Sections 721.131 through 721.133.

B) For excluded fuel that would have otherwise been a hazardous waste listed in Sections 721.131 through 721.133 and which is spilled or leaked, the USEPA hazardous waste code for the listed waste applies to the spilled or leaked material.

16) In corresponding 40 CFR 261.38(b)(16), USEPA included the following disclaimer, which the Board quotes in full: ~~"~~"Nothing in this section preempts, overrides, or otherwise negates the provisions in CERCLA Section 103, which establish reporting obligations for releases of hazardous substances, or the Department of Transportation requirements for hazardous materials in 49 CFR parts 171 through 180.~~"~~"

c) Failure to comply with the conditions of the exclusion. An excluded fuel loses its exclusion if any person managing the fuel fails to comply with the conditions of the exclusion under this Section, and the material must be managed as a hazardous waste from the point of generation. In such situations, USEPA, the Agency, or any person may take enforcement action pursuant to section 31 of the Act [415 ILCS 5/31].

BOARD NOTE: Corresponding 40 CFR 261.38(c) provides that USEPA or an authorized state may take enforcement action pursuant to section 3008(a) of RCRA (42 USC 6927(a)). In Illinois, Section 31(a) and (d) of the Act [415 ILCS 5/31(a) and (d)] provide that the Agency or any person may pursue an enforcement action for violation of the Act or Board regulations.

(Source: Repealed at 40 Ill. Reg. ~~—~~ _____, effective _____~~_____~~)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 721.270 Applicability

This Subpart I applies to hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27) and stored in containers.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~_____~~)

Section 721.271 Condition of Containers

If a container holding hazardous secondary material is not in good condition (e.g., the container has severe rusting, apparent structural defects, etc.) or if the container begins to leak, the

hazardous secondary material must be transferred from this container to a container that is in good condition or managed in some other way that complies with the requirements of this Part.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~———~~)

Section 721.272 Compatibility of Hazardous Secondary Materials with Containers

A container holding hazardous secondary material must be made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous secondary material to be stored, so that the ability of the container to contain the material is not impaired.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~———~~)

Section 721.273 Management of Containers

a) A container holding hazardous secondary material must always be closed during storage, except when it is necessary to add or remove the hazardous secondary material.

b) A container holding hazardous secondary material must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.275 Secondary Containment

a) Container storage areas must have a secondary containment system that is designed and operated in accordance with subsection (b).

b) A secondary containment system must be designed and operated as follows:

1) A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2) The base must be sloped or the secondary containment system must be otherwise designed and operated to drain and remove liquids resulting

from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

3) The secondary containment system must have sufficient capacity to contain ten percent of the volume of containers or the volume of the largest container, whichever is greater;

4) Run-on into the secondary containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in subsection (b)(3) to contain any run-on which might enter the system; and

5) Spilled or leaked material and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the secondary collection system.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.276 Special Requirements for Ignitable or Reactive Hazardous Secondary Material

Containers holding ignitable or reactive hazardous secondary material must be located at least 15 meters (50 feet) from the facility~~'~~'s property line.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.277 Special Requirements for Incompatible Materials

a) Incompatible materials must not be placed in the same container.

b) Hazardous secondary material must not be placed in an unwashed container that previously held an incompatible material.

c) A storage container holding a hazardous secondary material that is incompatible with any other materials stored nearby must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.279 Air Emission Standards

The remanufacturer or other person that stores or treats the hazardous secondary material must manage all hazardous secondary material placed in a container in accordance with the applicable requirements of Subparts AA, BB, and CC of this Part.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

SUBPART J: TANK SYSTEMS

Section 721.290 Applicability

a) The requirements of this Subpart J apply to tank systems for storing or treating hazardous secondary material excluded under the remanufacturing exclusion at Section 721.104(a)(27).

b) Tank systems, including sumps, as defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous secondary materials are exempted from the requirements in Section 721.293(a).

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~_____~~)

Section 721.291 Assessment of Existing Tank System~~'~~s Integrity

a) A tank system must meet the secondary containment requirements of Section 721.293, or the remanufacturer or other person that handles the hazardous secondary material must determine that the tank system is not leaking or is unfit for use. Except as provided in subsection (c), a written assessment reviewed and certified by a qualified Professional Engineer must be kept on file at the remanufacturer~~'~~s facility or other facility that stores or treats the hazardous secondary material that attests to the tank system~~'~~s integrity.

b) The qualified Professional Engineer~~'~~s assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the materials to be stored or treated, to ensure that the tank

system will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1) Design standards, if available, according to which the tank system and ancillary equipment were constructed;

2) Hazardous characteristics of the materials that have been and will be handled;

3) Existing corrosion protection measures;

4) Documented age of the tank system, if available (otherwise, an estimate of the age); and

5) Results of a leak test, internal inspection, or other tank system integrity examination such that:

A) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects~~.~~; and

B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer that addresses cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, ~~"~~"Atmospheric and Low-Pressure Storage Tanks,~~"~~" 4th edition, 1981, incorporated by reference in 35 Ill. Adm. Code 720.111, may be used, ~~where~~when applicable, as guidelines in conducting other than a leak test.

c) If, as a result of the assessment conducted in accordance with subsection (a), a tank system is found to be leaking or unfit for use, the remanufacturer or other

person that stores or treats the hazardous secondary material must comply with the requirements of Section 721.196.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.293 Containment and Detection of Releases

a) The following must be true of a secondary containment system:

1) The system is designed, installed, and operated to prevent any migration of materials or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

2) The system is capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

BOARD NOTE: If the collected material is a hazardous waste under this Part, the material is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the United States, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6.

b) To meet the requirements of subsection (a), a secondary containment system must fulfill the following requirements:

1) The secondary containment system must be constructed of or lined with materials that are compatible with the materials to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the material to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

2) The secondary containment system must be placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

3) The secondary containment system must be provided with a leak-detection system that is designed and operated so that the system will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous secondary material or accumulated liquid in the secondary containment system at the earliest practicable time; and

4) The secondary containment system must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked material and accumulated precipitation must be removed from the secondary containment system in as timely a manner as is possible, but in no case later than 24 hours after the leak, spill, or accumulation of precipitation occurs, to prevent harm to human health and the environment.

c) Secondary containment for tanks must include one or more of the following devices:

1) A liner (external to the tank);

2) A vault; or

3) A double-walled tank.

d) In addition to the requirements of subsections (a), (b), and (c), secondary containment systems must satisfy the following requirements:

1) An external liner system must fulfill the following requirements:

A) The secondary containment system must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

B) The secondary containment system must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. The additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event~~.~~;

C) The secondary containment system must be free of cracks or gaps; and

D) The secondary containment system must be designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the material if the material is released from the tanks (i.e., capable of preventing lateral as well as vertical migration of the material).

2) A vault system must fulfill the following requirements:

A) The vault system must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

B) The vault system must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. The additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

C) The vault system must be constructed with chemical-resistant water stops in place at all joints (if any);

D) The vault system must be provided with an impermeable interior coating or lining that is compatible with the stored material and that will prevent migration of material into the concrete;

E) The vault system must be provided with a means to protect against the formation of and ignition of vapors within the vault, if the material being stored or treated is ignitable or reactive; and

F) The vault system must be provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3) A double-walled tank must fulfill the following requirements:

A) The double-walled tank must be designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

B) The double-walled tank must be protected, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

C) The double-walled tank must be provided with a built-in continuous leak detection system capable of detecting a release at the earliest practicable time, but in no case later than 24 hours after the release occurs.

BOARD NOTE: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111, may be used as guidelines for aspects of the design of underground steel double-walled tanks.

e) This subsection (e) corresponds with 40 CFR 261.194(e), which USEPA has marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (a) and (b), except for the following equipment:

1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

3) Seal-less or magnetic coupling pumps and seal-less valves that are visually inspected for leaks on a daily basis; and

4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.294 General Operating Requirements

a) Hazardous secondary materials or treatment reagents must not be placed in a tank system if the materials or reagents could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include, at a minimum, the following controls and practices:

1) Spill prevention controls (e.g., check valves, dry disconnect couplings, etc.);

2) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

c) The remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of Section 721.196 if a leak or spill occurs in the tank system.

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____ ~~_____~~)

Section 721.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or ~~which~~ that is unfit for use, must be removed from service immediately, and the remanufacturer or other person that stores or treats the hazardous secondary material must satisfy the following requirements:

a) Cessation of use; prevent flow or addition of materials. The remanufacturer or other person that stores or treats the hazardous secondary material must immediately stop the flow of hazardous secondary material into the tank system or secondary containment system and inspect the system to determine the cause of the release.

b) Removal of material from tank system or secondary containment system.

1) If the release was from the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material must, within 24 hours after detection of the leak or, if the remanufacturer or other person that stores or treats the hazardous secondary material demonstrates that it is not possible, at the earliest practicable time, remove as much of the material as is necessary to prevent further release of hazardous secondary material to the environment and to allow inspection and repair of the tank system to be performed.

2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

c) Containment of visible releases to the environment. The remanufacturer or other person that stores or treats the hazardous secondary material must immediately conduct a visual inspection of the release and, based upon that inspection:

1) The remanufacturer must prevent further migration of the leak or spill to soils or surface water; and

2) The remanufacturer must remove, and properly dispose of, any visible contamination of the soil or surface water.

d) Notifications, reports.

1) Any release to the environment, except as provided in subsection (d)(2), must be reported to the Agency and the Administrator of USEPA Region 5 within 24 hours of its detection. If the release has been reported pursuant to 40 CFR 302, that report will satisfy the requirement to notify USEPA, but the release must still be reported to the Agency.

2) A leak or spill of hazardous secondary material is exempted from the requirements of this subsection (d) if the following is true of the leak or spill:

A) The leak or spill is less than or equal to a quantity of one pound; and

B) The leak or spill is immediately contained and cleaned up.

3) Within 30 days ~~of~~after detection of a release to the environment, a report containing the following information must be submitted to the Agency and the Administrator of USEPA Region 5:

A) The likely route of migration of the release;

B) The characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

C) The results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data

relating to the release are not available within 30 days, these data must be submitted to the Agency and the Administrator of USEPA Region 5~~:~~ as soon as the results become available~~.~~;

D) The proximity to downgradient drinking water, surface water, and populated areas; and

E) A description of response actions taken or planned.

e) Provision of secondary containment, repair, or closure.

1) Unless the remanufacturer or other person that stores or treats the hazardous secondary material satisfies the requirements of subsections (e)(2) through (e)(4), the tank system must cease to operate under the remanufacturing exclusion at Section 721.104(a)(27).

2) If the cause of the release was a spill that has not damaged the integrity of the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material may return the tank system to service as soon as the released material is removed and repairs, if necessary, are made.

3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the primary tank system must be repaired prior to returning the tank system to service.

4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material must provide the component of the tank system from which the leak occurred with secondary containment that satisfies the requirements of Section 721.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of subsection (f) are satisfied. Additionally, if a leak has occurred in any portion of a tank system component that is not readily

accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with Section 721.193 prior to being returned to use.

f) Certification of major repairs. If the remanufacturer or other person that stores or treats the hazardous secondary material has repaired a tank system in accordance with subsection (e), and the repair has been extensive (e.g., installation of an internal liner, repair of a ruptured primary containment or secondary containment vessel, etc.), the tank system must not be returned to service, unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification must be kept on file at the facility and maintained until closure of the facility.

BOARD NOTE: USEPA stated in note 1 appended to corresponding 40 CFR 261.196 that the Regional Administrator may, on the basis of any information received that there is or has been a release of hazardous secondary material or hazardous constituents into the environment, issue an order under RCRA section 7003(a) (42 USC 6973(a)) requiring corrective action or such other response as deemed necessary to protect human health or the environment. USEPA stated in note 2 appended to corresponding 40 CFR 261.196 that 40 CFR 302 may require the owner or operator to notify the National Response Center of certain releases.

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____~~_____~~)

Section 721.297 Termination of Remanufacturing Exclusion

Hazardous secondary material stored in units more than 90 days after the unit ceases to operate under the remanufacturing exclusion at Section 721.4(a)(27) or otherwise ceases to be operated for manufacturing, or for storage of a product or a raw material, then becomes subject to regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, 705, and 721 through 728, as applicable.

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____~~_____~~)

Section 721.298 Special Requirements for Ignitable or Reactive Materials

a) Ignitable or reactive material must not be placed in a tank system, unless the material is stored or treated in such a way that it is protected from any material or conditions that may cause the material to ignite or react.

b) The remanufacturer or other person that stores or treats hazardous secondary material that is ignitable or reactive must store or treat the hazardous secondary material in a tank system that is in compliance with the requirements for the maintenance of protective distances between the material management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.299 Special Requirements for Incompatible Materials

a) Incompatible materials must not be placed together in the same tank system.

b) Hazardous secondary material must not be placed in a tank system that has not been decontaminated and that previously held an incompatible material.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.300 Air Emission Standards

The remanufacturer or other person that stores or treats the hazardous secondary material must manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of Subparts AA, BB, and CC of this Part.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART M: EMERGENCY PREPAREDNESS AND RESPONSE FOR MANAGEMENT OF EXCLUDED HAZARDOUS SECONDARY MATERIALS

Section 721.500 Applicability

The requirements of this Subpart M apply to those areas of an entity managing hazardous secondary materials excluded under Section 721.104(a)(23) or (a)(24) where hazardous secondary materials are generated or accumulated on site.

a) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a solid waste determination under Section 720.131(d), that accumulates 6,000 kg or less of hazardous secondary material at any time must comply with Sections 721.510 and 261.511.

b) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a solid waste determination under Section 720.131(d) that accumulates more than 6,000 kg of hazardous secondary material at any time must comply with Sections 721.510 and 261.520.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.510 Preparedness and Prevention

a) Maintenance and operation of facility. Facilities generating or accumulating hazardous secondary material must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous secondary materials or hazardous secondary material constituents to air, soil, or surface water ~~which~~that could threaten human health or the environment.

b) Required equipment. All facilities generating or accumulating hazardous secondary material must be equipped with the following, unless none of the hazards posed by hazardous secondary material handled at the facility could require a particular kind of equipment specified below:

1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

3) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

c) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

d) Access to communications or alarm system.

1) Whenever hazardous secondary material is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under subsection (b).

2) If there is ever just one employee on the premises while the facility is operating, he or she must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under subsection (b).

e) Required aisle space. The hazardous secondary material generator or intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

f) Arrangements with local authorities.

1) The hazardous secondary material generator or an intermediate or reclamation facility operating under a solid waste determination under 35

Ill. Adm. Code 720.131(d) must attempt to make the following arrangements, as appropriate for the type of waste handled at ~~his~~the facility and the potential need for the services of these organizations:

A) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous secondary material handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

B) ~~Where~~When more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

C) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

D) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses ~~which~~that could result from fires, explosions, or releases at the facility.

2) ~~Where~~When state or local authorities decline to enter into ~~such~~ arrangements under this subsection (f), the hazardous secondary material generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must document the refusal in the operating record.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.511 Emergency Procedures for Facilities Generating or Accumulating 6000 kg or Less of Hazardous Secondary Material

A generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) that generates or accumulates 6,000 kg or less of hazardous secondary material must comply 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). This employee is the emergency coordinator.

b) The generator or intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) must post the following information next to the telephone:

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

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

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

c) The generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies~~:~~.

d) The emergency coordinator or his or her designee must respond to any emergencies that arise. The applicable responses are as follows:

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

2) 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;

3) In the event of a fire, explosion, or other release ~~which~~that could threaten human health outside the facility or when the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) has knowledge that a spill has reached surface water, the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must immediately notify the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following information:

A) The name, address, and USEPA identification number of the facility;

B) The date, time, and type of incident (e.g., spill or fire);

C) The quantity and type of hazardous waste involved in the incident;

D) The extent of injuries, if any; and

E) The estimated quantity and disposition of recovered materials, if any.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.520 Contingency Planning and Emergency Procedures for Facilities Generating or Accumulating More Than 6000 kg of Hazardous Secondary Material

A generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) that generates or accumulates more than 6,000 kg of hazardous secondary material must comply with the following requirements:

a) Purpose and implementation of contingency plan.

1) Each generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) that accumulates more than 6,000 kg of hazardous secondary material must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from

fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water.

2) The provisions of the contingency plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous secondary material or hazardous secondary material constituents that could threaten human health or the environment.

b) Content of contingency plan.

1) The contingency plan must describe the actions facility personnel must take to comply with subsections (a) and (f) in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water at the facility.

2) If the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) accumulating more than 6,000 kg of hazardous secondary material has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112, or some other emergency or contingency plan, the facility needs only amend that plan to incorporate hazardous secondary material management provisions that are sufficient to comply with the requirements of this Part. The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) may develop one contingency plan which meets all regulatory requirements. When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

BOARD NOTE: USEPA has recommended that the contingency plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").

3) The contingency plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and

local emergency response teams to coordinate emergency services, pursuant to 35 Ill. Adm. Code 722.510(f).

4) The contingency plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see subsection (e)), and this list must be kept up-to-date. ~~Where~~When more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

5) The contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each emergency equipment item on the list, and a brief outline of its capabilities.

6) The contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This evacuation plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous secondary material or fires).

c) Copies of contingency plan. The facility owner or operator must do as follows with the contingency plan and all revisions to the plan:

1) Maintain a copy at the facility; and

2) Submit a copy to every local police department, fire department, hospital, and State and local emergency response team that may be called upon to provide emergency services.

d) Amendment of contingency plan. The facility owner or operator must review and immediately amend its contingency plan, if necessary, whenever any of the following occurs:

1) Applicable regulations are revised;

2) The plan fails in an emergency;

3) The facility changes~~,~~ in its design, construction, operation, maintenance, or other circumstances~~,~~ in a way that materially increases the potential for fires, explosions, or releases of hazardous secondary material or hazardous secondary material constituents, or the facility changes the response necessary in an emergency;

4) The list of emergency coordinators changes; or

5) The list of emergency equipment changes.

e) Emergency coordinator. At all times, there must be at least one employee, either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time), with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility~~'~~s contingency plan, all operations and activities at the facility, the location and characteristics of hazardous secondary materials handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. The emergency coordinator~~'~~s responsibilities are more fully spelled out in subsection (f). Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of hazardous secondary materials handled by the facility, and type and complexity of the facility.

f) Emergency procedures.

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

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

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

2) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

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

4) If the emergency coordinator determines that the facility has had a release, fire, or explosion ~~which~~that could threaten human health, or the environment, outside the facility, the emergency coordinator must report his or her findings as follows:

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

B) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800-424~~-~~8802). The report must include the following information:

i) The name and telephone number of reporter;

ii) The name and address of facility;

iii) The time and type of incident (e.g., release, fire);

iv) The name and quantity of materials involved, to the extent known;

v) The extent of injuries, if any; and

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

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

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

7) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered secondary material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the hazardous secondary material generator can demonstrate, in accordance with Section 721.103(c) or (d), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage the recovered material in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

8) The emergency coordinator must ensure that the following has occurred in the affected areas of the facility:

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

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

9) The hazardous secondary material generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the emergency coordinator must submit a written report on the incident to the Regional Administrator. The report must include the following information:

A) The name, address, and telephone number of the hazardous secondary material generator;

B) The name, address, and telephone number of the facility;

C) The date, time, and type of incident (e.g., fire, explosion, etc.);

D) The name and quantity of materials involved;

E) The extent of injuries, if any;

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

G) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____~~_____~~)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 721.930 Applicability

The regulations in this Subpart AA apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or stream stripping operations that manage hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.104(a)(27) with organic concentrations of at least 10 ppmw (parts per million by weight),

unless the process vents are equipped with operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.931 Definitions

As used in this Subpart AA, all terms not defined ~~herein~~in this Section will have the meaning given them in the Resource Conservation and Recovery Act and 35 Ill. Adm. Code 720 through 726.

"Air stripping operation" is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

"Bottoms receiver" means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

"Closed-vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

"Condenser" means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

"Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

"Continuous recorder" means a data-recording device recording an instantaneous data value at least once every 15 minutes.

"Control device" means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of

solvents or other organics for use, reuse, or sale (e.g., a primary condenser on a solvent recovery unit) is not a control device.

""Control device shutdown"" means the cessation of operation of a control device for any purpose.

""Distillate receiver"" means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

""Distillation operation"" means an operation, either batch or continuous, separating one or more feed streams into two or more exit streams, each exit stream having component concentrations different from those in the feed streams. The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

""Double block and bleed system"" means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

""Equipment"" means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems required by this Subpart AA.

""Flame zone"" means the portion of the combustion chamber in a boiler occupied by the flame envelope.

""Flow indicator"" means a device that indicates whether gas flow is present in a vent stream.

""First attempt"" at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

""Fractionation operation"" means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

~~"~~"Hazardous secondary material management unit shutdown~~"~~" means a work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit for less than 24 hours is not a hazardous secondary material management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous secondary material management unit shutdowns.

~~"~~"Hot well~~"~~" means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

~~"~~"In gas/vapor service~~"~~" means that the piece of equipment contains or contacts a hazardous secondary material stream that is in the gaseous state at operating conditions.

~~"~~"In heavy liquid service~~"~~" means that the piece of equipment is not in gas/vapor service or in light liquid service.

~~"~~"In light liquid service~~"~~" means that the piece of equipment contains or contacts a material stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20° C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 ~~kilopascals (~~kPa~~)~~ at 20° C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

~~"~~"In situ sampling systems~~"~~" means non-extractive samplers or in-line samplers.

~~"~~"In vacuum service~~"~~" means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

~~"~~"Malfunction~~"~~" means any sudden failure of a control device or a hazardous secondary material management unit or failure of a hazardous secondary material management unit to operate in a normal or usual manner, so that organic emissions are increased.

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~~"~~"Open-ended valve or line~~"~~" means any valve, except pressure relief valves, having one side of the valve seat in contact with hazardous secondary material and one side open to the atmosphere, either directly or through open piping.

~~"~~"Pressure release~~"~~" means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

~~"~~"Process heater~~"~~" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

~~"~~"Process vent~~"~~" means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

~~"~~"Repaired~~"~~" means that equipment is adjusted, or otherwise altered, to eliminate a leak.

~~"~~"Sampling connection system~~"~~" means an assembly of equipment within a process or material management unit used during periods of representative operation to take samples of the process or material fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

~~"~~"Sensor~~"~~" means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

~~"~~"Separator tank~~"~~" means a device used for separation of two immiscible liquids.

~~"~~"Solvent extraction operation~~"~~" means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

~~"~~"Startup~~"~~" means the setting in operation of a hazardous secondary material management unit or control device for any purpose.

""Steam stripping operation"" means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

""Surge control tank"" means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

""Thin-film evaporation operation"" means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

""Vapor incinerator"" means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

""Vented"" means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (working losses) or by natural means such as diurnal temperature changes.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.932 Standards: Process Vents

a) The remanufacturer or other person that stores or treats hazardous secondary materials in hazardous secondary material management units with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous secondary material with organic concentrations of at least 10 ppmw must either:

1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr)~~;~~ or

2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

b) If the remanufacturer or other person that stores or treats the hazardous secondary material installs a closed-vent system and control device to comply with the provisions of subsection (a) the closed-vent system and control device must meet the requirements of Section 721.933.

c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of Section 721.934(c).

d) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on determinations of vent emissions or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in Section 721.934(c) must be used to resolve the disagreement. The Agency must state any disagreement on a determination of vent emissions or emission reductions in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.933 Standards: Closed-Vent Systems and Control Devices

a) Applicability.

1) The remanufacturer or other person that stores or treats the hazardous secondary materials in hazardous secondary material management units using closed-vent systems and control devices used to comply with provisions of this Part must comply with the provisions of this Section.

2) This subsection (a)(2) corresponds with 40 CFR 261.1033, which USEPA has marked "reserved." This statement maintains structural consistency with the federal regulations.

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 721.932(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to three percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° 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 five minutes during any two consecutive hours.

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

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 non-assisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2).

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), less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (C).

B) A steam-assisted or non-assisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

C) A steam-assisted or non-assisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), less than the velocity, V_{max}, 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_{max}, as determined by the method specified in subsection (e)(5).

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

e) Compliance determination and equations.

1) Reference Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, must be used to determine the compliance of a flare with the visible emission provisions of this Subpart AA. The observation period is two hours and must be used according to Method 22.

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

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$$H_T = K\left[\sum_{i=1}^{n} C_i H_i\right]$$

Where:

~~H_T = Net heating value of the sample, 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 one mol is 20° C;~~

~~K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20° C;~~

~~C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, and measured for hydrogen and carbon monoxide by ASTM D 1946-90, incorporated by reference in Section 720.111; and~~

~~H_i = Net heat of combustion of sample component i, kcal/g mol at 25° C and 760 mm Hg. The heats of combustion may be determined using ASTM D 2382-83, incorporated by reference in Section 720.111, if published values are not available or cannot be calculated.~~

H_T = Net heating value of the sample, MJ/scm, where the net enthalpy per mol of offgas is based on combustion at 25° C and 760 mmHg, but the standard temperature for determining the volume corresponding to one mol is 20° C;

K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20° C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, and measured for hydrogen and carbon monoxide by ASTM D 1946-90, incorporated by reference in Section 720.111; and

H_i = Net heat of combustion of sample component i, kcal/g mol at 25° C and 760 mmHg. The heats of combustion may be determined using ASTM D 2382-83, incorporated by reference in Section 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 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), or 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts) in appendix A to 40 CFR 60 (Test Methods), each 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_{max}, for a flare complying with subsection (d)(4)(C) must be determined by the following equation:

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

Where:

~~28.8 = Constant,~~

~~31.7 = Constant,~~

~~HT = The net heating value as determined in subsection (e)(2).~~

28.8 ≡ Constant;
31.7 ≡ Constant; and
H_T ≡ The net heating value as determined in subsection (e)(2).

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

$$V_{max} = 8.706 + 0.7084 (H_T)$$

Where:

~~8.706 = Constant,~~

~~0.7084 = Constant,~~

~~H_T = The net heating value as determined in subsection (e)(2).~~

8.706 ≡ Constant;
0.7084 ≡ Constant; and
T ≡ The net heating value as determined in subsection (e)(2).

f) The remanufacturer or other person that stores or treats the hazardous secondary material must monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

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

nearest feasible point to the control device inlet but before 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 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 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 parameters 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 with an accuracy of ±1 percent of the temperature being monitored in ~~degrees Celsius (~~° C~~)~~ or ±0.5° C, whichever is greater. The temperature sensor must be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

G) For a carbon adsorption system 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 subsections (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) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon

bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 721.935(b)(4)(C)(vi).

h) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of Section 721.935(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 721.935(b)(4)(C)(vii).

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

j) A remanufacturer or other person that stores or treats hazardous secondary material at an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

k) A closed-vent system must meet either of the following design requirements:

1) A closed-vent system must be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Section 721.934(b), and by visual inspections; or

2) A closed-vent system must be designed to operate at a pressure below atmospheric pressure. The system must be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

l) The remanufacturer or other person that stores or treats the hazardous secondary material must monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

1) Each closed-vent system that is used to comply with subsection (k)(1) must be inspected and monitored in accordance with the following requirements:

A) An initial leak detection monitoring of the closed-vent system must be conducted by the remanufacturer or other person that stores or treats the hazardous secondary material on or before the date that the system becomes subject to this section. The remanufacturer or other person that stores or treats the hazardous secondary material must monitor the closed-vent system components and connections using the procedures specified in Section 721.934(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

B) After initial leak detection monitoring required in subsection (l)(1)(A), the remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the closed-vent system as follows:

i) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) must be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The remanufacturer or other person that stores or treats the hazardous secondary material must monitor a component or connection using the procedures specified in Section 721.934(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

ii) Closed-vent system components or connections other than those specified in subsection (l)(1)(B)(i) must be monitored annually and at other times as requested by the Agency, except as provided for in subsection (o), using the procedures specified in Section 721.934(b) to demonstrate that the components or connections operate with no detectable emissions. The Agency must make any request for monitoring in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

C) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect or leak in accordance with the requirements of subsection (l)(3).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 721.935.

2) Each closed-vent system that is used to comply with subsection (k)(2) must be inspected and monitored in accordance with the following requirements:

A) The closed-vent system must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this Section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year.

C) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (l)(3).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 721.935.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must repair all detected defects as follows:

A) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in subsection (l)(3)(C).

B) A first attempt at repair must be made no later than 5 calendar days after the emission is detected.

C) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a

process unit shutdown, or if the remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment must be completed by the end of the next process unit shutdown.

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the defect repair in accordance with the requirements specified in Section 721.935.

m) Closed-vent systems and control devices used to comply with provisions of this Subpart AA must be operated at all times when emissions may be vented to them.

n) The owner or operator using a carbon adsorption system to control air pollutant emissions must document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

A) The owner or operator of the unit has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart X of this Part;

B) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Subparts AA and CC of this Part or Subparts AA and CC of 35 Ill. Adm. Code 725; or

C) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants) or 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

A) Has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of this Part; or

B) Has designed and operates the incinerator in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.

3) Burned in a boiler or industrial furnace for which the owner or operator either:

A) Has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726.

o) Any components of a closed-vent system that are designated, as described in Section 721.935(c)(9), as unsafe to monitor are exempt from the requirements of subsection (l)(1)(B)(ii) if both of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (l)(1)(B)(ii); and

2) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure

specified in subsection (l)(1)(B)(ii) as frequently as practicable during safe-to-monitor times.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

Section 721.934 Test Methods and Procedures

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart AA must comply with the test methods and procedural requirements provided in this Section.

b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 721.933(l) of this Subpart AA, the test must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be:

A) Zero air (less than 10 ppm of hydrocarbon in air).

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The background level must be determined as set forth in Reference Method 21.

6) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

c) Performance tests to determine compliance with Section 721.932(a) and with the total organic compound concentration limit of Section 721.933(c) must comply with the following:

1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices must be conducted and data reduced in accordance with the following reference methods and calculation procedures:

A) Reference Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111 for velocity and volumetric flow rate.

B) Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) or Reference Method 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, for organic content. If Reference Method 25A is used, the organic HAP used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Reference Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

C) Each performance test must consist of three separate runs; each run shall be conducted for at least one hour under the conditions that exist when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all

runs must apply. The average must be computed on a time-weighted basis.

D) Total organic mass flow rates must be determined by the following equation:

i) For sources utilizing Reference Method 18.

$$E_{2sd}\left\{\sum_{i=1}^{n} C_i MW_i\right\}[0.0416][10^{-6}]$$

Where:

~~E_h = Total organic mass flow rate, kg/h;~~

~~Q_{2sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;~~

~~n = Number of organic compounds in the vent gas;~~

~~C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Reference Method 18;~~

~~MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;~~

~~0.0416 = Conversion factor for molar volume, kg-mol/m³ (@293° K and 760 mm Hg);~~

~~10^{-6} = Conversion from ppm~~

E_h = Total organic mass flow rate, kg/h;
E_{2sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;
n = Number of organic compounds in the vent

gas;

C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Reference Method 18;

MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;

0.0416 = Conversion factor for molar volume, kg-mol/m3 (@293° K and 760 mmHg);

10^{-6} = Conversion from ppm.

ii) For sources utilizing Reference Method 25A.

$$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$$

Where:

~~Eh= Total organic mass flow rate, kg/h;~~

~~Q = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;~~

~~C = Organic concentration in ppm, dry basis, as determined by Reference Method 25A;~~

~~MW = Molecular weight of propane, 44;~~

~~0.0416 = Conversion factor for molar volume, kg-mol/m^3 (@293° K and 760 mm Hg);~~

~~10^{-6} = Conversion from ppm.~~

E_h = Total organic mass flow rate, kg/h;

Q = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;

C = Organic concentration in ppm, dry basis, as determined by Reference Method 25A;

MW = Molecular weight of propane (44);
0.0416 = Conversion factor for molar volume, kg-mol/m^3 (@293° K and 760 mmHg);
10^{-6} = Conversion from ppm.

E) The annual total organic emission rate must be determined by the following equation:

$$E_A=(E_h)(H)$$

Where:

~~E_A=Total organic mass emission rate, kg/y;~~

~~E_h=Total organic mass flow rate for the process vent, kg/h;~~

~~H=Total annual hours of operations for the affected unit, h.~~

E_A = Total organic mass emission rate (kg/y);
E_h = Total organic mass flow rate for the process vent, kg/h;
H = Total annual hours of operations for the affected unit (h).

F) Total organic emissions from all affected process vents at the facility must be determined by summing the hourly total organic mass emission rates (E_h, as determined in subsection (c)(1)(F)) and by summing the annual total organic mass emission rates (E_A, as determined in subsection (c)(1)(E)) for all affected process vents at the facility.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must record ~~such~~ process information ~~as may be~~ necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction must not constitute representative conditions for the purpose of a performance test.

3) The remanufacturer or other person that stores or treats the hazardous secondary material at an affected facility must provide, or cause to be provided, performance testing facilities, as follows:

A) Sampling ports adequate for the test methods specified in subsection (c)(1).

B) Safe sampling platforms.

C) Safe access to sampling platforms.

D) Utilities for sampling and testing equipment.

4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs must apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the control of the remanufacturer or other person that stores or treats the hazardous secondary material, the Agency may approve compliance determination using the average of the results of the two other runs. The Agency must state any approval or disapproval of a compliance determination in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

d) To show that a process vent associated with a hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this Subpart AA, the remanufacturer or other person that stores or treats the hazardous secondary material must make an initial determination that the time-weighted, annual average total organic concentration of the material managed by the hazardous secondary material management unit is less than 10 ppmw using one of the following two methods:

1) Direct measurement of the organic concentration of the material using the following procedures:

A) The remanufacturer or other person that stores or treats the hazardous secondary material must take a minimum of four grab samples of material for each material stream managed in the affected unit under process conditions expected to cause the maximum material organic concentration.

B) For material generated onsite, the grab samples must be collected at a point before the material is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the material after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For material generated offsite, the grab samples must be collected at the inlet to the first material management unit that receives the material provided the material has been transferred to the facility in a closed system such as a tank truck and the material is not diluted or mixed with other material.

C) Each sample must be analyzed and the total organic concentration of the sample must be computed using Method 9060A of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or analyzed for its individual organic constituents.

D) The arithmetic mean of the results of the analyses of the four samples must apply for each material stream managed in the unit in determining the time-weighted, annual average total organic concentration of the material. The time-weighted average is to be calculated using the annual quantity of each material stream processed and the mean organic concentration of each material stream managed in the unit.

2) Using knowledge of the material to determine that its total organic concentration is less than 10 ppmw. Documentation of the material determination 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 material is generated by a process that is identical to a

process at the same or another facility that has previously been demonstrated by direct measurement to generate a material stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:

1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later~~,~~; and

2) For continuously generated material~~,~~:

A) annually~~,~~; or

~~3~~B) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous secondary material with organic concentrations of at least 10 ppmw based on knowledge of the material, the dispute may be resolved by using direct measurement, as specified at subsection (d)(1). The Agency must state any disagreement in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.935 Recordkeeping Requirements

a) Compliance Required.

1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart AA must comply with the recordkeeping requirements of this Section.

2) A remanufacturer or other person that stores or treats the hazardous secondary material of more than one hazardous secondary material management unit subject to the provisions of this Subpart AA may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must keep the following records on-site:

1) For facilities that comply with the provisions of Section 721.933(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be kept on-site at the facility by the effective date that the facility becomes subject to the provisions of this Subpart AA.

2) Up-to-date documentation of compliance with the process vent standards in Section 721.932, including the following:

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

B) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and

emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action (e.g., managing a material of different composition or increasing operating hours of affected hazardous secondary material management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan must be developed and include the following:

A) A description of how it is determined that the planned test is going to be conducted when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. This must include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

B) A detailed engineering description of the closed-vent system and control device, including the following:

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

ii) Type of control device.

iii) Dimensions of the control device.

iv) Capacity.

v) Construction materials.

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

4) Documentation of compliance with Section 721.933 must include the following information:

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

B) Records, including the dates, of each compliance test required by Section 721.933(k).

C) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of ""APTI Course 415: Control of Gaseous Emissions,"" incorporated by reference as specified in 35 Ill. Adm. Code 720.111, or other engineering texts acceptable to the Agency that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with subsections (b)(4)(C)(i) through (b)(4)(C)(G) may be used to comply with this requirement. The design analysis must address the vent stream characteristics and control device operation parameters, as specified below. The Agency must state whether or not the other engineering texts are acceptable or unacceptable in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

i) For a thermal vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperature

in the combustion zone and the combustion zone residence time.

ii) For a catalytic vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

iii) For a boiler or process heater, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

iv) For a flare, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also consider the requirements specified in Section 721.933(d).

v) For a condenser, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

vi) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design exhaust vent stream organic compound concentration level, number and

capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/ drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

vii) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

D) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous secondary material management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

E) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Section 721.932(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Section 721.932(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency of less than 95 weight percent. A statement provided by the control device manufacturer or vendor

certifying that the control equipment meets the design specifications may be used to comply with this requirement.

F) If performance tests are used to demonstrate compliance, all test results.

c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part must be recorded and kept up-to-date at the facility. The information must include the following:

1) Description and date of each modification that is made to the closed-vent system or control device design.

2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 721.933 (f)(1) and (f)(2).

3) Monitoring, operating, and inspection information required by Section 721.933(f) through (k).

4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis, as specified below:

A) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760° C, period when the combustion temperature is below 760° C.

B) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, period when the combustion zone temperature is more than 28° C below the design average combustion zone temperature established as a requirement of subsection (b)(4)(C)(i).

C) For a catalytic vapor incinerator, period when either of the following occurs:

i) Temperature of the vent stream at the catalyst bed inlet is more than 28° C below the average temperature of the inlet vent stream established as a requirement of subsection (b)(4)(C)(ii), or

ii) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of subsection (b)(4)(C)(ii).

D) For a boiler or process heater, period when either of the following occurs:

i) Flame zone temperature is more than 28° C below the design average flame zone temperature established as a requirement of subsection (b)(4)(C)(iii); or

ii) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of subsection (b)(4)(C)(iii).

E) For a flare, period when the pilot flame is not ignited.

F) For a condenser that complies with Section 721.933(f)(2)(F)(i), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of subsection (b)(4)(C)(v).

G) For a condenser that complies with Section 721.933(f)(2)(F)(ii), period when either of the following occurs:

i) Temperature of the exhaust vent stream from the condenser is more than 6° C above the design average exhaust vent stream temperature established as a requirement of subsection (b)(4)(C)(v); or

ii) Temperature of the coolant fluid exiting the condenser is more than 6° C above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (b)(4)(C)(v).

H) For a carbon adsorption system, such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and which complies with Section 721.933(f)(2)(G)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (b)(4)(C)(vi).

I) For a carbon adsorption system, such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and which complies with Section 721.933(f)(2)(G)(ii), any period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (b)(4)(C)(vi).

5) Explanation for each period recorded under subsection (c)(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

6) For a carbon adsorption system operated subject to requirements specified in Section 721.933(g) or (h)(2), any date when existing carbon in the control device is replaced with fresh carbon.

7) For a carbon adsorption system operated subject to requirements specified in Section 721.933(h)(1), a log that records:

A) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

B) Date when existing carbon in the control device is replaced with fresh carbon.

8) Date of each control device startup and shutdown.

9) A remanufacturer or other person that stores or treats the hazardous secondary material designating any components of a closed-vent system as unsafe to monitor pursuant to Section 721.933(o) must record in a log that is kept at the facility the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Section 721.933(o), an explanation for each closedvent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

10) When each leak is detected as specified in Section 721.933(l), the following information must be recorded:

A) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

B) The date the leak was detected and the date of first attempt to repair the leak.

C) The date of successful repair of the leak.

D) Maximum instrument reading measured by Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, after it is successfully repaired or determined to be nonrepairable.

E) ~~"~~"Repair delayed~~"~~" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

i) The remanufacturer or other person that stores or treats the hazardous secondary material may develop a written

procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be documented by citing the relevant sections of the written procedure.

ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

d) Records of the monitoring, operating, and inspection information required by subsections (c)(3) through (c)(10) must be maintained by the owner or operator for at least three years following the date of each occurrence, measurement, maintenance, corrective action, or record.

e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify the appropriate recordkeeping requirements. The Agency must specify the appropriate recordkeeping requirements in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section ~~721.932~~721.932, including supporting documentation as required by Section 721.934(d)(2) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used, must be recorded in a log that is kept at the facility.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 721.950 Applicability

The regulations in this this Subpart BB apply to equipment that contains hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27), unless the equipment operations are subject to the requirements of an applicable federal Clean Air Act

regulation in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: 415 ILCS 5/9.1(b) and (d) make the federal new source performance standards and national emission standards for hazardous air pollutants directly applicable in Illinois and prohibit operation of an emission source without a permit issued by the Agency. The Agency issues permits that incorporate the federal new soruce performance standards and national emission standards for hazardous air pollutants pursuant to 415 ILCS 5/39.5.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

Section 721.951 Definitions

As used in this this Subpart BB, all terms will have the meaning given them in Section 721.931; section 1004 of the federal Resource Conservation and Recovery Act (42 USC 6903), incorporated by reference in 35 Ill. Adm. Code ~~720.111;~~720.111, and 35 Ill. Adm. Code 720 through 726.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~_____~~)

Section 721.952 Standards: Pumps in Light Liquid Service

a) Monitoring.

1) Each pump in light liquid service must be monitored monthly to detect leaks by the methods specified in Section 721.963(b), except as provided in subsections (d), (e), and (f).

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

b) Leaks.

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

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

c) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

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

1) Each dual mechanical seal system must be as follows:

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

B) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section ~~721.960,~~721.960; or

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

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

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

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

5) Alarms.

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

B) The remanufacturer or other person that stores or treats the hazardous secondary material must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

6) Leaks.

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

B) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

e) Any pump that is designated, as described in Section 721.964(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsections (a), (c), and (d) if the pump meets the following requirements:

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

2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Section 721.963(c).

3) Must be tested for compliance with subsection (e)(2) initially upon designation, annually, and at other times as requested by the Agency. The

Agency must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section 721.960, it is exempt from the requirements of subsections (a) through (e).

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~_____~~)

Section 721.953 Standards: Compressors

a) Each compressor must be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in subsections (h) and (i).

b) Each compressor seal system as required in subsection (a) must be:

1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure~~.~~; or

2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section ~~721.960.~~721.960; or

3) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to atmosphere.

c) The barrier fluid must not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

d) Each barrier fluid system, as described in subsections (a) through (c), must be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

e) Inspections.

1) Each sensor as required in subsection (d) must be checked daily or must be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under subsection (e)(2), a leak is detected.

g) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

h) A compressor is exempt from the requirements of subsections (a) and (b) if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Section 721.960, except as provided in subsection (i).

i) Any compressor that is designated, as described in Section 721.964(g)(2), for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of subsections (a) through (h) if the compressor:

1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

2) Is tested for compliance with subsection (i)(1) initially upon designation, annually, and at other times as requested by the Agency. The Agency must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.954 Standards: Pressure Relief Devices in Gas/Vapor Service

a) Except during pressure releases, each pressure relief device in gas/vapor service must be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

b) Actions following pressure release.

1) After each pressure release, the pressure relief device must be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five calendar days after each pressure release, except as provided in Section 721.959.

2) No later than five calendar days after the pressure release, the pressure relief device must be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section 721.960 is exempt from the requirements of subsections (a) and (b).

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.955 Standards: Sampling Connection Systems

a) Each sampling connection system must be equipped with a closed-purge, closed-loop, or closed-vent system. This system must collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

b) Each closed-purge, closed-loop, or closed-vent system as required in subsection (a) must meet one of the following requirements:

1) It must return the purged process fluid directly to the process line;

2) It must collect and recycle the purged process fluid; or

3) It must be designed and operated to capture and transport all the purged process fluid to a material management unit that complies with the applicable requirements of Sections 721.984 through 264.986 or a control device that complies with the requirements of Section 721.960.

c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of subsections (a) and (b).

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~_____~~)

Section 721.956 Standards: Open-Ended Valves or Lines

a) Equipment.

1) Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve.

2) The cap, blind flange, plug, or second valve must seal the open end at all times except during operations requiring hazardous secondary material stream flow through the open-ended valve or line.

b) Each open-ended valve or line equipped with a second valve must be operated in a manner such that the valve on the hazardous secondary material stream end is closed before the second valve is closed.

c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but must comply with subsection (a) at all other times.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.957 Standards: Valves in Gas/Vapor Service or in Light Liquid Service

a) Each valve in gas/vapor or light liquid service must be monitored monthly to detect leaks by the methods specified in Section 721.963(b) and must comply with subsections (b) through (e), except as provided in subsections (f), (g), and (h) and Sections 721.961 and 721.962.

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

c) Monitoring Frequency.

1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

2) If a leak is detected, the valve must be monitored monthly until a leak is not detected for two successive months,

d) Leak repair.

1) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section 721.959.

2) A first attempt at repair must be made no later than five calendar days after each leak is detected.

e) First attempts at repair include, but are not limited to, the following best practices where practicable:

1) Tightening of bonnet bolts.

2) Replacement of bonnet bolts.

3) Tightening of packing gland nuts.

4) Injection of lubricant into lubricated packing.

f) Any valve that is designated, as described in Section 721.964(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsection (a) if the valve:

1) Has no external actuating mechanism in contact with the hazardous secondary material stream.

2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Section 721.963(c).

3) Is tested for compliance with subsection (f)(2) initially upon designation, annually, and at other times as requested by the Agency. The Agency ~~must~~ must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

g) Any valve that is designated, as described in Section 721.964(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of subsection (a) if both of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (a); and

2) The remanufacturer or other person that stores or treats the hazardous secondary material adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

h) Any valve that is designated, as described in Section 721.964(h)(2), as a difficult-to-monitor valve is exempt from the requirements of subsection (a) if all of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve cannot be monitored without elevating the monitoring personnel more than two meters above a support surface;

2) The hazardous secondary material management unit within which the valve is located was in operation before January 13, 2015; and

3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~———~~)

Section 721.958 Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors

a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors must be monitored within five days by the method specified in Section 721.963(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

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

c) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

2) The first attempt at repair must be made no later than five calendar days after each leak is detected.

d) First attempts at repair include, but are not limited to, the best practices described under Section 721.957(e).

e) Any connector that is inaccessible or which is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of subsection (a) and from the recordkeeping requirements of Section 721.964.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.959 Standards: Delay of Repair

a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous secondary material management unit shutdown. In such a case, repair of this equipment must occur before the end of the next hazardous secondary material management unit shutdown.

b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous secondary material management unit and that does not continue to contain or contact hazardous secondary material with organic concentrations at least 10 percent by weight.

c) Delay of repair for valves will be allowed if:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section 721.960.

d) Delay of repair for pumps will be allowed if both of the following conditions are fulfilled:

1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

2) Repair is completed as soon as practicable, but not later than six months after the leak was detected.

e) Delay of repair beyond a hazardous secondary material management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous secondary material management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous secondary material management unit shutdown will not be allowed unless the next hazardous secondary material management unit shutdown occurs sooner than six months after the first hazardous secondary material management unit shutdown.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.960 Standards: Closed-Vent Systems and Control Devices

a) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management units using closed-vent systems and control devices subject to this Subpart BB must comply with the provisions of Section 721.933.

b) Implementation Schedule.

1) The remanufacturer or other person that stores or treats the hazardous secondary material at an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this Subpart BB on the effective date that the facility becomes subject to the provisions of this Subpart BB must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this Subpart BB for installation and startup.

2) Any unit that begins operation after July 13, 2015 and which is subject to the provisions of this Subpart BB when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

3) The remanufacturer or other person that stores or treats the hazardous secondary material at any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to this Subpart BB must comply with all requirements of this Subpart BB as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this Subpart BB cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator must prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this Subpart BB. The remanufacturer or other person that stores or treats the hazardous secondary material must keep a copy of the implementation schedule at the facility.

4) Remanufacturers or other persons that store or treat the hazardous secondary materials at facilities and units that become newly subject to the requirements of this Subpart BB after January 13, 2015, due to an action other than those described in subsection (b)(3), must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this Subpart BB; the 30-month implementation schedule does not apply).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.961 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak

a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section 721.957 may elect to have all valves within a hazardous secondary material management unit comply with an alternative standard that allows no greater than two percent of the valves to leak.

b) The following requirements must be met if a remanufacturer or other person that stores or treats the hazardous secondary material decides to comply with the alternative standard of allowing two percent of valves to leak:

1) A performance test, as specified in subsection (c), must be conducted initially upon designation, annually, and at other times requested by the Agency in writing to the remanufacturer or other persons that stores or treats the hazardous secondary material; and

2) If a valve leak is detected, it must be repaired in accordance with Section 721.957(d) and (e).

c) Performance tests must be conducted in the following manner:

1) All valves subject to the requirements in Section 721.957 within the hazardous secondary material management unit must be monitored within ~~1~~one week by the methods specified in Section 721.963(b).

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

3) The leak percentage must be determined by dividing the number of valves subject to the requirements in Section 721.957 for which leaks are detected by the total number of valves subject to the requirements in Section 721.957 within the hazardous secondary material management unit.

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____ ~~_____~~)

Section 721.962 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair

a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section 721.957 may elect for all valves within a hazardous secondary material management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3).

b) Reduced Monitoring.

1) A remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements for valves, as described in Section 721.957, except as described in subsections (b)(2) and (b)(3).

2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in Section 721.957.

3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in Section 721.957.

4) If the percentage of valves leaking is greater than two percent, the remanufacturer or other person that stores or treats the hazardous secondary material must monitor monthly in compliance with the requirements in Section 721.957, but may again elect to use this ~~section~~Section after meeting the requirements of Section 721.957(c)(1).

(Source: Added at 40 Ill. Reg. ~~—~~ _____, effective _____ ~~_____~~)

Section 721.963 Test Methods and Procedures

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart BB must comply with the test methods and procedures requirements provided in this ~~section~~Section.

b) Leak detection monitoring, as required in Sections 721.952~~, 261.962,~~ through 721.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be as follows:

A) Zero air (less than 10 ppm of hydrocarbon in air); and

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 721.952(e), ~~261.953~~721.953(i), ~~261.954,~~721.954, and ~~261.957~~721.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) must 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) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) A remanufacturer or other person that stores or treats the hazardous secondary material must determine, for each piece of equipment, whether the equipment

contains or contacts a hazardous secondary material with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267--88, E 169--87, E 168--88, E 260--85, incorporated by reference in 35 Ill. Adm. Code 720.111;

2) Method 9060A of ""Test Methods for Evaluating Solid Waste,"" USEPA Publication SW--846, incorporated by reference in 35 Ill. Adm. Code 720.111, for computing total organic concentration of the sample, or analyzed for its individual organic constituents; or

3) Application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced. Documentation of a material 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 material 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 material stream, where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

e) If a remanufacturer or other person that stores or treats the hazardous secondary material determines that a piece of equipment contains or contacts a hazardous secondary material 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).

f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) can be used to resolve the dispute. The Agency must state any disagreement on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight in writing to the

remanufacturer or other person that stores or treats the hazardous secondary material.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous secondary material 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 may be obtained from standard reference texts or may be determined by ASTM D 2879--92, 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 721.934(c)(1) through (c)(4).

(Source: Added at 40 Ill. Reg. ---, effective _____)

Section 721.964 Recordkeeping Requirements

a) Lumping Units.

1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart BB must comply with the recordkeeping requirements of this Section.

2) A remanufacturer or other person that stores or treats the hazardous secondary material in more than one hazardous secondary material management unit subject to the provisions of this Subpart BB may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

b) Remanufacturer'sRemanufacturers and other person'spersons that store or treat the hazardous secondary material must record and keep the following information at the facility:

1) For each piece of equipment to which this Subpart BB applies:

A) The equipment identification number and hazardous secondary material management unit identification.

B) The approximate locations within the facility (e.g., identify the hazardous secondary material management unit on a facility plot plan).

C) The type of equipment (e.g., a pump or pipeline valve).

D) The percent-by-weight total organics in the hazardous secondary material stream at the equipment.

E) The hazardous secondary material state at the equipment (e.g., gas/vapor or liquid).

F) A method of compliance with the standard (e.g., ~~"~~"monthly leak detection and repair~~"~~" or ~~"~~"equipped with dual mechanical seals~~"~~").

2) For facilities that comply with the provisions of Section 721.933(a)(2), an implementation schedule, as specified in Section 721.933(a)(2).

3) ~~Where~~When a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan, as specified in Section 721.935(b)(3).

4) Documentation of compliance with Section 721.960, including the detailed design documentation or performance test results specified in Section 721.935(b)(4).

c) When each leak is detected, as specified in Sections 721.952, ~~261.953,~~ ~~261.957,~~721.953, 721.957, and ~~261.958,~~721.958, the following requirements apply:

1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was

found in accordance with Section 721.958(a), and the date the leak was detected, must be attached to the leaking equipment.

2) The identification on equipment, except on a valve, may be removed after it has been repaired.

3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Section 721.957(c) and no leak has been detected during those two months.

d) When each leak is detected, as specified in Sections 721.952, ~~261.953,~~ ~~261.957,~~721.953, 721.957, and ~~261.958,~~721.958, the following information must be recorded in an inspection log and must be kept at the facility:

1) The instrument and operator identification numbers and the equipment identification number.

2) The date evidence of a potential leak was found in accordance with Section 721.958(a).

3) The date the leak was detected and the dates of each attempt to repair the leak.

4) Repair methods applied in each attempt to repair the leak.

5) "Above 10,000" if the maximum instrument reading measured by the methods specified in Section 721.963(b) after each repair attempt is equal to or greater than 10,000 ppm.

6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

7) Documentation supporting the delay of repair of a valve in compliance with Section 721.959(c).

8) The signature of the remanufacturer or other person that stores or treats the hazardous secondary material (or designate) whose decision it was that

repair could not be effected without a hazardous secondary material management unit shutdown.

9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

10) The date of successful repair of the leak.

e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 721.960 must be recorded and kept up-to-date at the facility, as specified in Section 721.935(c). Design documentation is specified in Section 721.935(c)(1) and (c)(2) and monitoring, operating, and inspection information in Section 721.935(c)(3) through (c)(8).

f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify in writing the appropriate recordkeeping requirements.

g) The following information pertaining to all equipment subject to the requirements in Sections 721.952 through ~~261.960~~721.960 must be recorded in a log that is kept at the facility:

1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subpart BB.

2) List of Equipment.

A) A list of identification numbers for equipment that the remanufacturer or other person that stores or treats the hazardous secondary material elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 721.952(e), ~~261.953~~721.953(i), and ~~261.957~~721.957(f).

B) The designation of this equipment as subject to the requirements of Sections 721.952(e), ~~261.953~~721.953(i), or ~~261.957~~721.957(f)

must be signed by the remanufacturer or other person that stores or treats the hazardous secondary material.

3) A list of equipment identification numbers for pressure relief devices required to comply with Section 721.954(a).

4) Compliance ~~tests~~Tests.

A) The dates of each compliance test required in Sections 721.952(e), ~~261.953~~721.953(i), ~~261.954,~~721.954, and ~~261.957~~721.957(f).

B) The background level measured during each compliance test.

C) The maximum instrument reading measured at the equipment during each compliance test.

5) A list of identification numbers for equipment in vacuum service.

6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous secondary material with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.

h) The following information pertaining to all valves subject to the requirements of Section 721.957(g) and (h) must be recorded in a log that is kept at the facility:

1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

i) The following information must be recorded in a log that is kept at the facility for valves complying with Section 721.962:

1) A schedule of monitoring.

2) The percent of valves found leaking during each monitoring period.

j) The following information must be recorded in a log that is kept at in the facility:

1) Criteria required in Sections 721.952(d)(5)(B) and ~~261.953~~721.953(e)(2) and an explanation of the design criteria.

2) Any changes to these criteria and the reasons for the changes.

k) The following information must be recorded in a log that is kept at the facility for use in determining exemptions, as provided in the applicability ~~section~~Sections of this Subpart BB and other specific Subparts:

1) An analysis determining the design capacity of the hazardous secondary material management unit.

2) A statement listing the hazardous secondary material influent to and effluent from each hazardous secondary material management unit subject to the requirements in Sections 721.952 through ~~261.960~~721.960 and an analysis determining whether these hazardous secondary materials are heavy liquids.

3) An up-to-date analysis and the supporting information and data used to determine whether ~~or not~~ equipment is subject to the requirements in Sections 721.952 through ~~261.960.~~721.960. The record must include supporting documentation as required by Section 721.963(d)(3) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action (e.g., changing the process that produced the material) that could result in an increase in the total organic content of the material contained in or contacted by equipment determined not to be subject to the requirements in Sections 721.952 through ~~261.960,~~721.960, then a new determination is required.

l) Records of the equipment leak information required by subsection (d) and the operating information required by subsection (e) need be kept only three years.

m) The remanufacturer or other person that stores or treats the hazardous secondary material at a facility with equipment that is subject to this Subpart BB and to regulations in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), incorporated by reference in 35 Ill. Adm. Code 720.111, may elect to determine compliance with this Subpart BB either by documentation pursuant to Section 721.964, or by documentation of compliance with the regulations in 40 CFR 60, 61, or 63 pursuant to the relevant provisions of the regulations in 40 CFR 60, 61, or 63. The documentation of compliance under regulations in 40 CFR 60, 61, or 63 must be kept with or made readily available at the facility.

BOARD NOTE: 415 ILCS 5/9.1(b) and (d) make the federal new source performance standards and national emission standards for hazardous air pollutants directly applicable in Illinois and prohibit operation of an emission source without a permit issued by the Agency. The Agency issues permits that incorporate the federal new soruce performance standards and national emission standards for hazardous air pollutants pursuant to 415 ILCS 5/39.5.

(Source: Added at 40 Ill. Reg. ~~—~~_____, effective _____~~———~~)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS

Section 721.980 Applicability

The regulations in this Subpart CC apply to tanks and containers that contain hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27), unless the tanks and containers are equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulations codified in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.981 Definitions

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

As used in this this Subpart CC, all terms not defined ~~herein~~in this Section will have the meaning given to them in section 1004 of the federal Resource Conservation and Recovery Act (42 USC 6903), incorporated by reference in 35 Ill. Adm. Code 720.111, 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 secondary material as determined in accordance with the requirements of Section 721.984.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous secondary material managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment ~~which~~that can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Empty hazardous secondary material container" means any of the following:

A container from which all hazardous secondary materials have been removed that can be removed using the practices commonly employed to remove materials from that type of container (e.g., pouring, pumping, or aspirating), and no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner;

A container that is less than or equal to 119 gallons (450 liters) in size and no more than three percent by weight of the total capacity of the container remains in the container or inner liner; or

A container that is greater than 119 (450 liters) gallons in size and no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner.

""Enclosure"" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

""External floating roof"" means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

""Fixed roof"" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

""Floating membrane cover"" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous secondary material being managed in a surface impoundment.

""Floating roof"" means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

""Hard-piping"" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

""In light material service"" means the container is used to manage a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20° C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20° C is equal to or greater than 20 percent by weight.

~~"~~"Internal floating roof~~"~~" means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

~~"~~"Liquid-mounted seal~~"~~" means a foam or liquid-filled primary seal mounted in contact with the hazardous secondary material between the tank wall and the floating roof continuously around the circumference of the tank.

~~"~~"Malfunction~~"~~" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

~~"~~"Material determination~~"~~" means performing all applicable procedures in accordance with the requirements of Section 721.984 to determine whether a hazardous secondary material meets standards specified in this Subpart CC. Examples of a material determination include performing the procedures in accordance with the requirements of Section 721.984 to determine the average VO concentration of a hazardous secondary material at the point of material origination; the average VO concentration of a hazardous secondary material at the point of material treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous secondary material; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous secondary material and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous secondary material in a tank and comparing the results to the applicable standards.

~~"~~"Maximum organic vapor pressure~~"~~" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining materials, etc.) reasonably expected to occur in the tank. For the purpose of this Subpart CC, maximum organic vapor pressure is determined using the procedures specified in Section 721.984(c).

~~"~~"Metallic shoe seal~~"~~" means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other

means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

~~"~~"No detectable organic emissions~~"~~" means no escape of organics to the atmosphere as determined using the procedure specified in Section 721.984(d).

~~"~~"Point of material origination~~"~~" means as follows:

~~Where~~If the remanufacturer or other person that stores or treats the hazardous secondary material is the generator of the hazardous secondary material, the point of material origination means the point ~~where~~at which a material produced by a system, process, or material management unit is determined to be a hazardous secondary material excluded under Section 721.104(a)(27).

BOARD NOTE: Where the person that stores or treats the hazardous secondary material~~,~~ ~~"~~ is the generator of the hazardous secondary material, "point of material origination~~"~~" is being used in a manner similar to the use of the term ~~"~~"point of generation~~"~~" in air standards established under authority of the federal Clean Air Act in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

Where the remanufacturer or other person that stores or treats the hazardous secondary material is not the generator of the hazardous secondary material, point of material origination means the point where the remanufacturer or other person that stores or treats the hazardous secondary material accepts delivery or takes possession of the hazardous secondary material.

~~"~~"Safety device~~"~~" means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device ~~which~~that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart CC, a safety device is not used for routine venting

of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted such that there is a vapor space between the hazardous secondary material in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of the volatile organic compounds contained in a hazardous secondary material expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the material in accordance with the requirements of Section 721.984. For the purpose of determining the VO concentration of a hazardous secondary material, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C must be included.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.982 Standards: General

a) This Section applies to the management of hazardous secondary material in tanks and containers subject to this Subpart CC.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each hazardous secondary material management unit in accordance with standards specified in Sections 721.984 through ~~261.987,~~721.987, as applicable to the hazardous secondary material management unit, except as provided for in subsection (c).

c) A tank or container is exempt from standards specified in Sections 721.984 through ~~261.987,~~721.987, as applicable, provided that the hazardous secondary material management unit is a tank or container for which all hazardous secondary material entering the unit has an average VO concentration at the point of material origination of less than 500 parts per million by weight (ppmw). The average VO concentration must be determined using the procedures specified in Section 721.983(a). The remanufacturer or other person that stores or treats the hazardous secondary material must review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous secondary material streams entering the unit.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.983 Material Determination Procedures

a) Material determination procedure to determine average volatile organic (VO) concentration of a hazardous secondary material at the point of material origination.

1) Determining average VO concentration at the point of material origination. A remanufacturer or other person that stores or treats the hazardous secondary material must determine the average VO concentration at the point of material origination for each hazardous secondary material placed in a hazardous secondary material management unit exempted under the provisions of Section 721.982(c)(1) from using air emission controls in accordance with standards specified in Sections 721.984 through ~~261.987,~~721.987, as applicable to the hazardous secondary material management unit.

A) An initial determination of the average VO concentration of the material stream must be made before the first time any portion of the material in the hazardous secondary material stream is placed

in a hazardous secondary material management unit exempted under the provisions of Section 721.982(c)(1) from using air emission controls, and thereafter an initial determination of the average VO concentration of the material stream must be made for each averaging period that a hazardous secondary material is managed in the unit; and

B) Perform a new material determination whenever changes to the source generating the material stream are reasonably likely to cause the average VO concentration of the hazardous secondary material to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 721.982.

2) Determination of average VO concentration using direct measurement or knowledge. For a material determination that is required by subsection (a)(1), the average VO concentration of a hazardous secondary material at the point of material origination must be determined using either direct measurement, as specified in subsection (a)(3), or by knowledge of the hazardous secondary material, as specified in subsection (a)(4).

3) Direct measurement to determine average VO concentration of a hazardous secondary material at the point of material origination, as follows:

A) Identification. The remanufacturer or other person that stores or treats the hazardous secondary material must identify and record in a log that is kept at the facility the point of material origination for the hazardous secondary material.

B) Sampling. Samples of the hazardous secondary material stream must be collected at the point of material origination in a manner such that volatilization of organics contained in the material and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous secondary

material stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the remanufacturer or other person that stores or treats the hazardous secondary material determines is appropriate for the hazardous secondary material stream but must not exceed one year.

ii) A sufficient number of samples, but no less than four samples, must be collected and analyzed for a hazardous secondary material determination. All of the samples for a given material determination must be collected within a one-hour period. The average of the four or more sample results constitutes a material determination for the material stream. One or more material determinations may be required to represent the complete range of material compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous secondary material stream. Examples of such normal variations are seasonal variations in material quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous secondary material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained at the facility. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test

Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

iv) Sufficient information, as specified in the ~~"~~site sampling plan~~"~~ required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the material quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous secondary material represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed material concentration accounts for and reflects all organic compounds in the material with Henry~~'~~s law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) ~~[~~(which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3~~]~~) at 25° C. At the discretion of the remanufacturer or other person that stores or treats the hazardous secondary material, the test data obtained may be adjusted by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry~~'~~s law constant value of less than 0.1 Y/X at 25° C. To adjust these data, the measured concentration of each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (fm_{25D}). If the remanufacturer or other person that stores or treats the hazardous secondary material elects to adjust the test data, the adjustment must be made to all individual chemical constituents with a Henry~~'~~s law constant value greater than or equal to 0.1 Y/X at 25° C contained in the material. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific

adjustment factors (fm_{25D}) obtained in writing from the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement to reflect all organic compounds in the material with Henry~~'~~s law constant values greater than or equal to 0.1 Y/X ~~[~~(which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3~~]~~) at 25° C, is met.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63 (Alternative Validation Procedure for EPA Waste and Wastewater Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations.

i) The average VO concentration (C) on a mass-weighted basis must be calculated by using the results for all material determinations conducted in accordance with subsections (a)(3)(B) and (a)(3)(C) and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} Q_i \times C_i$$

Where:

~~C = Average VO concentration of the hazardous secondary material at the point of material origination on a mass-weighted basis, ppmw.~~

~~i = Individual material determination "i" of the hazardous secondary material.~~

~~n = Total number of material determinations of the hazardous secondary material conducted for the averaging period (not to exceed one year).~~

~~Q_i = Mass quantity of hazardous secondary material stream represented by C_i, kg/hr.~~

~~Q_T = Total mass quantity of hazardous secondary material during the averaging period, kg/hr.~~

~~C_i = Measured VO concentration of material determination "i" as determined in accordance with the requirements of subsection (a)(3)(C) (i.e. the average of the four or more samples specified in subsection (a)(3)(B)(ii)), ppmw.~~

C = Average VO concentration of the hazardous secondary material at the point of material origination on a mass-weighted basis, in ppmw.

i = Individual material determination "i" of the hazardous secondary material.

n = Total number of material determinations of the

hazardous secondary material conducted for the averaging period (not to exceed one year).

Q_i = Mass quantity of hazardous secondary material stream represented by C_i, in kg/hr.

Q_T = Total mass quantity of hazardous secondary material during the averaging period, in kg/hr.

C_i = Measured VO concentration of material determination "i" in ppmw, as determined in accordance with the requirements of subsection (a)(3)(C) (i.e., the average of the four or more samples specified in subsection (a)(3)(B)(ii))

ii) For the purpose of determining C_i, for individual material samples analyzed in accordance with subsection (a)(3)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must account for VO concentrations determined to be below the limit of detection of the analytical method by using the VO concentration that is one-half the blank value determined in the method at section 4.4 of Reference Method 25D, if Reference Method 25D is used for the analysis; or that is one-half the sum of the limits of detection established for each organic constituent in the material that has a Henry~~'~~s law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) ~~[~~(which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3~~]~~) at 25° C, if any other analytical method is used.

4) Use of knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material to determine average VO concentration of a hazardous secondary material at the point of material origination.

A) Documentation must be prepared that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material of the

hazardous secondary material stream's average VO concentration. Examples of information that may be used as the basis for knowledge include material balances for the source or process generating the hazardous secondary material stream; constituent-specific chemical test data for the hazardous secondary material stream from previous testing that are still applicable to the current material stream; previous test data for other locations managing the same type of material stream; or other knowledge based on information included in shipping papers or material certification notices.

B) If test data are used as the basis for knowledge, then the remanufacturer or other person that stores or treats the hazardous secondary material must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, a remanufacturer or other person that stores or treats the hazardous secondary material may use organic concentration test data for the hazardous secondary material stream that are validated in accordance with Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods) as the basis for knowledge of the material.

C) A remanufacturer or other person that stores or treats the hazardous secondary material using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous secondary material may adjust the test data to the corresponding average VO concentration value which would have been obtained had the material samples been analyzed using Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). To adjust these data, the measured concentration for each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (fm_{25D}).

D) In the event that the Agency and the remanufacture or other person that stores or treats the hazardous secondary material disagree on a determination of the average VO concentration for a hazardous secondary material stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in subsection (a)(3) must be used to establish compliance with the applicable requirements of this Subpart CC. The Agency may perform or request that the remanufacturer or other person that stores or treats the hazardous secondary material perform this determination using direct measurement. The remanufacturer or other person that stores or treats the hazardous secondary material may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of subsection (a)(3)(C). The Agency must state any disagreement on determination of the average VO concentration for a hazardous secondary material stream using knowledge in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

b) This subsection (b) corresponds with 40 CFR 261.1083(b), marked "reserved" by USEPA. This statement maintains structural consistency with the federal regulations.

c) Procedure to determine the maximum organic vapor pressure of a hazardous secondary material in a tank.

1) A remanufacturer or other person that stores or treats the hazardous secondary material must determine the maximum organic vapor pressure for each hazardous secondary material placed in a tank using Tank Level 1 controls in accordance with standards specified in Section 721.984(c).

2) A remanufacturer or other person that stores or treats the hazardous secondary material must use either direct measurement as specified in subsection (c)(3) or knowledge of the waste as specified by subsection (c)(4) to determine the maximum organic vapor pressure which is representative of the hazardous secondary material composition stored or treated in the tank.

3) Direct measurement to determine the maximum organic vapor pressure of a hazardous secondary material.

A) Sampling. A sufficient number of samples must be collected to be representative of the hazardous secondary material contained in the tank. All samples must be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous secondary material are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained at the facility. An example of acceptable sample collection and handling procedures may be found in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

B) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous secondary material:

i) Reference Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

ii) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, ""Evaporative Loss from External Floating-Roof Tanks,"" incorporated by reference in 35 Ill. Adm. Code 720.111;

iii) Methods obtained from standard reference texts;

iv) ASTM Method 2879--92, incorporated by reference in 35 Ill. Adm. Code 720.111; and

v) Any other method approved in writing by the Agency.

4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous secondary material. Documentation must be prepared and recorded that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material that the maximum organic vapor pressure of the hazardous secondary material is less than the maximum vapor pressure limit listed in Section ~~721.9085~~721.984(b)(1)(A) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous secondary material is generated by a process for which at other locations it previously has been determined by direct measurement that the hazardous secondary material's maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

d) Procedure for determining no detectable organic emissions for the purpose of complying with this Subpart CC:

1) The test must be conducted in accordance with the procedures specified in Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices must be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to, the interface of the cover and its foundation mounting, the periphery of any opening on the cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure relief valve.

2) The test must be performed when the unit contains a hazardous secondary material having an organic concentration representative of the range of concentrations for the hazardous secondary material expected to be managed in the unit. During the test, the cover and closure devices must be secured in the closed position.

3) The detection instrument must meet the performance criteria of Reference Method 21, except the instrument response factor criteria in section 3.1.2(a) of Reference Method ~~21~~21, must be for the average composition of the organic constituents in the hazardous secondary material placed in the hazardous secondary management unit, not for each individual organic constituent.

4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

5) Calibration gases must be as follows:

   A) Zero air (less than 10 ppmv hydrocarbon in air), and

   B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

6) The background level must be determined according to the procedures in Reference Method 21.

7) Each potential leak interface must be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Reference Method 21. ~~Where~~If the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface must be sampled. ~~Where~~If the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet must be placed at approximately the center of the exhaust area to the atmosphere.

8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison must be as specified in subsection (d)(9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.984 Standards: Tanks

a) The provisions of this Section apply to the control of air pollutant emissions from tanks for which Section 721.982(b) references the use of this Section for ~~such~~that air emission control.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each tank subject to this Section in accordance with the following requirements, as applicable:

1) For a tank that manages hazardous secondary material that meets all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in subsection (c) or the Tank Level 2 controls specified in subsection (d).

A) The hazardous secondary material in the tank has a maximum organic vapor pressure that is less than the maximum organic vapor pressure limit for the tank~~'~~s design capacity category, as follows:

i) For a tank design capacity equal to or greater than 151 m3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

ii) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

iii) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

B) The hazardous secondary material in the tank is not heated by the remanufacturer or other person that stores or treats the hazardous secondary material to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous secondary material is determined for the purpose of complying with subsection (b)(1)(A).

2) For a tank that manages hazardous secondary material that does not meet all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of subsection (d). An example of tanks required to use Tank Level 2 controls is a tank for which the hazardous secondary material in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category, as specified in subsection (b)(1)(A).

c) A remanufacturer or other person that stores or treats the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 1 controls must meet the requirements specified in subsections (c)(1) through (c)(4) of this ~~section~~Section:

1) The remanufacturer or other person that stores or treats that hazardous secondary material must determine the maximum organic vapor pressure for a hazardous secondary material to be managed in the tank using Tank Level 1 controls before the first time the hazardous secondary material is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 721.983(c). Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform a new determination whenever changes to the hazardous secondary material managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic

vapor pressure limit for the tank design capacity category specified in subsection (b)(1)(A), as applicable to the tank.

2) The tank must be equipped with a fixed roof designed to meet the following specifications:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the hazardous secondary material in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

B) The fixed roof must be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

C) Each opening in the fixed roof, and any manifold system associated with the fixed roof, must fulfill either of the following requirements:

i) It must be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

ii) It must be connected by a closed-vent system that is vented to a control device. The control device must remove or destroy organics in the vent stream, and must be operating whenever hazardous secondary material is managed in the tank, except as provided in this subsection (c)(2)(C)(ii). During any period of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank. During any period when it is necessary to provide access to the tank for performing the foregoing

activities, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

BOARD NOTE: This subsection (c)(2)(C)(ii) corresponds with 40 CFR 261.1083(c)(2)(iii)(B). The Board combined the texts of 40 CFR 261.1083(c)(2)(iii)(B)(1) and (c)(2)(iii)(B)(2) into this single subsection to comport with codification requirements.

D) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the organic vapor permeability; the effects of any contact with the hazardous secondary material or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

3) Whenever a hazardous secondary material is in the tank, the fixed roof must be installed with each closure device secured in the closed position, except as follows:

A) Opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample

the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of tank.

B) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

C) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the air emission control equipment in accordance with the following requirements.

A) The fixed roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except under the special conditions provided for in subsection (l).

C) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

d) Remanufacturers or other persons that store or treat the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 2 controls must use one of the following tanks:

1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in subsection (e);

2) A tank equipped with an external floating roof in accordance with the requirements specified in subsection (f);

3) A tank vented through a closedvent system to a control device in accordance with the requirements specified in subsection (g);

4) A pressure tank designed and operated in accordance with the requirements specified in subsection (h); or

5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in subsection (i).

e) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof must meet the requirements specified in subsections (e)(1) through (e)(3).

1) The tank must be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

A) The internal floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The internal floating roof must be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

i) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Section 721.981; or

ii) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

C) The internal floating roof must meet the following specifications:

i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

ii) Each opening in the internal floating roof must be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

iii) Each penetration of the internal floating roof for the purpose of sampling must have a slit fabric cover that covers at least 90 percent of the opening.

iv) Each automatic bleeder vent and rim space vent must be gasketed.

v) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.

vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

C) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof must be bolted or

fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the internal floating roof in accordance with the procedures specified as follows:

A) The floating roof and its closure devices must be visually inspected by the remanufacture or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, the internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous secondary material surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the internal floating roof components as follows, except as provided in subsection (e)(3)(C):

i) It must visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and

ii) It must visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years.

C) As an alternative to performing the inspections specified in subsection (e)(3)(B), for an internal floating roof equipped with

two continuous seals mounted one above the other, the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years.

D) Prior to each inspection required by subsection (e)(3)(B) or (e)(3)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency of the date and location of the inspection as follows:

i) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned as provided for in subsection (e)(3)(D)(ii).

ii) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so

that it is received by the Agency at least seven calendar days before refilling the tank.

E) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

F) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

4) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any tank complying with the requirements of subsection (e).

f) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using an external floating roof must meet the requirements specified in subsections (f)(1) through (f)(3).

1) The remanufacturer or other person that stores or treats the hazardous secondary material must design the external floating roof in accordance with the following requirements:

A) The external floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The floating roof must be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) The primary seal must be a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 721.981. The total area of the gaps between the tank wall and the

primary seal must not exceed 212 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps must not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal must be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 ~~centimeters~~cm above the liquid surface.

ii) The secondary seal must be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal must not exceed 21.2 ~~square centimeters (~~ cm^2~~)~~ per meter of tank diameter, and the width of any portion of these gaps must not exceed 1.3 ~~centimeters (~~cm~~)~~.

C) The external floating roof must meet the following specifications:

i) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof must provide a projection below the liquid surface.

ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal, or lid.

iii) Each access hatch and each gauge float well must be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

iv) Each automatic bleeder vent and each rim space vent must be equipped with a gasket.

v) Each roof drain that empties into the liquid managed in the tank must be equipped with a slotted membrane fabric

cover that covers at least 90 percent of the area of the opening.

vi) Each unslotted and slotted guide pole well must be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

vii) Each unslotted guide pole must be equipped with a gasketed cap on the end of the pole.

viii) Each slotted guide pole must be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

ix) Each gauge hatch and each sample well must be equipped with a gasketed cover.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be secured and maintained in a closed position at all times except when the closure device must be open for access.

C) Covers on each access hatch and each gauge float well must be bolted or fastened when secured in the closed position.

D) Automatic bleeder vents must be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

E) Rim space vents must be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

F) The cap on the end of each unslotted guide pole must be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

G) The cover on each gauge hatch or sample well must be secured in the closed position at all times except when the hatch or well must be opened for access.

H) Both the primary seal and the secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the external floating roof in accordance with the following procedures:

A) The remanufacturer or other person that stores or treats the hazardous secondary material must measure the external floating roof seal gaps in accordance with the following requirements:

i) The remanufacturer or other person that stores or treats the hazardous secondary material must perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every five years.

ii) The remanufacturer or other person that stores or treats the hazardous secondary material must perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

iii) If a tank ceases to hold hazardous secondary material for a period of one year or more, subsequent introduction of hazardous secondary material into the tank must be considered an initial operation for the purposes of subsections (f)(3)(A)(i) and (f)(3)(A)(ii).

iv) The remanufacturer or other person that stores or treats the hazardous secondary material must determine the total surface area of gaps in the primary seal and in the secondary seal individually using the procedure described in subsection (f)(3)(D):

BOARD NOTE: The Board moved corresponding 40 CFR 261.1084(f)(3)(i)(D)(1) through (f)(3)(i)(D)(4) to appear as subsections (f)(3)(D)(i) through (f)(3)(A)(iv) to comport with codification requirements.

v) In the event that the seal gap measurements do not conform to the specifications in subsection (f)(1)(B), the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

vi) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

B) The remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the external floating roof in accordance with the following requirements:

i) The floating roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, holes, tears, or other

openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

ii) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except for the special conditions provided for in subsection (l).

iii) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

iv) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

C) Prior to each inspection required by subsection (f)(3)(A) or (f)(3)(B), the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency of the date and location of the inspection as follows:

i) Prior to each inspection to measure external floating roof seal gaps, as required under subsection (f)(3)(A), written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before the date the measurements are scheduled to be performed.

ii) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned as provided for in subsection (f)(3)(C)(iii).

iii) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

D) Procedure for determining the total surface area of gaps in the primary seal and in the secondary seal individually.

i) The seal gap measurements must be performed at one or more floating roof levels when the roof is floating off the roof supports.

ii) Seal gaps, if any, must be measured around the entire perimeter of the floating roof in each place where a 0.32~~-centimeter (~~ 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) For a seal gap measured under this subsection (f)(3), the gap surface area must be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

iv) The total gap area must be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in subsection (f)(1)(B).

BOARD NOTE: The texts of corresponding 40 CFR 261.1084(f)(3)(i)(D)(1) through (f)(3)(i)(D)(4), which would normally appear in subsection (f)(3)(A)(iv), appear as subsections (f)(3)(D)(i) through (f)(3)(~~A~~D)(iv) to comport with codification requirements.

4) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any tank complying with the requirements of subsection (f).

g) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank by venting the tank to a control device must meet the requirements specified in subsections (g)(1) through (g)(3).

1) The tank must be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

   A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

   B) Each opening in the fixed roof not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions.

   C) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include, organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

   D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 721.987.

2) Whenever a hazardous secondary material is in the tank, the fixed roof must be installed with each closure device secured in the closed position

and the vapor headspace underneath the fixed roof vented to the control device, except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of ~~such~~these activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of a tank.

B) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The fixed roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The closed-vent system and control device must be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in Section 721.987.

C) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except for the special conditions provided for in subsection (l).

D) In the event that a defect is detected, the remanufacture or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

h) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using a pressure tank must meet the following requirements:

1) The tank must be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

2) All tank openings must be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Section 721.983(d).

3) Whenever a hazardous secondary material is in the tank, the tank must be operated as a closed system that does not vent to the atmosphere, except under either or the following conditions described in subsection (h)(3)(A) or (h)(3)(B).

A) At those times when opening of a safety device, as defined in Section 721.981, is required to avoid an unsafe condition.

B) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section 721.987.

i) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device must meet the following requirements:

1) The tank must be located inside an enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in ""Procedure T— – Criteria for and Verification of a Permanent or Temporary Total Enclosure"" in appendix B to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor, vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material must perform the verification procedure for the enclosure as specified in Section 5.0 to ""Procedure T— – Criteria for and Verification of a Permanent or Temporary Total Enclosure"" initially when the enclosure is first installed and annually thereafter.

2) The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section 721.987.

3) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of subsections (i)(1) and (i)(2).

4) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the closed-vent system and control device, as specified in Section 721.987.

j) The remanufacturer or other person that stores or treats the hazardous secondary material must transfer hazardous secondary material to a tank subject to this section in accordance with the following requirements:

1) Transfer of hazardous secondary material, except as provided in subsection (j)(2), to the tank from another tank subject to this section must be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous secondary material to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63 (National Emission Standards for Individual Drain Systems), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The requirements of subsection (j)(1) do not apply when transferring a hazardous secondary material to the tank under any of the following conditions:

A) The hazardous secondary material meets the average VO concentration conditions specified in Section 721.982(c)(1) at the point of material origination.

B) The hazardous secondary material has been treated by an organic destruction or removal process to meet the requirements in Section 721.982(c)(2).

C) The hazardous secondary material meets the requirements of Section 721.982(c)(4).

k) The remanufacturer or other person that stores or treats the hazardous secondary material must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(4), (e)(3), (f)(3), or (g)(3), as follows:

1) The remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible, but no later than 45 calendar days after detection, except as provided in subsection (k)(2).

2) Repair of a defect may be delayed beyond 45 calendar days if the remanufacturer or other person that stores or treats the hazardous secondary material determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous secondary material normally managed in the tank. In this case, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect the next time the process or unit that is generating the hazardous secondary material managed in the tank stops operation. Repair of the defect must be completed before the process or unit resumes operation.

l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year under the following special conditions:

1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the remanufacturer or other person that stores or treats the hazardous secondary material may designate a cover as an ""unsafe to inspect and monitor cover"" and comply with all of the following requirements:

A) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

B) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable

section of this Subpart CC, as frequently as practicable during those times when a worker can safely access the cover.

2) In the case when a tank is buried partially or entirely underground, a remanufacturer or other person that stores or treats the hazardous secondary material is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~_____~~)

Section 721.986 Standards: Containers

a) Applicability. The provisions of this Section apply to the control of air pollutant emissions from containers for which Section 721.982(b) references the use of this Section for ~~such~~that air emission control.

b) General requirements.

1) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each container subject to this Section in accordance with the following requirements, as applicable to the container.

A) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).

B) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).

C) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in subsection (d).

2) This subsection (b)(2) corresponds with 40 CFR 261.1086(b)(2), marked ~~"~~"reserved~~"~~" by USEPA. This statement maintains structural consistency with the federal regulations

c) Container Level 1 standards.

1) A container using Container Level 1 controls is one of the following:

A) A container that meets the applicable U.S. Department of Transportation (~~DOT~~USDOT) regulations on packaging hazardous materials for transportation, as specified in subsection (f).

B) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that, when the cover and closure devices are secured in the closed position, there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a ~~"~~"portable tank~~"~~" or bulk cargo container equipped with a screw-type cap).

C) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous secondary material in the container such that no hazardous secondary material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

2) A container used to meet the requirements of subsection (c)(1)(B) or (c)(1)(C) must be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous secondary material to the atmosphere and to

maintain the equipment integrity, for as long as the container is in service. Factors to be considered in selecting the construction materials ~~of~~ construction and designing the cover and closure devices must include, organic vapor permeability; the effects of contact with the hazardous secondary material or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

3) Whenever a hazardous secondary material is in a container using Container Level 1 controls, the remanufacturer or other person that stores or treats the hazardous secondary material must install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

i) ~~In the case when~~When the container is filled to the intended final level in one continuous operation, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) ~~In the case when~~When discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the

process generating the hazardous secondary material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container, as follows:

i) For the purpose of meeting the requirements of this section, an empty hazardous secondary material container may be open to the atmosphere at any time (i.e., covers and closure devices on such a container are not required to be secured in the closed position).

ii) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of ~~such~~routine activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which

vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other persons that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 1 controls must inspect the containers and their covers and closure devices, as follows:

A) ~~In the case when~~When a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., is not an empty hazardous secondary material container) the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the

container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the container standards of this Subpart CC).

B) ~~In the case when~~When a container used for managing hazardous secondary material remains at the facility for a period of one year or more, the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices initially, and, thereafter, at least once every 12 months~~:~~ to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (c)(4)(C).

C) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous secondary material must be removed from the container and the container must not be used to manage hazardous secondary material until the defect is repaired.

5) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, ~~which~~that do not meet applicable ~~DOT~~USDOT regulations as specified in subsection (f), are not managing hazardous secondary material in light material service.

d) Container Level 2 standards.

1) A container using Container Level 2 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in subsection (f).

B) A container that operates with no detectable organic emissions, as defined in Section 721.981, and determined in accordance with the procedure specified in subsection (g).

C) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Reference Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Unis Pressure-Vacuum Test) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, in accordance with the procedure specified in subsection (h).

2) Transfer of hazardous secondary material in or out of a container using Container Level 2 controls must be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA has stated that it considers to meet the requirements of this subsection (d) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

3) Whenever a hazardous secondary material is in a container using Container Level 2 controls, the remanufacturer or other person that stores or treats the hazardous secondary material must install all covers and closure devices for the container, and secure and maintain each closure device in the closed position, except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container, as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the remanufacture or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container, as follows:

i) For the purpose of meeting the requirements of this Section, an empty hazardous secondary material container may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

ii) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary materials container, the

remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container

exceeds the internal pressure operating range for the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacture or other person that stores or treats the hazardous secondary material using containers with Container Level 2 controls must inspect the containers and their covers and closure devices as follows:

A) ~~In the case when~~When a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., is not an empty hazardous secondary material container), the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the container standards of this Subpart CC).

B) In the case when a container used for managing hazardous secondary material remains at the facility for a period of one year or more, the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats

the hazardous secondary material must repair the defect in accordance with the requirements of subsection (d)(4)(C).

C) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than 24 hours after detection, and repair must be completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous secondary material must be removed from the container and the container must not be used to manage hazardous secondary material until the defect is repaired.

e) Container Level 3 standards.

1) A container using Container Level 3 controls is one of the following:

A) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of subsection (e)(2)(B).

B) A container that is vented inside an enclosure ~~which~~that is exhausted through a closed-vent system to a control device in accordance with the requirements of subsections (e)(2)(A) and (e)(2)(B).

2) The remanufacturer or other person that stores or treats the hazardous secondary material must meet the following requirements, as applicable to the type of air emission control equipment selected by the remanufacturer or other person that stores or treats the hazardous secondary material:

A) The container enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in ~~"~~"Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure~~"~~" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111. The enclosure may have permanent or temporary openings to allow

worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material must perform the verification procedure for the enclosure as specified in Section 5.0 ~~to "~~of "Procedure T~~—~~ – Criteria for and Verification of a Permanent or Temporary Total Enclosure~~"~~" initially when the enclosure is first installed and, thereafter, annually.

B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 721.987.

3) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of subsection (e)(1).

4) Remanufacturers or other persons that store or treat the hazardous secondary material using Container Level 3 controls in accordance with the provisions of this Subpart CC must inspect and monitor the closed-vent systems and control devices as specified in Section 721.987.

5) Remanufacturers or other persons that store or treat the hazardous secondary material that use Container Level 3 controls in accordance with the provisions of this Subpart CC must prepare and maintain the records specified in Section 721.989(d).

6) Transfer of hazardous secondary material in or out of a container using Container Level 3 controls must be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA has stated that it considers to meet the requirements of this subsection (e) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the

container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

f) For the purpose of compliance with subsection (c)(1)(A) or (d)(1)(A), containers must be used that meet the applicable ~~U.S. Department of Transportation (~~USDOT~~)~~ regulations on packaging hazardous materials for transportation, as follows:

1) The container meets the applicable requirements specified in 49 CFR 178 (Specifications for Packagings) or 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111.

2) Hazardous secondary material is managed in the container in accordance with the applicable requirements specified in subpart B of 49 CFR 107 (Hazardous Material Program Procedures) and 49 CFR 172 (Hazardous Materials Table, Special Provisions, ~~hazardous~~Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans), 173 (Shippers~~—~~ General Requirements for Shipments and Packagings), and 180 (Continuing Qualification and Maintenance of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111.

3) For the purpose of complying with this Subpart CC, no exceptions to the 49 CFR 178 (Specifications for Packagings) or 179 (Specifications for Tank Cars) regulations are allowed.

g) To determine compliance with the no detectable organic emissions requirement of subsection (d)(1)(B), the procedure specified in Section 721.983(d) must be used.

1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, must be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

2) The test must be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous secondary materials expected to be managed in this type of container. During the test, the container cover and closure devices must be secured in the closed position.

h) Procedure for determining a container to be vapor-tight using Reference Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Unis Pressure-Vacuum Test) in appendix A (Test Methods) to 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, for the purpose of complying with subsection (d)(1)(C).

1) The test must be performed in accordance with Reference Method 27 of appendix A to 40 CFR 60.

2) A pressure measurement device must be used 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.

3) If the test results determined by Reference Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within five minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.987 Standards: Closed-Vent Systems and Control Devices

a) This Section applies to each closed-vent system and control device installed and operated by the remanufacturer or other person who stores or treats the hazardous secondary material to control air emissions in accordance with standards of this Subpart CC.

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 secondary material in the hazardous secondary

material management unit to a control device that meets the requirements specified in subsection (c).

2) The closed-vent system must be designed and operated in accordance with the requirements specified in Section 721.933(k).

3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device must be equipped with either a flow indicator as specified in subsection (b)(3)(A) or a seal or locking device as specified in subsection (b)(3)(B). For the purpose of complying with this subsection (b), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

   A) If a flow indicator is used to comply with subsection (b)(3), the indicator must be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this subsection (b), a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

   B) If a seal or locking device is used to comply with subsection (b)(3), the device must be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever, etc.) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

4) The closed-vent system must be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedure specified in Section 721.933(l).

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 721.933(c); or

C) A flare designed and operated in accordance with the requirements of Section 721.933(d).

2) The remanufacturer or other person that stores or treats the hazardous secondary material who elects to use a closed-vent system and control device to comply with the requirements of this section must comply with the requirements specified in subsections (c)(2)(A) through (c)(2)(F).

A) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of subsection (c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, must not exceed 240 hours per year.

B) The specifications and requirements in subsections (c)(1)(A) through (c)(1)(C) for control devices do not apply during periods of planned routine maintenance.

C) The specifications and requirements in subsections (c)(1)(A) through (c)(1)(C) for control devices do not apply during a control device system malfunction.

D) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate compliance with the requirements of subsection (c)(2)(A) (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of subsection (c)(1)(A), (c)(1)(B),

or (c)(1)(C), as applicable, must not exceed 240 hours per year) by recording the information specified in Section 721.989(e)(1)(E).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

F) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally) except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

3) The remanufacturer or other person that stores or treats the hazardous secondary material using a carbon adsorption system to comply with subsection (c)(1) must 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 721.933(g) or (h).

B) All carbon that is hazardous waste and that is removed from the control device must be managed in accordance with the requirements of Section 721.933(n), regardless of the average volatile organic concentration of the carbon.

4) A remanufacturer or other person that stores or treats the hazardous secondary material 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) must operate and maintain the control device in accordance with the requirements of Section 721.933(j).

5) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate that a control device achieves the performance requirements of subsection (c)(1) as follows:

A) A remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate the performance of each control device, using either a performance test, as specified in subsection (c)(5)(C), or a design analysis, as specified in subsection (c)(5)(D), except for the following:

i) A flare;

ii) A boiler or process heater with a design heat input capacity of 44 megawatts or greater; or

iii) A boiler or process heater into which the vent stream is introduced with the primary fuel.

B) A remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate the performance of each flare in accordance with the requirements specified in Section 721.933(e).

C) For a performance test conducted to meet the requirements of subsection (c)(5)(A), the remanufacturer or other person that stores or treats the hazardous secondary material must use the test methods and procedures specified in Section 721.934(c)(1) through (c)(4).

D) For a design analysis conducted to meet the requirements of subsection (c)(5)(A), the design analysis must meet the requirements specified in Section 721.935(b)(4)(C).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate that a carbon adsorption system achieves the performance requirements of subsection (c)(1) 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 remanufacturer or other person that stores or treats the hazardous secondary material 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 remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the requirements of subsection (c)(5)(C). The Agency may choose to have an authorized representative observe the performance test. The Agency must state any disagreement on a demonstration of control device performance using a design analysis in writing to the remanufacturer or other person that treats or stores hazardous secondary material.

7) The closed-vent system and control device must be inspected and monitored by the remanufacture or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in Section 721.933(f)(2) and (l). The readings from each monitoring device required by Section 721.933(f)(2) must be inspected at least once each operating day to check control device operation. Any necessary corrective measures must be immediately implemented to ensure the control device is operated in compliance with the requirements of this Section.

(Source: Added at 40 Ill. Reg. ~~_____~~, effective ~~_____~~)

Section 721.988 Inspection and Monitoring Requirements

a) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor air emission control equipment used to comply with this Subpart CC in accordance with the applicable requirements specified in Sections 721.984 through 261.987.

b) The remanufacture or other person that stores or treats the hazardous secondary material must develop and implement a written plan and schedule to perform the inspections and monitoring required by subsection (a). The remanufacturer or

other person that stores or treats the hazardous secondary material must keep the plan and schedule at the facility.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.989 Recordkeeping Requirements

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to requirements of this Subpart CC must record and maintain the information specified in subsections (b) through (j), as applicable to the facility. Except for air emission control equipment design documentation and information required by subsections (i) and (j), records required by this section must be maintained at the facility for a minimum of three years. Air emission control equipment design documentation must be maintained at the facility until the air emission control equipment is replaced or otherwise no longer in service. Information required by subsections (i) and (j) must be maintained at the facility for as long as the hazardous secondary material management unit is not using air emission controls specified in Sections 721.984 through 261.987 in accordance with the conditions specified in Section 721.980(b)(7) or (d), respectively.

b) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank with air emission controls in accordance with the requirements of Section 721.984 must prepare and maintain records for the tank that include the following information:

1) For each tank using air emission controls in accordance with the requirements of Section 721.984, the remanufacturer or other person that stores or treats the hazardous secondary material must record:

A) A tank identification number (or other unique identification description as selected by the remanufacturer or other person that stores or treats the hazardous secondary material).

B) A record for each inspection required by Section 721.984 that includes the following information:

i) The date inspection was conducted.

ii) For each defect detected during the inspection, the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section 721.984, the remanufacturer or other person that stores or treats the hazardous secondary material must also record the reason for the delay and the date that completion of repair of the defect is expected.

2) In addition to the information required by subsection (b)(1), the remanufacturer or other person that stores or treats the hazardous secondary material must record the following information, as applicable to the tank:

A) The remanufacturer or other person that stores or treats the hazardous secondary material using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 721.984(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous secondary material in the tank performed in accordance with the requirements of Section 721.984(c) ~~of this Subpart~~. The records must include the date and time the samples were collected, the analysis method used, and the analysis results.

B) The remanufacturer or other person that stores or treats the hazardous secondary material using an internal floating roof to comply with the Tank Level 2 control requirements specified in Section 721.1084(e) of this Subpart CC must prepare and maintain documentation describing the floating roof design.

C) Remanufacturer or other persons that store or treat the hazardous secondary material using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 721.984(f) must prepare and maintain the following records:

i) Documentation describing the floating roof design and the dimensions of the tank.

ii) Records for each seal gap inspection required by Section 721.984(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 721.984(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

D) Each remanufacturer or other person that stores or treats the hazardous secondary material using an enclosure to comply with the Tank Level 2 control requirements specified in Section 721.984(i) must prepare and maintain the following records:

i) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111.

ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e).

c) This subsection (c) corresponds with 40 CFR 261.1089(c), marked "reserved" by USEPA. This statement maintains structural consistency with the federal regulations

d) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 3 air emission controls in

accordance with the requirements of Section 721.986 must prepare and maintain records that include the following information:

1) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in ~~"~~"Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure~~"~~" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e).

e) The remanufacturer or other person that stores or treats the hazardous secondary material using a closed-vent system and control device in accordance with the requirements of Section 721.987 must prepare and maintain records that include the following information:

1) Documentation for the closed-vent system and control device that includes:

A) Certification that is signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material stating that the control device is designed to operate at the performance level documented by a design analysis, as specified in subsection (e)(1)(B), or by performance tests as specified in subsection (e)(1)(C) when the tank 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 721.935(b)(4). The documentation must include information prepared by the remanufacturer or other person that stores or treats the hazardous secondary material or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 721.935(b)(4)(C) and certification by the remanufacturer or other person that stores or

treats the hazardous secondary material that the control equipment meets the applicable specifications.

C) If performance tests are used, then a performance test plan, as specified in Section 721.935(b)(3), and all test results.

D) Information as required by ~~Sections~~Section 721.935(c)(1) and (c)(2), as applicable.

E) A remanufacturer or other person that stores or treats the hazardous secondary material must record, on a semiannual basis, the information specified in subsections (e)(1)(E)(i) and (e)(1)(E)(ii) for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable.

i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

ii) A description of the planned routine maintenance that was performed for the control device during the previous six-month period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance.

F) A remanufacturer or other person that stores or treats the hazardous secondary material must record the information specified in subsections (e)(1)(F)(i) through (e)(1)(F)(iii) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable.

i) The occurrence and duration of each malfunction of the control device system.

ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the hazardous secondary material management unit through the closedvent system to the control device while the control device is not properly functioning.

iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 721.987(c)(3)(B).

f) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank or container exempted under the hazardous secondary material organic concentration conditions specified in Section 721.982(c)(1) or (c)(2)(A) through (c)(2)(F), must prepare and maintain at the facility records documenting the information used for each material determination (e.g., test results, measurements, calculations, and other documentation). If analysis results for material samples are used for the material determination, then the remanufacturer or other person that stores or treats the hazardous secondary material must record the date, time, and location that each material sample is collected in accordance with applicable requirements of Section 721.983.

BOARD NOTE: Corresponding 40 CFR 261.1089(f) includes a subsection (f)(2) that USEPA marked "reserved." Because there is no 40 CFR 1089(f)(1), the Board included no text to correspond with subsection (f)(2).

g) A remanufacturer or other person that stores or treats the hazardous secondary material designating a cover as "unsafe to inspect and monitor" pursuant to Section 721.984(l) or Section 721.985(g) must record and keep at facility the following information: the identification numbers for hazardous secondary material management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to

inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

h) The remanufacturer or other person that stores or treats the hazardous secondary material that is subject to this Subpart CC and to the control device standards in subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, on or Before November 7, 2006) of 40 CFR 60 or subpart V of 40 CFR 61 (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), each incorporated by reference in 35 Ill. Adm. Code 720.111, may elect to demonstrate compliance with the applicable sections of this Subpart CC by documentation either pursuant to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60 or subpart V of 40 CFR 61, to the extent that the documentation required by 40 CFR 60 or 61 duplicates the documentation required by this Section.

(Source: Added at 40 Ill. Reg. _____~~—~~, effective _____~~———~~)

Section 721.APPENDIX H Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number (CAS No.)	USEPA Hazardous Waste Number
A2213	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2-(methylsulfonyl)-, O-((methylamino)carbonyl)oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1-α,4-α,4a-β,5-α,8-α,8a-β)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro-	107-05-1	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	(1,1'-Biphenyl)-4-amine	92-67-1	
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(~~aminomethyl~~amino-methyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	~~U119~~

			P119 U119
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90~~-~~-04~~-~~-0	
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S. (not otherwise specified)			
Aramite	Sulfurous acid, 2-chloroethyl-, 2~~-~~(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester	140-57-8	
Arsenic	Arsenic	7440-38-2	
Arsenic compounds, N.O.S.			
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-~~carbonimidoylbis~~carbon-imidoyl bis(N, N-dimethyl-	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S.			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol-2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol-2,2-dimethyl-,	22961-82-6	U364
Benomyl	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	17804-35-2	U271
Benz(c)acridine	Same	225-51-4	U016
Benz(a)anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	~~U018~~ U019 U018
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	(1,1'-Biphenyl)-4,4'-diamine	92-87-5	U021

Benzo(b)fluoranthene	Benz(e)acephenanthrylene	205-99-2	
Benzo(j)fluoranthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
Benzo(a)pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.			
Bis(pentamethylene)thiuram tetrasulfide	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7	
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butylate	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008-41-5	
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Cacodylic acid	Arsenic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.			
Calcium chromate	Chromic acid H_2CrO_4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide $Ca(CN)_2$	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbosulfan	Carbamic acid, ((dibutylamino)thio) methyl-2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	P189
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difuoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211

Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4(bis-(2-chloroethyl)amino)-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7, 7a-hexahydro-	57-74-9	U036
Chlordane, α and γ isomers			U036
Chlorinated benzenes, N.O.S.			
Chlorinated ethane, N.O.S.			
Chlorinated fluorocarbons, N.O.S.			
Chlorinated naphthalene, N.O.S.			
Chlorinated phenol, N.O.S.			
Chlornaphazine	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydro xy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-((2,5-dimethoxyphenyl)azo)-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper,	137-29-1	

	bis(dimethylcarbamodithioato-S,S')-,		
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120-71-8	
Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202
Cyanides (soluble salts and complexes), N.O.S.			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	β-D-glucopyranoside, (methyl-ONN-azoxy)methyl-	14901-08-7	
Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters		U240
Daunomycin	5, 12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-l-methoxy-, 8S-cis)-	20830-81-3	U059
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-c	50-29-3	U061

	hloro-		
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz(a,h)acridine	Same	226-36-8	
Dibenz(a,j)acridine	Same	224-42-0	
Dibenz(a,h)anthracene	Same	53-70-3	U063
7H-Dibenzo(c,g)carbazole	Same	194-59-2	
Dibenzo(a,e)pyrene	Naphtho(1,2,3,4-def)chrysene	192-65-4	
Dibenzo(a,h)pyrene	Dibenzo(b,def)chrysene	189-64-0	
Dibenzo(a,i)pyrene	Benzo(rst)pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'-oxybis(2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis(2-chloro-	108-60-1	U027
Dichloromethoxyethane	Ethane, 1,1'-(methylenebis(oxy)- bis(2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis(chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth(2,	60-57-1	P037

	3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-		
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl-S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	60-51-5	P044
3,3'-Dimethoxybenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	
7,12-Dimethylbenz(a)anthracene	Benz(a)anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099

α,α-Dimethylphenethylamine	Benzeneethanamine, α, α-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1-((dimethylamino) carbonyl)-5-methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	541-53-7	P049
Endosulfan	6, 9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9 a-hexahydro-, 3-oxide,	115-29-7	P050
Endothal	7-Oxabicyclo(2.2.1)heptane-2,3-dicar boxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth(2,3-b)oxiren e, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7 ,7a-octahydro-, (1a	72-20-8	P051

	α,2β,2aβ,3α,6α,6aβ,7β,7aα)-,		
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-	51-43-4	P042
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidine dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	U407
Famphur	Phosphorothioc acid, O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamodithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-	23422-53-9	P198

	carbonyl) oxy)phenyl)-, monohydrochloride		
Formic acid	Same	64-18-16	U123
Formparanate	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino) carbonyl)oxy)phenyl)-	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxaldehyde	765-34-4	U126
Halomethanes, N.O.S.			
Heptachlor	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno(1, 2b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro--, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-	1024-57-3	
Heptachlor epoxide (α, β, and γ isomers)			
Heptachlorodibenzofurans			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclo-pentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H_2S	7783-06-4	U135
Indeno(1,2,3-cd)pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl-n-butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140

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

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

Mitomycin C	Azirino(2', 3':3, 4)pyrrolo(1, 2-a)indole-4, 7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-	50-07-7	U010
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas	Ethane, 1,1'-thiobis(2-chloro-	505-60-2	U165
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
α-Naphthylamine	1-Naphthalenamine	134-32-7	U167
β-Naphthylamine	2-Naphthalenamine	91-59-8	U168
α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S.			
Nickel carbonyl	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide $Ni(CN)_2$	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	~~P078~~ U169 P078
Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride salt			

Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.		35576-91-1	
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin.	3268-87-9	
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran.	39001-02-0	
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO_4, (T-4)	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofurans			

Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
1,2-Phenylenediamine	1,2-Benzenediamine	95-54-5	
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	298-02-2	P094
Phthalic acid esters, N.O.S.			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.			
Potassium cyanide	Same	151-50-8	P098
Potassium dimethyldithiocarbamate	Carbamodithioc acid, dimethyl, potassium salt	128-03-0	
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioc acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	
Potassium n-methyldithiocarbamate	Carbamodithioc acid, methyl-monopotassium salt	137-41-7	
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium)	506-61-6	P099
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None

Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S.			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS_2	7488-56-4	U205
Selenium, tetrakis(dimethyl-dithiocarbamate	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.			
Silver cyanide	Silver cyanide AgCN	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027

Sodium cyanide	Sodium cyanide NaCN	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl-, sodium salt	136-30-1	
Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)carbonyl) amino)-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans			
Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol, potassium salt	Same	53535276	None
2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567559	None
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	

Thallium compounds			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium (I) acetate	Acetic acid, thallium (1+) salt	563-68-8	U214
Thallium (I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium (I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium (I) nitrate	Nitric acid, thallium (1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium (1+) salt	12039-52-0	P114
Thallium (I) sulfate	Sulfuric acid, dithallium (1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'-(thiobis((methylimino)carbonyloxy))-bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl)oxime	39196-18-4	P045
Thiophanate-methyl	Carbamic acid, (1,2-phyenylenebis(iminocarbonothioyl))-bis-, dimethyl ester	23564-05-8	U409
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	P219
Thiram	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)carbonyl) oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzeneamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123

Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(l-aziridinyl)phosphine sulfide	Aziridine, 1,1',1''-phosphinothioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo))bis(5-amino-4-hydroxy)-, tetrasodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vernolate	Carbamothioc acid, dipropyl-, S-propyl ester	1929-77-7	
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3 percent	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations	81-81-2	P001

	greater than 0.3 percent		
Warfarin salts, when present at concentrations less than 0.3 percent			U248
Warfarin salts, when present at concentrations greater than 0.3 percent			P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations greater than 10 percent	1314-84-7	P122
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations of 10 percent or less	1314-84-7	U249
Ziram	Zinc, bis(dimethylcarbamodithioato-S,S')-(T-4)-	137-30-4	P205

Note: The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class that are not specifically listed by name in this Section.

(Source: Amended at 40 Ill. Reg. _____~~—~~, effective _____~~—————~~)

Section 721.APPENDIX Z Table to Section 721.102: Recycled Materials That Are Solid Waste

The following table lists the instances when a recycled secondary material is solid waste, based on the type of secondary material and the mode of material management during recycling. This table supports the requirements of the recycling provision of the definition of solid waste rule, at Section 721.102(c).

Table

	1	2	3	4
	Use constituting disposal	Burning for energy recovery or use to produce a fuel	Reclamation (except as provided in ~~Sections~~Section 721.102(a)(2)(B) or ~~Section~~ 721.104(a)(17), (a)(23), (a)(24), or (a)(~~25~~27) (a)(~~27~~25))	Speculative accumulation
Applicable Subsection of Section 721.102:	(c)(1)	(c)(2)	(c)(3)	(c)(4)
Spent materials	Yes	Yes	Yes	Yes
Sludges (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes
Sludges exhibiting a characteristic of hazardous waste	Yes	Yes	No	Yes
By-products (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes

By-products exhibiting a characteristic of hazardous waste	Yes	Yes	No	Yes
Commercial chemical products listed in Section 721.133	Yes	Yes	No	=
Scrap metal that is not excluded pursuant to Section 721.104(a)(13)	Yes	Yes	Yes	Yes
~~Spent materials~~	~~Yes~~	~~Yes~~	~~Yes~~	~~Yes~~
~~Sludges (listed in Section 721.131 or 721.132)~~	~~Yes~~	~~Yes~~	~~Yes~~	~~Yes~~
~~Sludges exhibiting a characteristic of hazardous waste~~	~~Yes~~	~~Yes~~	~~No~~	~~Yes~~
~~By-products (listed in Section 721.131 or 721.132)~~	~~Yes~~	~~Yes~~	~~Yes~~	~~Yes~~
~~By-products exhibiting a characteristic of hazardous waste~~	~~Yes~~	~~Yes~~	~~No~~	~~Yes~~
~~Commercial chemical products listed in Section 721.133~~	~~Yes~~	~~Yes~~	~~No~~	~~No~~
~~Scrap metal that is not excluded pursuant to Section 721.104(a)(13)~~	~~Yes~~	~~Yes~~	~~Yes~~	~~Yes~~

Yes — Defined as a solid waste

No — Not defined as a solid waste

BOARD NOTE: Derived from Table 1 to 40 CFR 261.2 (2010). The terms "spent materials," "sludges," "by-products," "scrap metal," and "processed scrap metal" are defined in Section 721.101.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

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Insertion	
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Statistics:	
	Count
Insertions	840
Deletions	900
Moved from	12
Moved to	12
Style change	0
Format changed	0
Total changes	1764

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

PART 721
IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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

SUBPART C: CHARACTERISTICS OF HAZARDOUS WASTE

SUBPART D: LISTS OF HAZARDOUS WASTE

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721.132 Hazardous Waste from Specific Sources
721.133 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof
721.135 Wood Preserving Wastes

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SUBPART M: EMERGENCY PREPAREDNESS AND RESPONSE FOR MANAGEMENT OF EXCLUDED HAZARDOUS SECONDARY MATERIALS

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS

Section

		Dibenzofurans (Repealed)
	721.APPENDIX Y	Table to Section 721.138: Maximum Contaminant Concentration and Minimum Detection Limit Values for Comparable Fuel Specification
	721.APPENDIX Z	Table to Section 721.102: Recycled Materials that Are Solid Waste

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 at 8 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9 at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 Ill. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 Ill. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. 7950, effective May 9, 1991; amended in R90-11 at 15 Ill. Reg. 9332, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14473, effective September 30, 1991; amended in R91-12 at 16 Ill. Reg. 2155, effective January 27, 1992; amended in R91-26 at 16 Ill. Reg. 2600, effective February 3, 1992; amended in R91-13 at 16 Ill. Reg. 9519, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17666, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5650, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20568, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6741, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12175, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17490, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9522, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 10963, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 275, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7615, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17531, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1718, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9135, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9481, effective June 20, 2000; amended in R01-3 at 25 Ill. Reg. 1281, effective January 11, 2001; amended in R01-21/R01-23 at 25 Ill. Reg. 9108, effective July 9, 2001; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6584, effective April 22, 2002; amended in R03-18 at 27 Ill. Reg. 12760, effective July 17, 2003; amended in R04-16 at 28 Ill. Reg. 10693, effective July 19, 2004; amended in R05-8 at 29 Ill. Reg. 6003, effective April 13, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 2992,

effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 791, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 11786, effective July 14, 2008; amended in R09-3 at 33 Ill. Reg. 986, effective December 30, 2008; amended in R09-16/R10-4 at 34 Ill. Reg. 18611, effective November 12, 2010; amended in R11-2/R11-16 at 35 Ill. Reg. 17734, effective October 14, 2011; amended in R13-5 at 37 Ill. Reg. 3213, effective March 4, 2013; amended in R14-13 at 38 Ill. Reg. 12442, effective May 27, 2014; amended in R15-1 at 39 Ill. Reg. 1607, effective January 12, 2015; amended in R16-7 at 40 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 721.101 Purpose and Scope

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

1) Subpart A of this Part defines the terms "solid waste" and "hazardous waste," identifies those wastes that are excluded from regulation under 35 Ill. Adm. Code 702, 703, and 722 through 728, and establishes special management requirements for hazardous waste produced by conditionally exempt small quantity generators and hazardous waste that is recycled.

2) Subpart B of this Part sets forth the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes.

3) Subpart C of this Part identifies characteristics of hazardous wastes.

4) Subpart D of this Part lists particular hazardous wastes.

b) Limitations on definition of solid waste.

1) The definition of solid waste contained in this Part applies only to wastes that also are hazardous for purposes of the regulations implementing Subtitle C of RCRA. For example, it does not apply to materials (such as non-hazardous scrap, paper, textiles or rubber) that are not otherwise hazardous wastes and that are recycled.

2) This Part identifies only some of the materials that are solid wastes and hazardous wastes under Sections 1004(5), 1004(27) and 7003 of RCRA. A material that is not defined as a solid waste in this Part, or is not a hazardous waste identified or listed in this Part, is still a hazardous waste

for purposes of those Sections if, in the case of Section 7003 of RCRA, the statutory elements are established.

c) For the purposes of Sections 721.102 and 721.106 the following definitions apply:

1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which it was produced without processing.

2) "Sludge" has the same meaning used in 35 Ill. Adm. Code 720.110.

3) A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. The term does not include a co-product that is produced for the general public's use and is ordinarily used in the form it is produced by the process.

4) A material is "reclaimed" if it is processed to recover a usable product, or if it is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents. In addition, for purposes of Section~~Sections 721.102(a)(2)(B) and~~ 721.104(a)(23) and (a)(24) smelting, melting, and refining furnaces are considered to be solely engaged in metals reclamation if the metal recovery from the hazardous secondary materials meets the same requirements as those specified for metals recovery from hazardous waste found in 35 Ill. Adm. Code 726.200(d)(1) through (d)(3), and if the residuals meet the requirements specified in 35 Ill. Adm. Code 726.212.

5) A material is "used or reused" if either of the following is true:

A) It is employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material will not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials); or

B) It is employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorus precipitant and sludge conditioner in wastewater treatment).

6) "Scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, or wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap automobiles, or railroad box cars) that when worn or superfluous can be recycled.

7) A material is "recycled" if it is used, reused, or reclaimed.

8) A material is "accumulated speculatively" if it is accumulated before being recycled. A material is not accumulated speculatively, however, if the person accumulating it can show that the material is potentially recyclable and has a feasible means of being recycled; and that, during the calendar year (commencing on January 1), the amount of material that is recycled, or transferred to a different site for recycling, equals at least 75 percent by weight or volume of the amount of that material accumulated at the beginning of the period. Materials must be placed in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method. In calculating the percentage of turnover, the 75 percent requirement is to be applied to each material of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulating in units that would be exempt from regulation under Section 721.104(c) are not to be included in making the calculation. ~~(~~Materials that are already defined as solid wastes also are not to be included in making the calculation.~~)~~ Materials are no longer in this category once they are removed from accumulation for recycling, however.

BOARD NOTE: Various segments of this Part and 35 Ill. Adm. Code 720 use the verbal phrase "accumulated speculatively" and the noun phrase "speculative accumulation." Some of those segments rely on this subsection (c)(8) definition of "speculatively accumulated" for definition of the "speculative accumulation". The Board infers that USEPA intends that the verb phrase define the noun phrase: material that is accumulated speculatively is the subject of speculative accumulation.

9) "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.

10) "Processed scrap metal" is scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance

economic value or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal that has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and fines, drosses and related materials that have been agglomerated. (Note: shredded circuit boards being sent for recycling are not considered processed scrap metal. They are covered under the exclusion from the definition of solid waste for shredded circuit boards being recycled (Section 721.104(a)(14))).

11) "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries, such as turnings, cuttings, punchings, and borings.

12) "Prompt scrap metal" is scrap metal as generated by the metal working/fabrication industries, and it includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap metal is also known as industrial or new scrap metal.

d) The Agency has inspection authority pursuant to Section 3007 of RCRA and Section 4 of the Environmental Protection Act [415 ILCS 5/4].

e) Electronic reporting. The filing of any document pursuant to any provision of this Part as an electronic document is subject to 35 Ill. Adm. Code 720.104.

BOARD NOTE: Subsection (e) ~~of this Section~~ is derived from 40 CFR 3, 271.10(b), 271.11(b), and 271.12(h) (2015) ~~(2014)~~.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.102 Definition of Solid Waste

a) Solid waste.

1) A solid waste is any discarded material that is not excluded pursuant to Section 721.104(a) or that is not excluded pursuant to 35 Ill. Adm. Code 720.130 and 720.131 or 35 Ill. Adm. Code 720.130 and 720.134.

2) Discarded material.

A) A discarded material is any material that is described as follows:

i) It is abandoned, as described in subsection (b) ~~of this Section~~;

ii) It is recycled, as described in subsection (c) ~~of this Section~~;

iii) It is considered inherently waste-like, as described in subsection (d) ~~of this Section~~; or

iv) It is a military munition identified as a solid waste in 35 Ill. Adm. Code 726.302.

B) This subsection (a)(2)(B) corresponds with 40 CFR 261.2(a)(2)(ii), which USEPA has removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations. ~~A hazardous secondary material is not discarded if each of the following is true with respect to the waste:~~

~~i) It is generated and reclaimed under the control of the generator, as defined in 35 Ill. Adm. Code 720.110;~~

~~ii) It is not speculatively accumulated, as defined in Section 721.101(c)(8);~~

~~iii) It is handled only in non-land-based units and is contained in such units;~~

~~iv) It is generated and reclaimed within the United States and its territories;~~

~~v) It is not otherwise subject to material-specific management conditions pursuant to Section 721.104(a) when reclaimed;~~

~~vi) It is not a spent lead acid battery (see 35 Ill. Adm. Code 726.180 and 733.102);~~

~~vii) It does not meet either of the listing descriptions for K171 or K172 waste in Section 721.132; and~~

~~viii) The reclamation of the material is legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143.~~

BOARD NOTE: See also the notification requirements of 35 Ill. Adm. Code 720.142. For hazardous secondary materials managed in land-based units, see Section 721.104(a)(23).

b) A material is a solid waste if it is abandoned in one of the following ways:

1) It is disposed of;

2) It is burned or incinerated;~~ or~~

3) It is accumulated, stored, or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned, or incinerated; or~~.~~

4) Sham recycled, as explained in subsection (g).

c) A material is a solid waste if it is recycled – or accumulated, stored, or treated before recycling – as specified in subsections (c)(1) through (c)(4)~~ of this Section~~, if one of the following occurs with regard to the material:

1) The material is used in a manner constituting disposal.

A) A material that is noted with a "yes" in column 1 of the table in Appendix Z of this Part is a solid waste when one of the following occurs :

i) The material is applied to or placed on the land in a manner that constitutes disposal; or

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

B) However, a commercial chemical product that is listed in Section 721.133 is not a solid waste if it is applied to the land and that is its ordinary manner of use.

2) The material is burned for energy recovery.

A) A material that is noted with a "yes" in column 2 of the table in Appendix Z of this Part is a solid waste when one of the following occurs:

i) It is burned to recover energy;

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

iii) It is contained in fuels (in which case the fuel itself remains a solid waste).

B) However, a commercial chemical product that is listed in Section 721.133 is not a solid waste if it is itself a fuel.

3) Reclaimed. A material noted with a "No" in column 3 of the table in Appendix Z of this Part is not a solid waste when reclaimed (except as provided under Section 721.104(a)(17)). A material noted with a "Yes" in column 3 of Appendix Z of this Part is a solid waste when reclaimed, unless it meets the requirements of Section ~~721.102(a)(2)(B) or~~ 721.104(a)(17), (a)(23), (a)(24), or (a)(27)~~(a)(25)~~.

4) Accumulated speculatively. A material noted with "yes" in column 4 of the table in Appendix Z of this Part is a solid waste 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) A secondary material fed to a halogen acid furnace that exhibits a characteristic of a hazardous waste or which is listed as a hazardous waste, as defined in Subpart C or D of this Part, except for brominated material that meets the following criteria:

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

B) The material must contain less than a total of one percent of toxic organic compounds listed in Appendix H of this Part; and

C) The material is processed continually on-site in the halogen acid furnace via direct conveyance (hard piping).

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

A) Disposal method or toxicity.

i) The material is ordinarily disposed of, burned, or incinerated; or

ii) The material contains toxic constituents listed in Appendix H of this Part and these constituents are not ordinarily found in raw materials or products for which the material substitutes (or are found in raw materials or products in smaller concentrations) and is not used or reused during the recycling process; and

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

e) Materials that are not solid waste when recycled.

1) A material is not a solid waste when it can be shown to be recycled by fulfilling one of the following conditions:

A) It is used or reused as an ingredient in an industrial process to make a product, provided the material is not being reclaimed; or

B) It is used or reused as effective substitutes for commercial products; or

C) It is returned to the original process from which it is generated, without first being reclaimed or land disposed. The material must be returned as a substitute for feedstock materials. In cases where the original process to which the material is returned is a secondary process, the material must be managed in such a manner that there is no placement on the land. In cases where the material is generated and reclaimed within the primary mineral processing industry, the conditions of the exclusion found at Section 721.104(a)(17) apply rather than this provision.

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

A) A material used in a manner constituting disposal or used to produce a product that is applied to the land; or

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

C) A material accumulated speculatively; or

D) A material listed in subsections (d)(1) and (d)(2) ~~of this Section~~.

f) Documentation of claims that a material is not a solid waste or is conditionally exempt from regulation. A respondent in an action to enforce regulations implementing Subtitle C of RCRA or Section 21 of the Environmental Protection Act that raises a claim that a certain material is not a solid waste or that the material is conditionally exempt from regulation must demonstrate that there is a known market or disposition for the material and that the material meets the terms of the exclusion or exemption. In doing so, the person must provide appropriate documentation (such as contracts showing that a second person uses the material as an ingredient in a production process) to demonstrate that the material is not a waste or that the material is exempt from regulation. In addition, an owner or operator of a facility claiming that it actually is recycling a material must show that it has the necessary equipment to recycle that material.

g) Sham recycling. A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling, as defined in 35 Ill. Adm. Code 720.143.

(Source: Amended at 40 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 the following is true of the waste:

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

2) It meets any of the following criteria:

A) It exhibits any of the characteristics of hazardous waste identified in Subpart C of this Part. However, any mixture of a waste from the extraction, beneficiation, and processing of ores and minerals excluded pursuant to Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste pursuant to Subpart C of this Part is a hazardous waste only if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred, or if the mixture continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the toxicity characteristic to such mixtures, the mixture is

also a hazardous waste if it exceeds the maximum concentration for any contaminant listed in Section 721.124 that would not have been exceeded by the excluded waste alone if the mixture had not occurred or if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

B) It is listed in Subpart D of this Part and has not been excluded from the lists in Subpart D of this Part pursuant to 35 Ill. Adm. Code 720.120 and 720.122.

C) This subsection (a)(2)(B) corresponds with 40 CFR 261.3(a)(2)(iii), which USEPA removed and marked as "reserved" at 66 Fed. Reg. 27266 (May 16, 2001). This statement maintains structural consistency with the federal regulations.

D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D of this Part and has not been excluded from this subsection (a)(2) pursuant to 35 Ill. Adm. Code 720.120 and 720.122 or~~,~~ subsection (g) or (h) of this Section~~, or subsection (h) of this Section~~; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D of this Part are not hazardous wastes (except by application of subsection (a)(2)(A) or (a)(2)(B)~~ of this Section~~) if the generator demonstrates that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities that have eliminated the discharge of wastewater) and the following is true of the waste:

i) It is one or more of the following solvents listed in Section 721.131: benzene, carbon tetrachloride, tetrachloroethylene, trichloroethylene or the scrubber waters derived from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pretreatment system does not exceed 1 part per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission

standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 1 part per million on an average weekly basis. Any facility that uses benzene as a solvent and claims this exemption must use an aerated biological wastewater treatment system and must use only lined surface impoundments or tanks prior to secondary clarification in the wastewater treatment system. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(i) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected;

ii) It is one or more of the following spent solvents listed in Section 721.131: methylene chloride, 1,1,1-trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents, 2-ethoxyethanol, or the scrubber waters derived-from the combustion of these spent solvents, provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the

headworks of the facility's wastewater treatment or pretreatment system does not exceed 25 parts per million, or the total measured concentration of these solvents entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 25 parts per million on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(ii) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected;

iii) It is one of the following wastes listed in Section 721.132, provided that the wastes are discharged to the refinery oil recovery sewer before primary oil/water/solids separation: heat exchanger bundle cleaning sludge from the petroleum refining industry (USEPA hazardous waste number K050), crude oil storage tank sediment from petroleum refining operations (USEPA hazardous waste number K169), clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations (USEPA hazardous waste number K170), spent hydrotreating

catalyst (USEPA hazardous waste number K171), and spent hydrorefining catalyst (USEPA hazardous waste number K172);

iv) It is a discarded hazardous waste, commercial chemical product or chemical intermediate listed in Section 721.121, 721.132, or 721.133 arising from de minimis losses of these materials. For purposes of this subsection (a)(2)(D)(iv), "de minimis" losses are inadvertent releases to a wastewater treatment system, including those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing. Any manufacturing facility that claims an exemption for de minimis quantities of a waste listed in Section 721.131 or 721.132, or any nonmanufacturing facility that claims an exemption for de minimis quantities of wastes listed in Subpart D of this Part, must either have eliminated the discharge of wastewaters or have included in its federal Clean Water Act (33 USC 1251 et seq.) permit application or wastewater pretreatment submission to the Agency or the wastewater pretreatment Control Authority pursuant to 35 Ill. Adm. Code 307 of the constituents for which each waste was listed (in Appendix G of this Part); and the constituents in Table T to 35 Ill. Adm. Code 728 for which each waste has a treatment standard (i.e., land disposal restriction constituents). A facility is eligible to claim the exemption once the Agency or Control Authority has been notified of possible de minimis releases via the Clean Water Act permit application or the wastewater pretreatment submission. A copy of the Clean Water Act permit application or the wastewater pretreatment submission must be placed in the facility's on-site files;

v) It is wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D of this Part, provided that the annualized average flow of laboratory

wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pretreatment system or provided that the wastes' combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pretreatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation;

vi) It is one or more of the following wastes listed in Section 721.132: wastewaters from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K157), provided that the maximum weekly usage of formaldehyde, methyl chloride, methylene chloride, and triethylamine (including all amounts that cannot be demonstrated to be reacted in the process, destroyed through treatment, or recovered, i.e., what is discharged or volatilized) divided by the average weekly flow of process wastewater prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 parts per million by weight, or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 5 parts per million on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to

include the information required by this subsection (a)(2)(D)(vi) or that the plan parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected; or

vii) It is wastewater derived from the treatment of one or more of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K156), provided that the maximum concentration of formaldehyde, methyl chloride, methylene chloride, and triethylamine prior to any dilutions into the headworks of the facility's wastewater treatment system does not exceed a total of 5 milligrams per liter, or the total measured concentration of these chemicals entering the headworks of the facility's wastewater treatment system (at a facility that is subject to regulation under the federal Clean Air Act new source performance standards or national emission standards for hazardous air pollutants of 40 CFR 60, 61, or 63 or at a facility that is subject to an enforceable limit in a federal operating permit that minimizes fugitive emissions) does not exceed 5 milligrams per liter on an average weekly basis. A facility that chooses to measure concentration levels must file a copy of its sampling and analysis plan with the Agency. A facility must file a copy of a revised sampling and analysis plan only if the initial plan is rendered inaccurate by changes in the facility's operations. The sampling and analysis plan must include the monitoring point location (headworks), the sampling frequency and methodology, and a list of constituents to be monitored. A facility is eligible for the direct monitoring option once it receives confirmation that the sampling and analysis plan has been received by the Agency. The Agency must reject the sampling and analysis plan if it determines that the sampling and analysis plan fails to include the information required by this subsection (a)(2)(D)(vii) or that the plan

parameters would not enable the facility to calculate the weekly average concentration of these chemicals accurately. If the Agency rejects the sampling and analysis plan, or if the Agency determines that the facility is not following the sampling and analysis plan, the Agency must notify the facility to cease the use of the direct monitoring option until such time as the bases for rejection are corrected.

E) Rebuttable presumption for used oil. Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in Subpart D of this Part. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in Appendix H of this Part).

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

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

b) A solid waste that is not excluded from regulation pursuant to subsection (a)(1) ~~of this Section~~ becomes a hazardous waste when any of the following events occur:

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

2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D of this Part is first added to the solid waste.

3) In the case of any other waste (including a waste mixture), when the waste exhibits any of the characteristics identified in Subpart C of this Part.

c) Unless and until it meets the criteria of subsection (e) ~~of this Section~~, a hazardous waste will remain a hazardous waste.

BOARD NOTE: This subsection (c) corresponds with 40 CFR 261.3(c)(1). The Board has codified 40 CFR 261.3(c)(2) at subsection (e) ~~of this Section~~.

d) Any solid waste described in subsection (e) ~~of this Section~~ is not a hazardous waste if it meets the following criteria:

1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C of this Part. (However, wastes that exhibit a characteristic at the point of generation may still be subject to 35 Ill. Adm. Code 728, even if they no longer exhibit a characteristic at the point of land disposal.)

2) In the case of a waste that is a listed waste pursuant to Subpart D of this Part, a waste that contains a waste listed pursuant to Subpart D of this Part, or a waste that is derived from a waste listed in Subpart D of this Part, it also has been excluded from subsection (e) ~~of this Section~~ pursuant to 35 Ill. Adm. Code 720.120 and 720.122.

e) Specific inclusions and exclusions.

1) Except as otherwise provided in subsection (e)(2), (g), or (h) ~~of this Section~~, any solid waste generated from the treatment, storage, or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust, or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and hence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)

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

A) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332).

B) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(C) and (a)(3)(D).

C) Nonwastewater residues, such as slag, resulting from high temperature metal recovery (HTMR) processing of K061, K062, or F006 waste in the units identified in this subsection (e)(2) that are disposed of in non-hazardous waste units, provided that these residues meet the generic exclusion levels identified in the tables in this subsection (e)(2)(C) for all constituents and the residues exhibit no characteristics of hazardous waste. The types of units identified are rotary kilns, flame reactors, electric furnaces, plasma arc furnaces, slag reactors, rotary hearth furnace/electric furnace combinations, or the following types of industrial furnaces (as defined in 35 Ill. Adm. Code 720.110): blast furnaces; smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces); and other furnaces designated by the Agency pursuant to that definition.

i) Testing requirements must be incorporated in a facility's waste analysis plan or a generator's self-implementing waste analysis plan; at a minimum, composite samples of residues must be collected and analyzed quarterly and when the process or operation generating the waste changes.

ii) Persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements. The generic exclusion levels are the following:

Generic exclusion levels for K061 and K062 nonwastewater HTMR residues:

Constituent	Maximum for any single composite sample (mg/ℓ)
Antimony	0.10
Arsenic	0.50
Barium	7.6
Beryllium	0.010
Cadmium	0.050
Chromium (total)	0.33
Lead	0.15

Mercury	0.009
Nickel	1.0
Selenium	0.16
Silver	0.30
Thallium	0.020
Vanadium	1.26
Zinc	70

Generic exclusion levels for F006 nonwastewater HTMR residues:

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

iii) A one-time notification and certification must be placed in the facility's files and sent to the Agency (or, for out-of-State shipments, to the appropriate Regional Administrator of USEPA or the state agency authorized to implement federal 40 CFR 268 requirements) for K061, K062, or F006 HTMR residues that meet the generic exclusion levels for all constituents, which do not exhibit any characteristics, and which are sent to RCRA Subtitle D (municipal solid waste landfill) units. The notification and certification that is placed in the generator's or treater's files must be updated if the process or operation generating the waste changes or if the RCRA Subtitle D unit receiving the waste changes. However, the generator or treater need only notify the Agency on an annual basis if such changes occur. Such

notification and certification should be sent to the Agency by the end of the calendar year, but no later than December 31. The notification must include the following information: the name and address of the non-hazardous waste management unit receiving the waste shipment; the USEPA hazardous waste number and treatability group at the initial point of generation; and the treatment standards applicable to the waste at the initial point of generation. The certification must be signed by an authorized representative and must state as follows:

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

D) Biological treatment sludge from the treatment of one of the following wastes listed in Section 721.132: organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K156) and wastewaters from the production of carbamates and carbamoyl oximes (USEPA hazardous waste number K157).

E) Catalyst inert support media separated from one of the following wastes listed in Section 721.132: spent hydrotreating catalyst (USEPA hazardous waste number K171) and spent hydrorefining catalyst (USEPA hazardous waste number K172).

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

f) Notwithstanding subsections (a) through (e) ~~of this Section~~ and provided the debris, as defined in 35 Ill. Adm. Code 728.102, does not exhibit a characteristic identified at Subpart C of this Part, the following materials are not subject to regulation under 35 Ill. Adm. Code 702, 703, 720, 721 to 726, or 728:

1) Hazardous debris as defined in 35 Ill. Adm. Code 728.102 that has been

treated using one of the required extraction or destruction technologies specified in Table F to 35 Ill. Adm. Code 728; persons claiming this exclusion in an enforcement action will have the burden of proving by clear and convincing evidence that the material meets all of the exclusion requirements; or

2) Debris, as defined in 35 Ill. Adm. Code 728.102, that the Agency, considering the extent of contamination, has determined is no longer contaminated with hazardous waste.

g) Exclusion of certain wastes listed in Subpart D of this Part solely because they exhibit a characteristic of ignitability, corrosivity, or reactivity.

1) A hazardous waste that is listed in Subpart D of this Part solely because it exhibits one or more characteristics of ignitability, as defined under Section 721.121; corrosivity, as defined under Section 721.122; or reactivity, as defined under Section 721.123 is not a hazardous waste if the waste no longer exhibits any characteristic of hazardous waste identified in Subpart C of this Part.

2) The exclusion described in subsection (g)(1) ~~of this Section~~ also pertains to the following:

A) Any mixture of a solid waste and a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D) ~~of this Section~~; and

B) Any solid waste generated from treating, storing, or disposing of a hazardous waste listed in Subpart D of this Part solely because it exhibits the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (e)(1) ~~of this Section~~.

3) Wastes excluded pursuant to this subsection (g) are subject to 35 Ill. Adm. Code 728 (as applicable), even if they no longer exhibit a characteristic at the point of land disposal.

4) Any mixture of a solid waste excluded from regulation in Section 721.104(b)(7) and a hazardous waste listed in Subpart D of this Part solely because the listed hazardous waste exhibits one or more of the characteristics of ignitability, corrosivity, or reactivity, as regulated under subsection (a)(2)(D), is not a hazardous waste if the mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C of

this Part for which USEPA listed the hazardous waste listed in Subpart D of this Part.

h) Eligible radioactive mixed waste.

1) Hazardous waste containing radioactive waste is no longer a hazardous waste when it meets the eligibility criteria and conditions of Subpart N of 35 Ill. Adm. Code 726 (i.e., it is "eligible radioactive mixed waste").

2) The exemption described in subsection (h)(1) ~~of this Section~~ also pertains to the following:

A) Any mixture of a solid waste and an eligible radioactive mixed waste; and

B) Any solid waste generated from treating, storing, or disposing of an eligible radioactive mixed waste.

3) Waste exempted pursuant to this subsection (h) must meet the eligibility criteria and specified conditions in 35 Ill. Adm. Code 726.325 and 726.330 (for storage and treatment) and in 35 Ill. Adm. Code 726.410 and 726.415 (for transportation and disposal). Waste that fails to satisfy these eligibility criteria and conditions is regulated as hazardous waste.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.104 Exclusions

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

1) Sewage.

A) Domestic sewage (untreated sanitary wastes that pass through a sewer system); and

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

2) Industrial wastewater discharges that are point source discharges with National Pollutant Discharge Elimination System (NPDES) permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection

Act [415 ILCS 5/12(f)] and 35 Ill. Adm. Code 309.

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

3) Irrigation return flows.

4) Source, by-product, or special nuclear material, as defined by section 11 of the Atomic Energy Act of 1954, as amended (42 USC 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

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

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

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

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

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

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

C) The secondary materials are never accumulated in such tanks for over 12 months without being reclaimed; and

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

9) Wood preserving wastes.

A) Spent wood preserving solutions that have been used and which

are reclaimed and reused for their original intended purpose;

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

C) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in subsections (a)(9)(A) and (a)(9)(B) ~~of this Section~~, so long as they meet all of the following conditions:

i) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water-borne plants in the production process for their original intended purpose;

ii) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or groundwater or both;

iii) Any unit used to manage wastewaters or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases;

iv) Any drip pad used to manage the wastewaters or spent wood preserving solutions prior to reuse complies with the standards in Subpart W of 35 Ill. Adm. Code 725, regardless of whether the plant generates a total of less than 100 kg/month of hazardous waste; and

v) Prior to operating pursuant to this exclusion, the plant owner or operator prepares a one-time notification to the Agency stating that the plant intends to claim the exclusion, giving the date on which the plant intends to begin operating under the exclusion, and containing the following language: "I have read the applicable regulation establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand it requires me to comply at all times with the conditions set out in the regulation." The plant must maintain a copy of that document in its on-site records until closure of the facility. The exclusion applies only so long as the plant meets all of the conditions. If the plant goes out of compliance with any condition, it may apply to the Agency

for reinstatement. The Agency must reinstate the exclusion in writing if it finds that the plant has returned to compliance with all conditions and that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. The applicant under this subsection (a)(9)(C)(v) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act [415 ILCS 5/40].

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

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

12) Certain oil-bearing hazardous secondary materials and recovered oil, as follows:

A) Oil-bearing hazardous secondary materials (i.e., sludges, by-products, or spent materials) that are generated at a petroleum refinery (standard industrial classification (SIC) code 2911) and are inserted into the petroleum refining process (SIC code 2911: including, but not limited to, distillation, catalytic cracking, fractionation, ~~gasification (as defined in 35 Ill. Adm. Code 720.110),~~ or thermal cracking units (i.e., cokers)), unless the material is placed on the land, or speculatively accumulated before being so recycled. Materials inserted into thermal cracking units are excluded under this subsection (a)(12), provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the

same petroleum refinery where they are generated or sent directly to another petroleum refinery and still be excluded under this provision. Except as provided in subsection (a)(12)(B) ~~of this Section~~, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this Section. Residuals generated from processing or recycling materials excluded under this subsection (a)(12)(A), where such materials as generated would have otherwise met a listing under Subpart D of this Part, are designated as USEPA hazardous waste number F037 listed wastes when disposed of or intended for disposal.

B) Recovered oil that is recycled in the same manner and with the same conditions as described in subsection (a)(12)(A) ~~of this Section~~. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in Subpart D of this Part; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include used oil, as defined in 35 Ill. Adm. Code 739.100.

13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

14) Shredded circuit boards being recycled, provided that they meet the following conditions:

A) The circuit boards are stored in containers sufficient to prevent a release to the environment prior to recovery; and

B) The circuit boards are free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries.

15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with federal Clean Air Act regulation 40 CFR 63.446(e). The exemption applies only to combustion at the mill generating the condensates.

16) <u>This subsection (a)(16) corresponds with 40 CFR 261.4(a)(16), marked</u>

"reserved" by USEPA. This statement maintains structural consistency with the federal regulations. ~~Comparable fuels or comparable syngas fuels that meet the requirements of Section 721.138.~~

17) Spent materials (as defined in Section 721.101) (other than hazardous wastes listed in Subpart D of this Part) generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that the following is true:

A) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values;

B) The spent material is not accumulated speculatively;

C) Except as provided in subsection (a)(17)(D) ~~of this Section~~, the spent material is stored in tanks, containers, or buildings that meet the following minimum integrity standards: a building must be an engineered structure with a floor, walls, and a roof all of which are made of non-earthen materials providing structural support (except that smelter buildings may have partially earthen floors, provided that the spent material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation; a tank must be free standing, not be a surface impoundment (as defined in 35 Ill. Adm. Code 720.110), and be manufactured of a material suitable for containment of its contents; a container must be free standing and be manufactured of a material suitable for containment of its contents. If a tank or container contains any particulate that may be subject to wind dispersal, the owner or operator must operate the unit in a manner that controls fugitive dust. A tank, container, or building must be designed, constructed, and operated to prevent significant releases to the environment of these materials.

D) The Agency must allow by permit that solid mineral processing spent materials only may be placed on pads, rather than in tanks, containers, or buildings if the facility owner or operator can demonstrate the following: the solid mineral processing secondary materials do not contain any free liquid; the pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment; and the pads provide the same degree of containment afforded by the non-RCRA tanks, containers, and buildings eligible for exclusion.

i) The Agency must also consider whether storage on pads poses the potential for significant releases via groundwater, surface water, and air exposure pathways. Factors to be considered for assessing the groundwater, surface water, and air exposure pathways must include the following: the volume and physical and chemical properties of the spent material, including its potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.

ii) Pads must meet the following minimum standards: they must be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material; they must be capable of withstanding physical stresses associated with placement and removal; they must have runon and runoff controls; they must be operated in a manner that controls fugitive dust; and they must have integrity assurance through inspections and maintenance programs.

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

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

E) The owner or operator provides a notice to the Agency, providing the following information: the types of materials to be recycled, the type and location of the storage units and recycling processes, and the annual quantities expected to be placed in land-based~~non-land-based~~ units. This notification must be updated when there is a change in the type of materials recycled or the location of the recycling process.

F) For purposes of subsection (b)(7) ~~of this Section~~, mineral

processing spent materials must be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of solid waste.

18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided that both of the following conditions are true of the oil:

A) The oil is hazardous only because it exhibits the characteristic of ignitability (as defined in Section 721.121) or toxicity for benzene (Section 721.124, USEPA hazardous waste code D018);

B) The oil generated by the organic chemical manufacturing facility is not placed on the land, or speculatively accumulated before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility for which all of the following is true: its primary SIC code is 2869, but its operations may also include SIC codes 2821, 2822, and 2865; it is physically co-located with a petroleum refinery; and the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed from secondary materials (i.e., sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid, unless the material is placed on the land or accumulated speculatively, as defined in Section 721.101(c).

20) Hazardous secondary materials used to make zinc fertilizers, provided that the following conditions are satisfied:

A) Hazardous secondary materials used to make zinc micronutrient fertilizers must not be accumulated speculatively, as defined in Section 721.101(c)(8).

B) A generator or intermediate handler of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers must fulfill the following conditions:

i) It must submit a one-time notice to the Agency that contains the name, address, and USEPA identification number of the generator or intermediate handler facility, that provides a brief description of the secondary material that will be subject to the exclusion, and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

ii) It must store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose must be an engineered structure made of non-earthen materials that provide structural support, and it must have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. A tank used for this purpose must be structurally sound and, if outdoors, it must have a roof or cover that prevents contact with wind and rain. A container used for this purpose must be kept closed, except when it is necessary to add or remove material, and it must be in sound condition. Containers that are stored outdoors must be managed within storage areas that fulfill the conditions of subsection (a)(20)(F) ~~of this Section~~:

iii) With each off-site shipment of excluded hazardous secondary materials, it must provide written notice to the receiving facility that the material is subject to the conditions of this subsection (a)(20).

iv) It must maintain records at the generator's or intermediate handler's facility for no less than three years of all shipments of excluded hazardous secondary materials. For each shipment these records must, at a minimum, contain the information specified in subsection (a)(20)(G) ~~of this Section~~.

C) A manufacturer of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials must fulfill the following conditions:

i) It must store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in subsection (a)(20)(B)(ii) ~~of this Section~~.

ii) It must submit a one-time notification to the Agency that, at a minimum, specifies the name, address, and USEPA identification number of the manufacturing facility and which identifies when the manufacturer intends to begin managing excluded zinc-bearing hazardous secondary materials under the conditions specified in this subsection (a)(20).

iii) It must maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which must at a minimum identify for each shipment the name and address of the generating facility, the name of transporter, and the date on which the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

iv) It must submit an annual report to the Agency that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial processes from which the hazardous secondary materials were generated.

D) Nothing in this Section preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person who generates a solid waste to determine if that waste is a hazardous waste.

E) Interim status and permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submission of the one-time notice described in subsection (a)(20)(B)(i) ~~of this Section~~, and that afterward will be used only to store hazardous

secondary materials excluded under this subsection (a)(20), are not subject to the closure requirements of 35 Ill. Adm. Code 724 and 725.

F) A container used to store excluded secondary material must fulfill the following conditions:

i) It must have containment structures or systems sufficiently impervious to contain leaks, spills, and accumulated precipitation;

ii) It must provide for effective drainage and removal of leaks, spills, and accumulated precipitation; and

iii) It must prevent run-on into the containment system.

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

G) Required records of shipments of excluded hazardous secondary materials must, at a minimum, contain the following information:

i) The name of the transporter and date of the shipment;

ii) The name and address of the facility that received the excluded material, along with documentation confirming receipt of the shipment; and

iii) The type and quantity of excluded secondary material in each shipment.

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

21) Zinc fertilizers made from hazardous wastes or hazardous secondary materials that are excluded under subsection (a)(20)~~ of this Section~~, provided that the following conditions are fulfilled:

A) The fertilizers meet the following contaminant limits:

i) For metal contaminants:

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

ii) For dioxin contaminants, the fertilizer must contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).

B) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less frequently than once every six months, and for dioxins no less frequently than once every 12 months. Testing must also be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. It is the responsibility of the manufacturer to ensure that the sampling and analysis are unbiased, precise, and representative of the products introduced into commerce.

C) The manufacturer maintains for no less than three years records of all sampling and analyses performed for purposes of determining compliance with subsection (a)(21)(B)~~ of this Section~~. Such records must at a minimum include the following:

i) The dates and times product samples were taken, and the dates the samples were analyzed;

ii) The names and qualifications of the persons taking the samples;

iii) A description of the methods and equipment used to take the samples;

iv) The name and address of the laboratory facility at which analyses of the samples were performed;

v) A description of the analytical methods used, including any cleanup and sample preparation methods; and

vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in this subsection (a)(21).

22) Used CRTs.

A) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste within the United States, unless they are disposed of or speculatively accumulated, as defined in Section 721.101(c)(8), by a CRT collector or glass processor.

B) Used, intact CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste when exported for recycling, provided that they meet the requirements of Section 721.140.

C) Used, broken CRTs, as defined in 35 Ill. Adm. Code 720.110, are not solid waste, provided that they meet the requirements of Section 721.139.

D) Glass removed from CRTs is not a solid waste provided that it meets the requirements of Section 721.139(c).

23) Hazardous secondary materials reclaimed under the control of the generator~~managed in land-based units~~. Hazardous secondary material generated and legitimately reclaimed within the United States or its territories and under the control of the generator, provided that the material complies with subsections (a)(23)(A) and (a)(23)(B)~~managed in land-based units, as defined in 35 Ill. Adm. Code 720.110, is not a solid waste if the following conditions are fulfilled with regard to the material~~:

A) Excluded hazardous secondary materials.

i) The hazardous secondary material is generated and reclaimed at the generating facility. (For purposes of this

subsection (a)(23)(A)(i), "generating facility" means all contiguous property owned, leased, or otherwise controlled by the hazardous secondary material generator.);

ii) The hazardous secondary material is generated and reclaimed at different facilities, if the reclaiming facility is controlled by the generator or if both the generating facility and the reclaiming facility are controlled by a person as defined in 35 Ill. Adm. Code 720.110, and if the generator provides one of the following certifications:

"On behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], which is controlled by [insert generator facility name] and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material."

or

"On behalf of [insert generator facility name], I certify that this facility will send the indicated hazardous secondary material to [insert reclaimer facility name], that both facilities are under common control, and that [insert name of either facility] has acknowledged full responsibility for the safe management of the hazardous secondary material."

For purposes of this subsection (a)(23)(A)(ii), "control" means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person, as defined in 35 Ill. Adm. Code 720.110, cannot be deemed to "control" such facilities. The generating and receiving facilities must both maintain at their facilities for no less than three years records of hazardous secondary materials sent or received under this exclusion. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped

or received under the exclusion. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of USDOT shipping papers, or electronic confirmations); or

iii) The hazardous secondary material is generated pursuant to a written contract between a tolling contractor and a toll manufacturer and is reclaimed by the tolling contractor, if the tolling contractor certifies as follows:

> "On behalf of [insert tolling contractor name], I certify that [insert tolling contractor name] has a written contract with [insert toll manufacturer name] to manufacture [insert name of product or intermediate] which is made from specified unused materials, and that [insert tolling contractor name] will reclaim the hazardous secondary materials generated during this manufacture. On behalf of [insert tolling contractor name], I also certify that [insert tolling contractor name] retains ownership of, and responsibility for, the hazardous secondary materials that are generated during the course of the manufacture, including any releases of hazardous secondary materials that occur during the manufacturing process."

The tolling contractor must maintain at its facility for no less than three years records of hazardous secondary materials received pursuant to its written contract with the tolling manufacturer, and the tolling manufacturer must maintain at its facility for no less than three years records of hazardous secondary materials shipped pursuant to its written contract with the tolling contractor. In both cases, the records must contain the name of the transporter, the date of the shipment, and the type and quantity of the hazardous secondary material shipped or received pursuant to the written contract. These requirements may be satisfied by routine business records (e.g., financial records, bills of lading, copies of USDOT shipping papers, or electronic confirmations). For purposes of this subsection (a)(23)(A)(ii), "tolling contractor" means a person who arranges for the production of a product or intermediate made from specified unused materials through a written

contract with a toll manufacturer. "Toll manufacturer" means a person who produces a product or intermediate made from specified unused materials pursuant to a written contract with a tolling contractor.

B) Management of hazardous secondary materials.

iA) The hazardous secondary material is contained, as defined in 35 Ill. Adm. Code 720.110. A hazardous secondary material released to the environment is discarded material and a solid waste unless it is immediately recovered for the purpose of reclamation. Hazardous secondary material managed in a unit with leaks or other continuing or intermittent unpermitted releases is discarded material and a solid waste.;

~~B)~~ ~~The material is a hazardous secondary material generated and reclaimed under the control of the generator, as defined in 35 Ill. Adm. Code 720.110;~~

iiC) The hazardous secondary material is not speculatively accumulated, as defined in Section 721.101(c)(8);

iii) Notice is provided, as required by 35 Ill. Adm. Code 720.142.

ivD) The hazardous secondary material is not otherwise subject to material-specific management conditions under subsection (a) ~~of this Section~~ when reclaimed, and it is not a spent lead acid battery (see 35 Ill. Adm. Code 726.180 and 733.102)~~, and it does not meet either of the listing descriptions for K171 or K172 waste in Section 721.132~~;

v) Persons performing the recycling of hazardous secondary materials under this exclusion must maintain documentation of their legitimacy determination on-site. Documentation must be a written description of how the recycling meets all four factors in 35 Ill. Adm. Code 720.143(a). Documentation must be maintained for three years after the recycling operation has ceased.

vi) The emergency preparedness and response requirements found in Subpart M of this Part are met.

~~E)~~ ~~The reclamation of the material is legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143; and~~

~~F)~~ ~~In addition, a person claiming the exclusion under this subsection (a)(23) must provide notification of regulated waste activity, as required by 35 Ill. Adm. Code 720.142. (For hazardous secondary material managed in a non-land-based unit, see Section 721.102(a)(2)(B)).~~

24) Hazardous secondary materials transferred for off-site recycling. Hazardous secondary material that is generated and then transferred to a verified reclamation facility~~another person~~ for the purpose of reclamation is not a solid waste if the management of the material fulfills the conditions of subsections (a)(24)(A) through (a)(24)(G) ~~of this Section~~:

A) The hazardous secondary material must not be speculatively accumulated, as defined in Section 721.101(c)(8)~~)~~.

B) No person or facility other than the hazardous secondary material generator, the transporter, an intermediate facility, or a reclaimer manages the material; the hazardous secondary material must not be stored for more than 10 days at a transfer facility, as defined in Section 721.110; and the hazardous secondary material must be packaged according to applicable USDOT regulations codified as 49 CFR 173, 178, and 179, incorporated by reference in 35 Ill. Adm. Code 720.111, while in transport.

C) The hazardous secondary material must not otherwise be subject to material-specific management conditions pursuant to other provisions of this subsection (a) when reclaimed; the hazardous secondary material must not be a spent lead-acid battery (see 35 Ill. Adm. Code 726.180 and 733.102)~~; and the material must not fulfill either of the listing descriptions for K171 or K172 waste in Section 721.132~~.

D) The reclamation of the hazardous secondary material must be legitimate, as determined pursuant to 35 Ill. Adm. Code 720.143.

E) The hazardous secondary material generator must satisfy each of the following conditions:

i) The hazardous secondary material must be contained as defined in 35 Ill. Adm. Code 720.110. A hazardous secondary material released to the environment is discarded and a solid waste unless it is immediately recovered for the purpose of recycling. Hazardous secondary material managed in a unit that leaks or that otherwise continuously releases hazardous secondary material is discarded material and a solid waste.

ii) The hazardous secondary material generator must arrange~~This subsection (a)(24)(E)(ii) applies when non-RCRA management of hazardous secondary material will occur at a reclamation facility or transfer facility. For the purposes of this subsection (a)(24), "non-Subtitle C management" is management of the hazardous secondary material that is not addressed under a RCRA Part B permit or under the interim status facility standards (of 35 Ill. Adm. Code 725 or similar regulations authorized by USEPA as equivalent to 40 CFR 265). Prior to arranging~~ for transport of hazardous secondary materials to a verified reclamation facility in the United States. A "verified reclamation facility" is a facility that has been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d), or a reclamation facility when the management of the hazardous secondary material is regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727~~ where non-Subtitle C management will occur, the hazardous secondary material generator must make reasonable efforts to ensure that the reclaimer intends to properly and legitimately reclaim the hazardous secondary material and not discard it, and that the reclaimer will manage the hazardous secondary material in a manner that is protective of human health and the environment~~. If the hazardous secondary material will pass through an intermediate facility, the facility must be a "verified intermediate facility" that has been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d) or~~ where non-RCRA~~ management of the hazardous secondary materials at that facility must be regulated by any of 35 Ill. Adm. Code 724, 725, 726, or 727~~will occur~~, and the hazardous secondary material generator must make contractual arrangements with the intermediate facility to ensure that the hazardous secondary material is sent to the reclamation facility identified by the

hazardous secondary material generator~~, and the hazardous secondary material generator must perform reasonable efforts to ensure that the intermediate facility will manage the hazardous secondary material in a manner that is protective of human health and the environment. Reasonable efforts must be repeated at a minimum of once every three years for the hazardous secondary material generator to claim the exclusion of this subsection (a)(24) and to send the hazardous secondary materials to a reclaimer and any intermediate facility. In making these reasonable efforts, the generator may use any credible evidence available, including information gathered by the hazardous secondary material generator, provided by the reclaimer or intermediate facility, or provided by a third party. The hazardous secondary material generator must make the series of affirmative determinations set forth in subsection (a)(24)(H) of this Section for each reclamation facility and intermediate facility that will manage its waste~~.

~~BOARD NOTE: Corresponding 40 CFR 261.4(a)(24)(v)(B) makes it clear that USEPA intends that the generator undertake this determination for each reclaimer that will manage its hazardous secondary material. The Board added a definition of "non-Subtitle C management" and substituted this term for the language "management of the hazardous secondary materials is not addressed under a RCRA Part B permit or interim status standards." Although the Board shifted the language for enhanced readability, the Board intends no shift in meaning. The Board moved the material from 40 CFR 261.4(a)(24)(v)(B)(1) through (a)(24)(v)(B)(5) to appear as 35 Ill. Adm. Code 721.104(a)(24)(H)(i) through (a)(24)(H)(v). This movement allowed compliance with codification requirements relating to the maximum permissible indent level.~~

iii) The hazardous secondary material generator must maintain certain records at the generating facility for a minimum of three years that document every off-site shipment of hazardous secondary materials. The documentation for each shipment must, at a minimum, include the following information about the shipment: the name of the transporter and date of the shipment; the name and address

of each reclaimer and intermediate facility to which the hazardous secondary material was sent; and the type and quantity of hazardous secondary material in the shipment.

BOARD NOTE: The Board combined and moved the shipping documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(C) and (a)(24)(v)(C)(1) through (a)(24)(v)(C)(3) to this single subsection (a)(24)(E)(iii). This combination allowed compliance with codification requirements relating to the maximum permissible indent level.~~The hazardous secondary material generator must execute a certification statement that includes the following language, together with the printed name and official title of an authorized representative of the hazardous secondary material generator, the authorized representative's signature, and the date signed:~~

> ~~"I hereby certify in good faith and to the best of my knowledge that, prior to arranging for transport of excluded hazardous secondary materials to [insert the name of each reclamation facility and any intermediate facility that will manage the materials], reasonable efforts were made in accordance with 35 Ill. Adm. Code 721.104(a)(24)(E)(ii) (and corresponding 40 CFR 261.4(a)(24)(v)(B)) to ensure that the hazardous secondary materials would be recycled legitimately and would be otherwise managed in a manner that is protective of human health and the environment, and that such efforts were based on current and accurate information."~~

~~BOARD NOTE: Corresponding 40 CFR 261.4(a)(24)(v)(C) combines the requirements for records retention and availability for inspection with the requirement for certification. The Board combined the certification requirements from 40 CFR 261.4(a)(24)(v)(C), (a)(24)(v)(C)(1), and (a)(24)(v)(C)(2) in this single subsection (a)(24)(E)(iii). This combination allowed compliance with codification requirements relating to the maximum permissible indent level. The Board moved the records retention and availability for inspection~~

~~requirements from 40 CFR 261.4(a)(24)(v)(C) to subsection (a)(24)(E)(iv) of this Section. This forced renumbering 40 CFR 261.4(a)(24)(v)(D) and (a)(24)(v)(E) as subsections (a)(24)(E)(v) and (a)(24)(E)(vi) of this Section. Although the Board shifted the language for enhanced readability, the Board intends no shift in meaning.~~

~~iv)~~ ~~The hazardous secondary material generator must maintain the following records for a minimum of three years: documentation and certification that the generator made reasonable efforts, prior to transferring hazardous secondary material, for each reclamation facility and, if applicable, intermediate facility where non-Subtitle C management of the hazardous secondary materials will occur. Documentation and certification must be made available, within 72 hours, or within any longer period of time specified by the Agency, upon request by the Agency.~~

~~BOARD NOTE: The Board moved the records retention and availability for inspection requirements of corresponding 40 CFR 261.4(a)(24)(v)(C) to this subsection (a)(24)(E)(iv).~~

~~v)~~ ~~The hazardous secondary material generator must maintain certain records at the generating facility for a minimum of three years that document every off-site shipment of hazardous secondary materials. The documentation for each shipment must, at a minimum, include the following information about the shipment: the name of the transporter and date of the shipment; the name and address of each reclaimer and intermediate facility to which the hazardous secondary material was sent; and the type and quantity of hazardous secondary material in the shipment.~~

~~BOARD NOTE: The Board combined and moved the shipping documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(D) and (a)(24)(v)(D)(1) through (a)(24)(v)(D)(3) to this single subsection (a)(24)(E)(v). This combination allowed compliance with codification requirements relating to the maximum permissible indent level.~~

ivvi) The hazardous secondary material generator must maintain at the generating facility, for a minimum of three years, for every off-site shipment of hazardous secondary materials, confirmations of receipt from each reclaimer and intermediate facility to which its hazardous secondary materials were sent. Each confirmation of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received, and the date on which the facility received the hazardous secondary materials. The generator may satisfy this requirement using routine business records (e.g., financial records, bills of lading, copies of USDOTDOT shipping papers, or electronic confirmations of receipt).

BOARD NOTE: The Board moved the shipment confirmation documentation and records retention requirements of corresponding 40 CFR 261.4(a)(24)(v)(E) to this subsection (a)(24)(E)(vi).

v) The hazardous secondary material generator must comply with the emergency preparedness and response conditions in Subpart M of this Part.

F) The reclaimer of hazardous secondary material or any intermediate facility, as defined in 35 Ill. Adm. Code 720.110, that manages material which is excluded from regulation pursuant to this subsection (a)(24) must satisfy all of the following conditions:

i) The owner or operator of a reclamation or intermediate facility must maintain at its facility for a minimum of three years records of every shipment of hazardous secondary material that the facility received and, if applicable, for every shipment of hazardous secondary material that the facility received and subsequently sent off-site from the facility for further reclamation. For each shipment, these records must, at a minimum, contain the following information: the name of the transporter and date of the shipment; the name and address of the hazardous secondary material generator and, if applicable, the name and address of the reclaimer or intermediate facility from which the facility received the hazardous secondary materials; the type and quantity of hazardous secondary material in the

shipment; and, for hazardous secondary materials that the facility subsequently transferred off-site for further reclamation after receiving it, the name and address of the (subsequent) reclaimer and any intermediate facility to which the facility sent the hazardous secondary material.

BOARD NOTE: The Board combined the provisions from 40 CFR 261.4(a)(24)(vi)(A) and (a)(24)(vi)(A)(1) through (a)(24)(vi)(A)(3) that enumerate the required information into this single subsection (a)(24)(F)(i). This combination allowed compliance with codification requirements relating to the maximum permissible indent level.

ii) The intermediate facility must send the hazardous secondary material to the reclaimers designated by the generator of the hazardous secondary materials.

iii) The reclaimer or intermediate facility that receives a shipment of hazardous secondary material must send a confirmation of receipt to the hazardous secondary material generator for each off-site shipment of hazardous secondary materials. A confirmation of receipt must include the name and address of the reclaimer (or intermediate facility), the type and quantity of the hazardous secondary materials received, and the date on which the facility received the hazardous secondary materials. The reclaimer or intermediate facility may satisfy this requirement using routine business records (e.g., financial records, bills of lading, copies of USDOT~~DOT~~ shipping papers, or electronic confirmations of receipt).

iv) The reclaimer or intermediate facility must manage the hazardous secondary material in a manner that is at least as protective of human health and the environment as that employed for analogous raw material, and the material must be contained. An "analogous raw material" is a raw material for which the hazardous secondary material substitutes and that serves the same function and has similar physical and chemical properties as the hazardous secondary material.

v) A reclaimer of hazardous secondary materials must manage any residuals that are generated from its reclamation

processes in a manner that is protective of human health and the environment. If any residuals of the reclamation process exhibit a characteristic of hazardous waste, as defined in Subpart C of this Part, or if the residuals themselves are specifically listed as hazardous waste in Subpart D of this Part, those residuals are hazardous waste. The reclaimer and any subsequent persons must manage that hazardous waste in accordance with the applicable requirements of 35 Ill. Adm. Code: Subtitle G or similar regulations authorized by USEPA as equivalent to 40 CFR 260 through 272.

vi) The reclaimer and intermediate facility must have financial assurance that satisfies the requirements of Subpart H of this Part.

vii) The reclaimer and intermediate facility must have been granted a solid waste determination pursuant to 35 Ill. Adm. Code 720.131(d), or have a RCRA Part B permit or be subject to interim status standards that address the management of the hazardous secondary materials; and

G) Any person claiming the exclusion for recycled hazardous secondary material pursuant to this subsection (a)(24) must provide notification as required by 35 Ill. Adm. Code 720.142.

~~H)~~ ~~For the purposes of subsection (a)(24)(E)(ii) of this Section, the hazardous secondary material generator must affirmatively determine that each of the following conditions is true for each reclamation facility and any intermediate facility that will manage the generator's hazardous secondary material:~~

~~i)~~ ~~Available information indicates that the reclamation process is legitimate recycling, as determined pursuant to 35 Ill. Adm. Code 720.143. In making this determination, the hazardous secondary material generator may rely on its existing knowledge of the physical and chemical properties of the hazardous secondary material, as well as on information from other sources (e.g., the reclamation facility, audit reports, etc.) about the reclamation process. (By making this determination, the hazardous secondary material generator has also satisfied the requirement in 35~~

~~Ill. Adm. Code 720.143(a) that the generator demonstrate that the recycling is legitimate).~~

~~ii)~~ ~~Publicly available information indicates that each reclamation facility and any intermediate facility that is used by the hazardous secondary material generator has submitted the notification required by 35 Ill. Adm. Code 720.142, and these facilities have submitted the required proofs of financial assurance as required by the applicable of Section 721.243(a)(1), (b)(1), (c)(1), (d)(1), (e)(3), and (g) and notification of financial assurance pursuant to 35 Ill. Adm. Code 720.142(a)(5). In making this dual determination, the hazardous secondary material generator may rely on the available information documenting the reclamation facility's and any intermediate facility's compliance with the notification requirements pursuant to 35 Ill. Adm. Code 720.142, including the requirement in 35 Ill. Adm. Code 720.142(a)(5) to notify the Agency whether the reclaimer or intermediate facility has financial assurance.~~

~~iii)~~ ~~Publicly available information indicates that each reclamation facility and any intermediate facility that is used by the hazardous secondary material generator has not had any formal enforcement actions taken against the facility within the previous three years for violations of the RCRA hazardous waste regulations, and the facility has not been classified as a significant non-complier (SNC) with RCRA Subtitle C requirements. In making this determination, the hazardous secondary material generator may rely on the publicly available information from USEPA, the Agency, or the Office of the Attorney General. If the reclamation facility or any intermediate facility that is used by the hazardous secondary material generator has had a formal enforcement action taken against the facility within the previous three years for violations of the RCRA hazardous waste regulations, or if the facility has been classified as a SNC with RCRA Subtitle C requirements, the hazardous secondary material generator must have credible evidence that the facility will manage the hazardous secondary materials properly. In making this determination, the hazardous secondary material generator can obtain additional information from USEPA, the~~

~~Agency, the Office of the Attorney General, or the facility itself which indicates that the facility has addressed the violations, taken remedial steps to address the violations and prevent future violations, or that the violations are not relevant to the proper management of the generator's hazardous secondary materials.~~

~~BOARD NOTE: USEPA or a state may make a formalized determination that a facility is a SNC (pronounced "snick") pursuant to USEPA's "Hazardous Waste Civil Enforcement Response Policy" (most recent version: December 2003, available from USEPA, Envirofacts Data Warehouse (www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf)). USEPA operates the online RCRAInfo database (www.epa.gov/enviro/html/rcris/) from which interested persons can learn whether a facility has significant federal enforcement action against it, or if it is a SNC.~~

~~iv)~~ ~~Available information indicates that the reclamation facility and any intermediate facility used by the hazardous secondary material generator have the equipment and trained personnel to safely recycle the hazardous secondary material. In making this determination, the generator may rely on a description made by the reclamation facility or an independent third party of the equipment and trained personnel that the facility will use to manage and recycle the generator's hazardous secondary material.~~

~~v)~~ ~~If residuals are generated from the reclamation of the excluded hazardous secondary materials, the reclamation facility has the permits required (if any) to manage the residuals. If the reclamation facility does not have required permits, the facility has a contract with an appropriately permitted facility to dispose of the residuals. If the reclamation facility does not have required permits or a contract with a permitted facility, the hazardous secondary material generator has credible evidence that the residuals will be managed in a manner that is protective of human health and the environment. In making these determinations, the hazardous secondary material generator may rely on publicly available information from USEPA or~~

~~the Agency, or on information provided by the facility itself.~~

~~BOARD NOTE: The Board moved 40 CFR 261.4(a)(24)(v)(B)(1) through (a)(24)(v)(B)(5) to appear as 35 Ill. Adm. Code 721.104(a)(24)(H)(i) through (a)(24)(H)(v), which set forth the determinations mandated for the purposes of subsection (a)(24)(E)(ii). This movement allowed compliance with codification requirements relating to the maximum permissible indent level.~~

25) This subsection (a)(25) corresponds with 40 CFR 261.4(a)(25), which USEPA removed and marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.~~Hazardous secondary materials exported for recycling. Hazardous secondary material that is exported from the United States and reclaimed at a reclamation facility located in a foreign country is not a solid waste, so long as the hazardous secondary material generator complies with the applicable requirements of subsections (a)(24)(A) through (a)(24)(E) of this Section, except that the requirements of subsection (a)(24)(H)(ii) of this Section (requiring the use of publicly available information to verify that the facility has submitted required notifications) do not apply to foreign reclaimers and intermediate facilities, and the hazardous secondary material generator also complies with the following requirements:~~

~~A) The generator must notify the Agency and USEPA of an intended export before the hazardous secondary material is scheduled to leave the United States. The generator must submit a complete notification at least 60 days before the initial shipment is intended to be shipped off-site. This notification may cover export activities extending over a period up to 12 months in duration, but not longer. The notification must be in writing and signed by the hazardous secondary material generator, and must include the following information:~~

~~i) The name, mailing address, telephone number and USEPA identification number (if applicable) of the hazardous secondary material generator;~~

~~ii) A description of the hazardous secondary material; the USEPA hazardous waste number that would apply were the~~

~~hazardous secondary material to be managed as hazardous waste; and the USDOT proper shipping name, hazard class, and identification number (UN or NA number) for each hazardous secondary material, as identified in 49 CFR 171 through 173, each incorporated by reference in 35 Ill. Adm. Code 720.111;~~

~~iii) The estimated frequency or rate at which the hazardous secondary material is to be exported, and the period of time over which the hazardous secondary material is to be exported;~~

~~iv) The estimated total quantity of hazardous secondary material;~~

~~v) All points of entry to and departure from each foreign country through which the hazardous secondary material will pass;~~

~~vi) A description of the means by which each shipment of the hazardous secondary material will be transported (e.g., mode of transportation vehicle (air, highway, rail, water, etc.), and the types of container (drums, boxes, tanks, etc.));~~

~~vii) A description of the manner in which the hazardous secondary material will be reclaimed in the receiving country;~~

~~viii) The name and address of each reclaimer, any intermediate facility, and any alternative reclaimer and intermediate facilities; and~~

~~ix) The name of any transit countries through which the hazardous secondary material will be sent, together with a description of the approximate length of time the material will remain in each transit country and the nature of the handling of the material while in the country (for purposes of this Section, the meanings of the terms "Acknowledgement of Consent," "receiving country," and "transit country" are as defined in 35 Ill. Adm. Code 722.151, with the exception that the terms in this Section refer to hazardous secondary materials, rather than hazardous waste).~~

B) Submission of notification of intent to export hazardous secondary material. Whether delivered by mail or hand delivery, the following words must prominently appear on the front of the envelope: "Attention: Notification of Intent to Export."

i) A notification that is submitted by mail must be sent to the following mailing addresses:

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

Permits Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, Illinois 62794-9276

ii) A notification that is hand-delivered must be delivered to the following addresses:

Office of Enforcement and Compliance Assurance
Office of Federal Activities
International Compliance Assurance Division
Environmental Protection Agency
Ariel Rios Bldg., Room 6144
12th St. and Pennsylvania Ave., NW.
Washington, DC 20004

Permits Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

C) Except for a change in the telephone number submitted pursuant to subsection (a)(25)(A)(i) of this Section or a decrease in the quantity of hazardous secondary material indicated pursuant to

~~subsection (a)(25)(A)(iv) of this Section, when the conditions specified on the original notification change (including any exceedance of the estimate of the quantity of hazardous secondary material specified in the original notification), the hazardous secondary material generator must provide the Agency and USEPA with a written re-notification of the change. The shipment cannot take place until consent of the receiving country to the changes (except for changes to subsection (a)(25)(A)(ix) of this Section and in the ports of entry to and departure from transit countries pursuant to subsection (a)(25)(A)(v) of this Section) has been obtained and the hazardous secondary material generator receives from USEPA an Acknowledgment of Consent reflecting the receiving country's consent to the changes.~~

~~D)~~ ~~Upon request from the Agency or USEPA, the hazardous secondary material generator must furnish to the Agency and USEPA any additional information that a receiving country requests in order to respond to a notification.~~

~~E)~~ ~~USEPA has stated in corresponding 40 CFR 261.4(a)(25)(v) that it will provide a complete notification to the receiving country and any transit countries. A notification is complete when USEPA determines that the notification satisfies the requirements of subsection (a)(25)(A) of this Section. When a claim of confidentiality is asserted with respect to any notification information required by subsection (a)(25)(A) of this Section, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(v) that it may find the notification not complete until any such claim is resolved in accordance with 40 CFR 260.2.~~

~~F)~~ ~~The export of hazardous secondary material pursuant to this subsection (a)(25) is prohibited, unless the receiving country consents to the intended export. When the receiving country consents in writing to the receipt of the hazardous secondary material, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(vi) that it will send an Acknowledgment of Consent to the hazardous secondary material generator. When the receiving country objects to receipt of the hazardous secondary material or withdraws a prior consent, USEPA has stated that it will notify the hazardous secondary material generator in writing. USEPA has stated that it will also notify the hazardous secondary material generator of any responses from transit countries.~~

~~G)~~ ~~For exports to OECD Member countries, the receiving country may respond to the notification using tacit consent. If no objection has been lodged by any receiving country or transit countries to a notification provided pursuant to subsection (a)(25)(A) of this Section within 30 days after the date of issuance of the acknowledgement of receipt of notification by the competent authority of the receiving country, the trans-boundary movement may commence. In such cases, USEPA has stated in corresponding 40 CFR 261.4(a)(25)(vii) that it will send an Acknowledgment of Consent to inform the hazardous secondary material generator that the receiving country and any relevant transit countries have not objected to the shipment, and are thus presumed to have consented tacitly. Tacit consent expires one calendar year after the close of the 30-day period; re-notification and renewal of all consents is required for exports after that date.~~

~~H)~~ ~~A copy of the Acknowledgment of Consent must accompany the shipment. The shipment must conform to the terms of the Acknowledgment of Consent.~~

~~I)~~ ~~If a shipment cannot be delivered for any reason to the reclaimer, intermediate facility or the alternate reclaimer or alternate intermediate facility, the hazardous secondary material generator must re-notify the Agency and USEPA of a change in the conditions of the original notification to allow shipment to a new reclaimer in accordance with subsection (a)(25)(C) of this Section and obtain another Acknowledgment of Consent.~~

~~J)~~ ~~The hazardous secondary material generator must keep a copy of each notification of intent to export and each Acknowledgment of Consent for a period of three years following receipt of the Acknowledgment of Consent.~~

~~K)~~ ~~Annual reporting of hazardous secondary material exports. A hazardous secondary material generator must file with the Agency and USEPA, no later than March 1 of each year, a report that summarizes the types, quantities, frequency, and ultimate destinations of all hazardous secondary materials exported during the previous calendar year. Annual reports must be sent to the addresses listed in subsection (a)(25)(B) of this Section (for mail or hand delivery, as appropriate) for submission notification of intent to export hazardous secondary material. The annual reports must include the following information:~~

~~i) The name, mailing and site addresses, and USEPA identification number (if applicable) of the hazardous secondary material generator;~~

~~ii) The calendar year covered by the report;~~

~~iii) The name and site address of each reclaimer and intermediate facility that received exported hazardous secondary material from the generator;~~

~~iv) By reclaimer and intermediate facility, for each hazardous secondary material exported, a description of the hazardous secondary material and the USEPA hazardous waste number that would apply were the hazardous secondary material to be managed as hazardous waste; the USDOT hazard class for the material, as determined pursuant to 49 CFR 171 through 173, each incorporated by reference in 35 Ill. Adm. Code 720.111; the name and USEPA identification number (where applicable) for each transporter used; the total amount of hazardous secondary material shipped; and the number of shipments pursuant to each notification;~~

~~v) A certification signed by the hazardous secondary material generator that states as follows:~~

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

~~L) Any person that claims an exclusion under this subsection (a)(25) must provide notification as required by 35 Ill. Adm. Code 720.142.~~

26) Solvent-contaminated wipes that are sent for cleaning and reuse are not solid wastes from the point of generation, provided that all of the following conditions are fulfilled:

A) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

B) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for cleaning;

C) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes must contain no free liquids, as defined in 35 Ill. Adm. Code 720.110;

D) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in this Part and 35 Ill. Adm. Code 720, 722 through 728, and 733;

E) Generators must maintain at their site the following documentation:

i) The name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes;

ii) The documentation that the 180-day accumulation time limit in 35 Ill. Adm. Code 721.104(a)(26)(B) is being met; and

iii) A description of the process the generator is using to ensure that the solvent-contaminated wipes contain no free liquids

at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning; and

F) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under sections 301 and 402 or section 307 of the federal Clean Water Act (33 USC 1311 and 1341 or 33 USC 1317) or equivalent Illinois or sister-state requirements approved by USEPA pursuant to 33 USC 1311 through 1346 and 1370.

27) Hazardous secondary material that is generated and then transferred to another person for the purpose of remanufacturing is not a solid waste, provided that the following conditions are fulfilled:

BOARD NOTE: The North American Industrial Classification System (NAICS) codes used in this subsection (a)(27) are defined in the NAICS Manual, available from the Office of Management and Budget and incorporated by reference in 35 Ill. Adm. Code 720.111.

A) The hazardous secondary material consists of one or more of the following spent solvents: toluene, xylenes, ethylbenzene, 1,2,4-trimethylbenzene, chlorobenzene, n-hexane, cyclohexane, methyl tert-butyl ether, acetonitrile, chloroform, chloromethane, dichloro-methane, methyl isobutyl ketone, N,N-dimethylformamide, tetra-hydrofuran, n-butyl alcohol, ethanol, or methanol.

B) The hazardous secondary material originated from using one or more of the solvents listed in subsection (a)(27)(A) in a commercial grade for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), or the paints and coatings manufacturing sectors (NAICS 325510).

C) The hazardous secondary material generator sends the hazardous secondary material spent solvents listed in subsection (a)(27)(A) to a remanufacturer in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), or the paints and coatings manufacturing sectors (NAICS 325510).

D) After remanufacturing one or more of the solvents listed in subsection (a)(27)(A), the use of the remanufactured solvent must be limited to reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) in the pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and the paints and coatings manufacturing sectors (NAICS 325510) or to using them as ingredients in a product. These allowed uses correspond to chemical functional uses enumerated in 40 CFR 711.15(b)(4)(i)(C) (Reporting Information to EPA), incorporated by reference in 35 Ill. Adm. Code 720.111, including Industrial Function Category Codes U015 (solvents consumed in a reaction to produce other chemicals) and U030 (solvents that become part of the mixture);

BOARD NOTE: The Board observes that the citation to Toxic Substances Control Act function categories and use of the word "including" to preface specific example Industrial Function Category Codes does not expand the range of permissible uses beyond the express limitations recited in the first segment of this subsection (a)(27)(D) and subsection (a)(27)(E).

E) After remanufacturing one or more of the solvents listed in subsection (a)(27)(i), the use of the remanufactured solvent does not involve cleaning or degreasing oil, grease, or similar material from textiles, glassware, metal surfaces, or other articles. (These disallowed continuing uses correspond to chemical functional uses in Industrial Function Category Code U029 (solvents (for cleaning and degreasing)) in 40 CFR 711.15(b)(4)(i)(C), incorporated by reference in 35 Ill. Adm. Code 720.111.

F) Both the hazardous secondary material generator and the remanufacturer must fulfill the following requirements:

i) The generator and remanufacturer must notify USEPA Region 5 and the Agency, and update the notification every two years per 35 Ill. Adm. Code 720.142;

ii) The generator and remanufacturer must develop and maintain an up-to-date remanufacturing plan that identifies the information enumerated in subsection (a)(27)(G);

BOARD NOTE: The Board moved corresponding 40 CFR 261.4(a)(27)(vi)(B)(1) through (a)(27)(vi)(B)(1) to appear as subsections (a)(27)(G)(i) through (a)(27)(G)(v) to comport with codification requirements.

iii) The generator and remanufacturer must maintain records of shipments and confirmations of receipts for a period of three years from the dates of the shipments;

iv) The generator and remanufacturer must, prior to remanufacturing, store the hazardous spent solvents in tanks or containers that meet technical standards found in Subparts I and J of this Part, with the tanks and containers being labeled or otherwise having an immediately available record of the material being stored;

v) The generator and remanufacturer must, during remanufacturing, and during storage of the hazardous secondary materials prior to remanufacturing, the remanufacturer certifies that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the applicable Clean Air Act regulations of 40 CFR 60, 61 and 63, incorporated by reference in 35 Ill. Adm. Code 720.111; or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in subparts AA (vents), BB (equipment) and CC (tank storage) of this Part; and

vi) The generator and remanufacturer must meet the requirements prohibiting speculative accumulation in Section 721.101(c)(8).

G) The following information items are required elements for a remanufacturing plan.

i) The name, address and USEPA ID number of the generators and the remanufacturers;

ii) The types and estimated annual volumes of spent solvents to be remanufactured;

iii) The processes and industry sectors that generate the spent solvents;

iv) The specific uses and industry sectors for the remanufactured solvents; and

v) A certification from the remanufacturer stating as follows: "On behalf of [insert remanufacturer facility name], I certify that this facility is a remanufacturer under pharmaceutical manufacturing (NAICS 325412), basic organic chemical manufacturing (NAICS 325199), plastics and resins manufacturing (NAICS 325211), and/or the paints and coatings manufacturing sectors (NAICS 325510), and will accept the spent solvent(s) for the sole purpose of remanufacturing into commercial-grade solvent(s) that will be used for reacting, extracting, purifying, or blending chemicals (or for rinsing out the process lines associated with these functions) or for use as product ingredient(s). I also certify that the remanufacturing equipment, vents, and tanks are equipped with and are operating air emission controls in compliance with the appropriate Clean Air Act regulations under 40 CFR part 60, part 61 or part 63, or, absent such Clean Air Act standards for the particular operation or piece of equipment covered by the remanufacturing exclusion, are in compliance with the appropriate standards in Section 721, subparts AA (vents), BB (equipment) and CC (tank storage)."

BOARD NOTE: Subsections (a)(27)(G)(i) through (a)(27)(G)(v) correspond with 40 CFR 261.4(a)(27)(vi)(B)(1) through (a)(27)(vi)(B)(1), moved to this subsection (a)(27)(G) to comport with codification requirements.

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

1) Household waste, including household waste that has been collected, transported, stored, treated, disposed of, recovered (e.g., refuse-derived fuel), or reused. "Household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels, and motels,

bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal solid waste must not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under this Part, if the following describe the facility:

A) The facility receives and burns only the following waste:

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

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

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

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

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

A) The growing and harvesting of agricultural crops, or

B) The raising of animals, including animal manures.

3) Mining overburden returned to the mine site.

4) Coal and fossil fuel combustion waste.

A4) 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.

B) The following wastes generated primarily from processes that support the combustion of coal or other fossil fuels that are co-disposed with the wastes in subsection (b)(4)(A), except as provided by 35 Ill. Adm. Code 726.112 for facilities that burn or process hazardous waste:

i) Coal pile run-off. For purposes of this subsection (b)(4), coal pile run-off means any precipitation that drains off coal piles.

ii) Boiler cleaning solutions. For purposes of this subsection (b)(4), boiler cleaning solutions means water solutions and chemical solutions used to clean the fire-side and waterside of the boiler.

iii) Boiler blowdown. For purposes of this subsection (b)(4), boiler blowdown means water purged from boilers used to generate steam.

iv) Process water treatment and demineralizer regeneration wastes. For purposes of this subsection (b)(4), process water treatment and demineralizer regeneration wastes means sludges, rinses, and spent resins generated from processes to remove dissolved gases, suspended solids, and dissolved chemical salts from combustion system process water.

v) Cooling tower blowdown. For purposes of this subsection (b)(4), cooling tower blowdown means water purged from a closed cycle cooling system. Closed cycle cooling systems include cooling towers, cooling ponds, or spray canals.

vi) Air heater and precipitator washes. For purposes of this subsection (b)(4), air heater and precipitator washes means

wastes from cleaning air preheaters and electrostatic precipitators.

vii) Effluents from floor and yard drains and sumps. For purposes of this subsection (b)(4), effluents from floor and yard drains and sumps means wastewaters, such as wash water, collected by or from floor drains, equipment drains, and sumps located inside the power plant building; and wastewaters, such as rain runoff, collected by yard drains and sumps located outside the power plant building.

viii) Wastewater treatment sludges. For purposes of this subsection (b)(4), wastewater treatment sludges refers to sludges generated from the treatment of wastewaters specified in subsections (b)(4)(B)(i) through (vi).

5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy.

6) Chromium wastes.

A) Wastes that fail the test for the toxicity characteristic (Section 721.124 and Appendix B to this Part) because chromium is present or which are listed in Subpart D of this Part due to the presence of chromium, that do not fail the test for the toxicity characteristic for any other constituent or which are not listed due to the presence of any other constituent, and that do not fail the test for any other characteristic, if the waste generator shows the following:

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

ii) The waste is generated from an industrial process that uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and

iii) The waste is typically and frequently managed in non-oxidizing environments.

B) The following are specific wastes that meet the standard in subsection (b)(6)(A) ~~of this Section~~ (so long as they do not fail the test for the toxicity characteristic for any other constituent and do

not exhibit any other characteristic):

i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue;

iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, retan/wet finish, no beamhouse, through-the-blue, and shearling;

vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish, hair save/chrome tan/retan/wet finish, and through-the-blue;

vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries; and

viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by

the chloride process.

7) Solid waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by 35 Ill. Adm. Code 726.212 for facilities that burn or process hazardous waste.

A) For purposes of this subsection (b)(7), beneficiation of ores and minerals is restricted to the following activities: crushing; grinding; washing; dissolution; crystallization; filtration; sorting; sizing; drying; sintering; pelletizing; briquetting; calcining to remove water or carbon dioxide; roasting; autoclaving or chlorination in preparation for leaching (except where the roasting (or autoclaving or chlorination) and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing); gravity concentration; magnetic separation; electrostatic separation; floatation; ion exchange; solvent extraction; electrowinning; precipitation; amalgamation; and heap, dump, vat tank, and in situ leaching.

B) For the purposes of this subsection (b)(7), solid waste from the processing of ores and minerals includes only the following wastes as generated:

i) Slag from primary copper processing;

ii) Slag from primary lead processing;

iii) Red and brown muds from bauxite refining;

iv) Phosphogypsum from phosphoric acid production;

v) Slag from elemental phosphorus production;

vi) Gasifier ash from coal gasification;

vii) Process wastewater from coal gasification;

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

ix) Slag tailings from primary copper processing;

x) Fluorogypsum from hydrofluoric acid production;

xi) Process wastewater from hydrofluoric acid production;

xii) Air pollution control dust or sludge from iron blast furnaces;

xiii) Iron blast furnace slag;

xiv) Treated residue from roasting and leaching of chrome ore;

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

xvi) Process wastewater from phosphoric acid production;

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

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

xix) Chloride processing waste solids from titanium tetrachloride production; and

xx) Slag from primary zinc production.

C) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under this subsection (b) if the following conditions are fulfilled:

i) The owner or operator processes at least 50 percent by weight normal beneficiation raw materials or normal mineral processing raw materials; and

ii) The owner or operator legitimately reclaims the secondary mineral processing materials.

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

9) Solid waste that consists of discarded arsenical-treated wood or wood

products that fails the test for the toxicity characteristic for hazardous waste codes D004 through D017 and which is not a hazardous waste for any other reason if the waste is generated by persons that utilize the arsenical-treated wood and wood products for these materials' intended end use.

10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of Section 721.124 (hazardous waste codes D018 through D043 only) and which are subject to corrective action regulations under 35 Ill. Adm. Code 731.

11) This subsection (b)(11) corresponds with 40 CFR 261.4(b)(11), which expired by its own terms on January 25, 1993. This statement maintains structural parity with USEPA regulations.

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

13) Non-terne plated used oil filters that are not mixed with wastes listed in Subpart D of this Part, if these oil filters have been gravity hot-drained using one of the following methods:

A) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining;

B) Hot-draining and crushing;

C) Dismantling and hot-draining; or

D) Any other equivalent hot-draining method that will remove used oil.

14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.

15) Leachate or gas condensate collected from landfills where certain solid wastes have been disposed of, under the following circumstances:

A) The following conditions must be fulfilled:

i) The solid wastes disposed of would meet one or more of the listing descriptions for the following USEPA hazardous waste numbers that are generated after the effective date listed for the waste:

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

ii) The solid wastes described in subsection (b)(15)(A)(i) ~~of this Section~~ were disposed of prior to the effective date of the listing (as set forth in that subsection);

iii) The leachate or gas condensate does not exhibit any characteristic of hazardous waste nor is derived from any other listed hazardous waste; and

iv) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under section 307(b) or 402 of the federal Clean Water Act (33 USC 1317(b) or 1342).

B) Leachate or gas condensate derived from K169, K170, K171, K172, K176, K177, K178, or K181 waste will no longer be exempt if it is stored or managed in a surface impoundment prior to discharge. There is one exception: if the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from the impoundment and continues to be managed in compliance with the conditions of this subsection (b)(15) after the emergency ends.

16) This subsection (b)(16) corresponds with 40 CFR 261.4(b)(16), which USEPA has marked "reserved." This statement maintains structural parity with USEPA regulations.

17) This subsection (b)(17) corresponds with 40 CFR 261.4(b)(17), which pertains exclusively to waste generated by a specific facility outside Illinois. This statement maintains structural parity with USEPA regulations.

18) Solvent-contaminated wipes, except for wipes that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that all of the following conditions are fulfilled:

A) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes". The containers must be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when it is necessary to add or remove solvent-contaminated wipes. When the container is full, when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container must be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions;

B) The solvent-contaminated wipes may be accumulated by the generator for up to 180 days from the start date of accumulation for each container prior to being sent for disposal;

C) At the point of being transported for disposal, the solvent-contaminated wipes must contain no free liquids, as defined in 35 Ill. Adm. Code 720.110;

D) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes must be managed according to the applicable regulations found in this Part and 35 Ill. Adm. Code 720, 722 through 728, and 733;

E) Generators must maintain at their site the following documentation:

i) The name and address of the landfill or combustor that is receiving the solvent-contaminated wipes;

ii) The documentation that the 180 day accumulation time limit in 35 Ill. Adm. Code 721.104(b)(18)(B) is being met; and

iii) A description of the process the generator is using to ensure that the solvent-contaminated wipes contain no free liquids at the point of being transported for disposal; and

F) The solvent-contaminated wipes are sent for disposal at one of the following facilities:

i) A municipal solid waste landfill regulated under RCRA Subtitle D regulations: 35 Ill. Adm. Code 810 through 815, including the landfill design criteria of 35 Ill. Adm. Code 811.303 through 811.309, 811.315 through 811.317, and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402; 40 CFR 258, including the landfill design criteria of 40 CFR 258.40; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6943 and 6947; or

ii) A hazardous waste landfill regulated under RCRA Subtitle C regulations: 35 Ill. Adm. Code 724 or 725; 40 CFR 264 or 265; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6926; or

iii) A municipal waste combustor or other combustion facility regulated under section 129 of the Clean Air Act (42 USC 7429) or equivalent Illinois or sister-state regulations approved by USEPA pursuant to 42 USC 7429; or

iv) A hazardous waste combustor, boiler, or industrial furnace regulated under RCRA Subtitle C regulations: 35 Ill. Adm. Code 724 or 725 or Subpart H of 35 Ill. Adm. Code 726; 40 CFR 264 or 265 or subpart H of 40 CFR 266; or equivalent regulations of a sister state that USEPA has approved pursuant to 42 USC 6926.

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

through 728 or to the notification requirements of section 3010 of RCRA (42 USC 6930) until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing or for storage or transportation of product or raw materials.

d) Samples.

1) Except as provided in subsection (d)(2) ~~of this Section~~, a sample of solid waste or a sample of water, soil, or air that is collected for the sole purpose of testing to determine its characteristics or composition is not subject to any requirements of this Part or 35 Ill. Adm. Code 702, 703, and 722 through 728. The sample qualifies when it fulfills one of the following conditions:

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

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

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

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

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

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

2) In order to qualify for the exemption in subsection (d)(1)(A) or (d)(1)(B) of this Section, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must do the following:

A) Comply with USDOT, U.S. Postal Service (USPS), or any other applicable shipping requirements; or

B) Comply with the following requirements if the sample collector determines that USDOT, USPS, or other shipping requirements do

not apply to the shipment of the sample:

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

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

3) This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1) ~~of this Section~~.

e) Treatability study samples.

1) Except as is provided in subsection (e)(2) ~~of this Section~~, a person that generates or collects samples for the purpose of conducting treatability studies, as defined in 35 Ill. Adm. Code 720.110, are not subject to any requirement of 35 Ill. Adm. Code 721 through 723 or to the notification requirements of section 3010 of the Resource Conservation and Recovery Act. Nor are such samples included in the quantity determinations of Section 721.105 and 35 Ill. Adm. Code 722.134(d) when:

A) The sample is being collected and prepared for transportation by the generator or sample collector;

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

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

2) The exemption in subsection (e)(1) ~~of this Section~~ is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that the following conditions are fulfilled:

A) The generator or sample collector uses (in "treatability studies") no more than 10,000 kg of media contaminated with non-acute hazardous waste, 1,000 kg of non-acute hazardous waste other than

contaminated media, 1 kg of acute hazardous waste, or 2,500 kg of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;

B) The mass of each shipment does not exceed 10,000 kg; the 10,000 kg quantity may be all media contaminated with non-acute hazardous waste, or may include 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of hazardous waste, and 1 kg of acute hazardous waste;

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

i) The transportation of each sample shipment complies with USDOT, USPS, or any other applicable shipping requirements; or

ii) If the USDOT, USPS, or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address, and telephone number of the originator of the sample; the name, address, and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number;

D) The sample is shipped to a laboratory or testing facility that is exempt under subsection (f) ~~of this Section~~, or has an appropriate RCRA permit or interim status;

E) The generator or sample collector maintains the following records for a period ending three years after completion of the treatability study:

i) Copies of the shipping documents;

ii) A copy of the contract with the facility conducting the treatability study; and

iii) Documentation showing the following: The amount of waste shipped under this exemption; the name, address, and

USEPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and whether or not unused samples and residues were returned to the generator; and

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

3) The Agency may grant requests on a case-by-case basis for up to an additional two years for treatability studies involving bioremediation. The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsections (e)(2)(A), (e)(2)(B), and (f)(4) ~~of this Section~~, for up to an additional 5,000 kg of media contaminated with non-acute hazardous waste, 500 kg of non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, and 1 kg of acute hazardous waste under the circumstances set forth in either subsection (e)(3)(A) or (e)(3)(B) ~~of this Section~~, subject to the limitations of subsection (e)(3)(C) ~~of this Section~~:

A) In response to requests for authorization to ship, store, and conduct further treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), the size of the unit undergoing testing (particularly in relation to scale-up considerations), the time or quantity of material required to reach steady-state operating conditions, or test design considerations, such as mass balance calculations.

B) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies when the following occurs: There has been an equipment or mechanical failure during the conduct of the treatability study, there is need to verify the results of a previously-conducted treatability study, there is a need to study and analyze alternative techniques within a previously-evaluated treatment process, or there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.

C) The additional quantities allowed and timeframes allowed in subsections (e)(3)(A) and (e)(3)(B) ~~of this Section~~ are subject to all

the provisions in subsections (e)(1) and (e)(2)(B) through (e)(2)(F) ~~of this Section~~. The generator or sample collector must apply to the Agency and provide in writing the following information:

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

ii) Documentation accounting for all samples of hazardous waste from the waste stream that have been sent for or undergone treatability studies, including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;

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

iv) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns; and

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

4) Final Agency determinations pursuant to this subsection (e) may be appealed to the Board.

f) Samples undergoing treatability studies at laboratories or testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 722 through 726, and 728 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act (42 USC 6930), provided that the requirements of subsections (f)(1) through (f)(11) ~~of this Section~~ are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11) ~~of this Section~~. Where a group of mobile treatment units are located at the same site, the limitations specified in

subsections (f)(1) through (f)(11) ~~of this Section~~ apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

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

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

3) No more than a total of 10,000 kg of "as received" media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, or 250 kg of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.

4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 10,000 kg, the total of which can include 10,000 kg of media contaminated with non-acute hazardous waste, 2,500 kg of media contaminated with acute hazardous waste, 1,000 kg of non-acute hazardous wastes other than contaminated media, and 1 kg of acute hazardous waste. This quantity limitation does not include treatment materials (including non-hazardous solid waste) added to "as received" hazardous waste.

5) No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to 500 kg of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years from the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.

7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information must be included for each treatability study conducted:

A) The name, address, and USEPA identification number of the generator or sample collector of each waste sample;

B) The date the shipment was received;

C) The quantity of waste accepted;

D) The quantity of "as received" waste in storage each day;

E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;

F) The date the treatability study was concluded;

G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.

8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years from the completion date of each treatability study.

9) The facility prepares and submits a report to the Agency, by March 15 of each year, that includes the following information for the previous calendar year:

A) The name, address, and USEPA identification number of the facility conducting the treatability studies;

B) The types (by process) of treatability studies conducted;

C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);

D) The total quantity of waste in storage each day;

E) The quantity and types of waste subjected to treatability studies;

F) When each treatability study was conducted; and

G) The final disposition of residues and unused sample from each treatability study.

10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703, and 721 through 728, unless the residues and unused samples are returned to the sample originator under the exemption of subsection (e) ~~of this Section~~.

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

g) Dredged material that is not a hazardous waste. Dredged material that is subject to the requirements of a permit that has been issued under section 404 of the Federal Water Pollution Control Act (33 USC 1344) is not a hazardous waste. For the purposes of this subsection (g), the following definitions apply:

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

"Permit" means any of the following:

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

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

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

h) Carbon dioxide stream injected for geologic sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for Class VI carbon sequestration injection wells, including the requirements in 35 Ill. Adm. Code 704 and 730, are not a hazardous waste, provided the following conditions are met:

1) Transportation of the carbon dioxide stream must be in compliance with U.S. Department of Transportation requirements, including the pipeline

safety laws (chapter 601 of subtitle VIII of 49 USC, incorporated by reference in 35 Ill. Adm. Code 720.111) and regulations (49 CFR 190 through 199, incorporated by reference in 35 Ill. Adm. Code 720.111) of the U.S. Department of Transportation, and pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 USC 60105, incorporated by reference in 35 Ill. Adm. Code 720.111, and 49 CFR 171 through 180, incorporated by reference in 35 Ill. Adm. Code 720.111, as applicable.

BOARD NOTE: The parenthetical language relating to pipeline transportation does not preclude transportation by air, water, highway, or rail that complies with U.S. Department of Transportation regulations at 49 CFR 171 through 180. For this reason, the Board has added citations of those regulations.

2) Injection of the carbon dioxide stream must be in compliance with the applicable requirements for Class VI carbon sequestration injection wells, including the applicable requirements in 35 Ill. Adm. Code 704 and 730;

3) No hazardous wastes may~~shall~~ be mixed with, or otherwise co-injected with, the carbon dioxide stream; and

4) Required Certifications.

A) Any generator of a carbon dioxide stream, who claims that a carbon dioxide stream is excluded under this subsection (h), must have an authorized representative (as defined in 35 Ill. Adm. Code 720.110) sign a certification statement worded as follows:

"I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 35 Ill. Adm. Code 721.104(h) has not been mixed with hazardous wastes, and I have transported the carbon dioxide stream in compliance with (or have contracted with a pipeline operator or transporter to transport the carbon dioxide stream in compliance with) U.S. Department of Transportation requirements, including the pipeline safety laws (49 USC 60101 et seq.) and regulations (49 CFR Parts 190 through 199) of the U.S. Department of Transportation, and the pipeline safety regulations adopted and administered by a state authority pursuant to a certification under 49 USC 60105, as applicable, for injection into a well subject to the requirements for the Class VI

Underground Injection Control Program of the federal Safe Drinking Water Act (42 USC 300f et seq.)."

B) Any Class VI carbon sequestration injection well owner or operator, who claims that a carbon dioxide stream is excluded under this subsection (h), must have an authorized representative (as defined in 35 Ill. Adm. Code 720.110) sign a certification statement worded as follows:

"I certify under penalty of law that the carbon dioxide stream that I am claiming to be excluded under 35 Ill. Adm. Code 721.104(h) has not been mixed with, or otherwise co-injected with, hazardous waste at the UIC Class VI permitted facility, and that injection of the carbon dioxide stream is in compliance with the applicable requirements for UIC Class VI wells, including the applicable requirements in 35 Ill. Adm. Code 704 and 730."

C) The signed certification statement must be kept on-site for no less than three years, and must be made available within 72 hours after a written request from the Agency or USEPA, or their designee. The signed certification statement must be renewed every year that the exclusion is claimed, by having an authorized representative (as defined in 35 Ill. Adm. Code 720.110) annually prepare and sign a new copy of the certification statement within one year after the date of the previous statement. The signed certification statement must also be readily accessible on the facility's publicly-available website (if such website exists) as a public notification with the title of "Carbon Dioxide Stream Certification" at the time the exclusion is claimed.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.107 Residues of Hazardous Waste in Empty Containers

a) Applicability of rules.

1) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as defined in subsection (b) ~~of this Section~~, is not subject to regulation under 35 Ill. Adm. Code 702, 703, or 721 through 728, or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

2) Any hazardous waste in either a container that is not empty or an inner liner that is removed from a container that is not empty, as defined in subsection (b) ~~of this Section~~, is subject to regulations under 35 Ill. Adm. Code 702, 703, and 721 through 728 and to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act.

b) Definition of "empty":

1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste listed in Section 721.131 or 721.133(e), is empty if the conditions of subsections (b)(1)(A) and (b)(1)(B) ~~of this Section~~ exist, subject to the limitations of subsection (b)(1)(C) ~~of this Section~~:

A) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating, and

B) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner, or

C) Weight limits.

i) No more than three percent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to 119~~110~~ gallons (450~~416~~ liters) in size; or

ii) No more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than 119~~110~~ gallons (450~~416~~ liters) in size.

2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches ambient atmospheric pressure.

3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in Section 721.131 or 721.133(e) is empty if any of the following occurs:

A) The container or inner liner has been triple rinsed using a solvent

capable of removing the commercial chemical product or manufacturing chemical intermediate;

B) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or

C) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.132 Hazardous Waste from Specific Sources

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

USEPA Hazardous Waste No.	Industry and Hazardous Waste	Hazard Code
	Wood Preservation Process Wastes:	
K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote or pentachlorophenol.	(T)
	Inorganic Pigments Production Wastes:	
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments.	(T)
K003	Wastewater treatment sludge from the production of molybdate orange pigments.	(T)
K004	Wastewater treatment sludge from the production of zinc yellow pigments.	(T)
K005	Wastewater treatment sludge from the production of chrome green pigments.	(T)

K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated).	(T)
K007	Wastewater treatment sludge from the production of iron blue pigments.	(T)
K008	Oven residue from the production of chrome oxide green pigments.	(T)

Organic Chemicals Production Wastes:

K009	Distillation bottoms from the production of acetaldehyde from ethylene.	(T)
K010	Distillation side cuts from the production of acetaldehyde from ethylene.	(T)
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile.	(R, T)
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile.	(R, T)
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile.	(T)
K015	Still bottoms from the distillation of benzyl chloride.	(T)
K016	Heavy ends or distillation residues from the production of carbon tetrachloride.	(T)
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin.	(T)
K018	Heavy ends from the fractionation column in ethyl chloride production.	(T)
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production.	(T)
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production.	(T)
K021	Aqueous spent antimony catalyst waste from fluoromethanes production.	(T)
K022	Distillation bottom tars from the production of phenol/acetone from cumene.	(T)
K023	Distillation light ends from the production of phthalic anhydride from naphthalene.	(T)
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene.	(T)
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene.	(T)

K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene.	(T)
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene.	(T)
K026	Stripping still tails from the production of methyl ethyl pyridines.	(T)
K027	Centrifuge and distillation residues from toluene diisocyanate production.	(R, T)
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane.	(T)
K029	Waste from the product stream stripper in the production of 1,1,1-trichloroethane.	(T)
K095	Distillation bottoms from the production of 1,1,1-trichloroethane.	(T)
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane.	(T)
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene.	(T)
K083	Distillation bottoms from aniline production.	(T)
K103	Process residues from aniline extraction from the production of aniline.	(T)
K104	Combined wastewater streams generated from nitrobenzene/aniline production.	(T)
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes.	(T)
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes.	(T)
K107	Column bottoms from product separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(C, T)
K108	Condensed column overheads from product separation and condensed reactor vent gases from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(I, T)
K109	Spent filter cartridges from the product purification from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)

K110	Condensed column overheads from intermediate separation from the production of 1,1-dimethylhydrazine (UDMH) from carboxylic acid hydrazides.	(T)
K111	Product washwaters~~wastewaters~~ from the production of dinitrotoluene via nitration of toluene.	(C, T)
K112	Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K113	Condensed liquid light ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K114	Vicinals from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K115	Heavy ends from the purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.	(T)
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.	(T)
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.	(T)
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.	(T)
K156	Organic waste (including heavy ends, still bottoms, light ends, spent solvents, filtrates, and decantates) from the production of carbamates and carbamoyl oximes. (This listing does not apply to wastes generated from the manufacture of 3-iodo-2-propynyl n-butylcarbamate.)	(T)

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

	demonstrate that it meets the conditions of the exclusion that are set forth above. In doing so, the respondent must provide appropriate documentation that the terms of the exclusion were met (e.g., contracts between the generator and the landfill owner or operator, invoices documenting delivery of waste to landfill, etc.).	
K175	Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process.	(T)
	Inorganic Chemicals Production Wastes:	
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used.	(T)
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production.	(T)
K106	Wastewater treatment sludge from the mercury cell process in chlorine production.	(T)
K176	Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(E)
K177	Slag from the production of antimony oxide that is speculatively accumulated or disposed of, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide).	(T)
K178	Residues from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process.	(T)
K181	Nonwastewaters from the production of dyes or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in subsection (c) ~~of this Section~~ that are equal to or greater	(T)

than the corresponding subsection (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are managed in one of the following ways:

1) They are disposed of in a municipal solid waste landfill unit that is subject to the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402;

2) They are disposed of in a hazardous waste landfill unit that is subject to either 35 Ill. Adm. Code 724.401 or 725.401;

3) They are disposed of in other municipal solid waste landfill units that meet the design criteria in 35 Ill. Adm. Code 811.303 through 811.309 and 811.315 through 811.317 and Subpart E of 35 Ill. Adm. Code 811 or 35 Ill. Adm. Code 814.302 and 814.402, 35 Ill. Adm. Code 724.401, or 35 Ill. Adm. Code 725.401; or

4) They are treated in a combustion unit that is permitted under 415 ILCS 5/39(d), or an onsite combustion unit that is permitted under 415 ILCS 5/39.5.

For the purposes of this listing, dyes or pigments production is defined in subsection (b)(1) ~~of this Section~~. Subsection (d) ~~of this Section~~ describes the process for demonstrating that a facility's nonwastewaters are not K181 waste. This listing does not apply to wastes that are otherwise identified as hazardous under Sections 721.121 through 721.124 and 721.131 through 721.133 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met, as set forth in subsection (c) ~~of this Section~~.

Pesticides Production Wastes:

K031	By-product salts generated in the production of MSMA and cacodylic acid.	(T)
K032	Wastewater treatment sludge from the production of chlordane.	(T)
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane.	(T)
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane.	(T)
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane.	(T)
K035	Wastewater treatment sludges generated in the production of creosote.	(T)
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton.	(T)
K037	Wastewater treatment sludges from the production of disulfoton.	(T)
K038	Wastewater from the washing and stripping of phorate production.	(T)
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.	(T)
K040	Wastewater treatment sludge from the production of phorate.	(T)
K041	Wastewater treatment sludge from the production of toxaphene.	(T)
K098	Untreated process wastewater from the production of toxaphene.	(T)
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T.	(T)
K043	2,6-Dichlorophenol waste from the production of 2,4-D.	(T)
K099	Untreated wastewater from the production of 2,4-D.	(T)
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salts.	(T)

K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.	(C, T)
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.	(T)
K126	Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of ethylenebisdithiocarbamic acid and its salts.	(T)
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.	(C, T)
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.	(T)

Explosives Production Wastes:

K044	Wastewater treatment sludges from the manufacturing and processing of explosives.	(R)
K045	Spent carbon from the treatment of wastewater containing explosives.	(R)
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds.	(T)
K047	Pink/red water from TNT operations.	(R)

Petroleum Refining Wastes:

K048	Dissolved air flotation (DAF) float from the petroleum refining industry.	(T)
K049	Slop oil emulsion solids from the petroleum refining industry.	(T)
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry.	(T)
K051	API separator sludge from the petroleum refining industry.	(T)
K052	Tank bottoms (leaded) from the petroleum refining industry.	(T)
K169	Crude oil storage tank sediment from petroleum refining operations.	(T)

K170	Clarified slurry oil tank sediment or in-line filter/separation solids from petroleum refining operations.	(T)
K171	Spent hydrotreating catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)
K172	Spent hydrorefining catalyst from petroleum refining operations, including guard beds used to desulfurize feeds to other catalytic reactors (this listing does not include inert support media).	(I, T)

Iron and Steel Production Wastes:

K061	Emission control dust/sludge from the primary production of steel in electric furnaces.	(T)
K062	Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel industry (SIC Codes 331 and 332) (as defined in 35 Ill. Adm. Code 720.110).	(C, T)

Primary Aluminum Production Wastes:

K088	Spent potliners from primary aluminum reduction.	(T)

Secondary Lead Production Wastes:

K069	Emission control dust/sludge from secondary lead smelting.	(T)

BOARD NOTE: This listing is administratively stayed for sludge generated from secondary acid scrubber systems. The stay will remain in effect until this note is removed.

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

	Veterinary Pharmaceuticals Production Wastes:	
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
K102	Residue from use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.	(T)
	Ink Formulation Wastes:	
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, dryers, soaps and stabilizers containing chromium and lead.	(T)
	Coke Production Wastes:	
K060	Ammonia still lime sludge from coking operations.	(T)
K087	Decanter tank tar sludge from coking operations.	(T)
K141	Process residues from the recovery of coal tar, including, but not limited to, collecting sump residues from the production of coke from coal or the recovery of coke by-products produced from coal. This listing does not include K087 (decanter tank tar sludges from coking operations).	(T)
K142	Tar storage tank residues from the production of coke from coal or from the recovery of coke by-products produced from coal.	(T)
K143	Process residues from the recovery of light oil, including, but not limited to, those generated in stills, decanters, and wash oil recovery units from the recovery of coke by-products produced from coal.	(T)

K144	Wastewater sump residues from light oil refining, including, but not limited to, intercepting or contamination sump sludges from the recovery of coke by-products produced from coal.	(T)
K145	Residues from naphthalene collection and recovery operations from the recovery of coke by-products produced from coal.	(T)
K147	Tar storage tank residues from coal tar refining.	(T)
K148	Residues from coal tar distillation, including, but not limited to, still bottoms.	(T)
K149	Distillation bottoms from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups. (This waste does not include still bottoms from the distillation of benzyl chloride.)	(T)
K150	Organic residuals, excluding spent carbon adsorbent, from the spent chlorine gas and hydrochloric acid recovery processes associated with the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)
K151	Wastewater treatment sludges, excluding neutralization and biological sludges, generated during the treatment of wastewaters from the production of α- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups.	(T)

b) Listing-specific definition: For the purposes of the K181 hazardous waste listing in subsection (a) ~~of this Section~~, "dyes or pigments production" includes manufacture of the following product classes: dyes, pigments, and FDA-certified colors that are in the azo, triarylmethane, perylene, and anthraquinone classes. Azo products include azo, monoazo, diazo, triazo, polyazo, azoic, benzidine, and pyrazolone products. Triarylmethane products include both triarylmethane and triphenylmethane products. Wastes that are not generated at a dyes or pigments manufacturing site, such as wastes from the offsite use, formulation, and packaging of dyes or pigments, are not included in the K181 listing.

c) K181 listing levels. Nonwastewaters containing constituents in amounts equal to or exceeding the following levels during any calendar year are subject to the K181 hazardous waste listing in subsection (a) ~~of this Section~~, unless the conditions in the K181 hazardous waste listing are met:

Constituent	Chemical Abstracts No.	Mass Levels (kg/yr)
Aniline	62-53-3	9,300
o-Anisidine	90-04-0	110
4-Chloroaniline	106-47-8	4,800
p-Cresidine	120-71-8	660
2,4-Dimethylaniline	95-68-1	100
1,2-Phenylenediamine	95-54-5	710
1,3-Phenylenediamine	108-45-2	1,200

d) Procedures for demonstrating that dyes or pigments nonwastewaters are not K181 waste. The procedures described in subsections (d)(1) through (d)(3) and (d)(5) ~~of this Section~~ establish when nonwastewaters from the production of dyes or pigments would not be hazardous. (These procedures apply to wastes that are not disposed of in landfill units or treated in combustion units, as specified in subsection (a) ~~of this Section~~). If the nonwastewaters are disposed of in landfill units or treated in combustion units as described in subsection (a) ~~of this Section~~, then the nonwastewaters are not hazardous. In order to demonstrate that it is meeting the landfill disposal or combustion conditions contained in the K181 waste listing description, the generator must maintain documentation as described in subsection (d)(4) ~~of this Section~~.

1) Determination based on no K181 waste constituents. A generator that has knowledge (e.g., knowledge of constituents in wastes based on prior sampling and analysis data or information about raw materials used, production processes used, and reaction and degradation products formed) that its waste contains none of the K181 waste constituents (see subsection (c) ~~of this Section~~) can use its knowledge to determine that its waste is not K181 waste. The generator must document the basis for all such determinations on an annual basis and keep each annual documentation for three years.

2) Determination for generated quantities of 1,000 tonnes (1,000 metric tons) per year or less for wastes that contain K181 waste constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is 1,000 tonnes or less, the generator can use knowledge of the wastes (e.g., knowledge of constituents in wastes based on prior analytical data or information about raw materials used, production processes used, and

reaction and degradation products formed) to conclude that annual mass loadings for the K181 constituents are below the listing levels of subsection (c) ~~of this Section~~. To make this determination, the generator must fulfill the following conditions:

A) Each year, the generator must document the basis for determining that the annual quantity of nonwastewaters expected to be generated will be less than 1,000 tonnes;

B) The generator must track the actual quantity of nonwastewaters generated from January 1 through December 31 of each calendar year. If, at any time within the year, the actual waste quantity exceeds 1,000 tonnes, the generator must comply with the requirements of subsection (d)(3) ~~of this Section~~ for the remainder of that calendar year;

C) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year; and

D) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations were made:

i) The quantity of dyes or pigments nonwastewaters generated;

ii) The relevant process information used; and

iii) The calculations performed to determine annual total mass loadings for each K181 waste constituent in the nonwastewaters during the year.

3) Determination for generated quantities greater than 1,000 tonnes per year for wastes that contain K181 constituents. If the total annual quantity of dyes or pigments nonwastewaters generated is greater than 1,000 tonnes, the generator must perform each of the following steps in order to make a determination that its waste is not K181 waste:

A) The generator must determine which K181 waste constituents (see subsection (c) ~~of this Section~~) are reasonably expected to be present in the wastes based on knowledge of the wastes (e.g., based on prior sampling and analysis data or information about raw

materials used, production processes used, and reaction and degradation products formed);

B) If 1,2-phenylenediamine is present in the wastes, the generator can use either knowledge of the wastes or sampling and analysis procedures to determine the level of this constituent in the wastes. For determinations based on use of knowledge of the wastes, the generator must comply with the procedures for using knowledge of the wastes described in subsection (d)(2) ~~of this Section~~ and keep the records described in subsection (d)(2)(D) ~~of this Section~~. For determinations based on sampling and analysis, the generator must comply with the sampling and analysis and recordkeeping requirements described in subsection (d)(3)(C) ~~of this Section~~;

C) The generator must develop a waste sampling and analysis plan (or modify an existing plan) to collect and analyze representative waste samples for the K181 waste constituents reasonably expected to be present in the wastes. At a minimum, the plan must include the following elements:

i) A discussion of the number of samples needed to characterize the wastes fully;

ii) The planned sample collection method to obtain representative waste samples;

iii) A discussion of how the sampling plan accounts for potential temporal and spatial variability of the wastes; and

iv) A detailed description of the test methods to be used, including sample preparation, clean up (if necessary), and determinative methods;

D) The generator must collect and analyze samples in accordance with the waste sampling and analysis plan, and the plan must fulfill the following requirements:

i) The sampling and analysis must be unbiased, precise, and representative of the wastes; and

ii) The analytical measurements must be sufficiently sensitive, accurate, and precise to support any claim that the

constituent mass loadings are below the listing levels of subsection (c) ~~of this Section~~;

E) The generator must record the analytical results;

F) The generator must record the waste quantity represented by the sampling and analysis results;

G) The genrator must calculate constituent-specific mass loadings (product of concentrations and waste quantity);

H) The generator must keep a running total of the K181 waste constituent mass loadings over the course of the calendar year;

I) The generator must determine whether the mass of any of the K181 waste constituents listed in subsection (c) ~~of this Section~~ generated between January 1 and December 31 of any calendar year is below the K181 waste listing levels;

J) The generator must keep the following records on site for the three most recent calendar years in which the hazardous waste determinations are made:

i) The sampling and analysis plan;

ii) The sampling and analysis results (including quality assurance or quality control data);

iii) The quantity of dyes or pigments nonwastewaters generated; and

iv) The calculations performed to determine annual mass loadings; and

K) The generator must conduct non-hazardous waste determinations annually to verify that the wastes remain non-hazardous.

i) The annual testing requirements are suspended after three consecutive successful annual demonstrations that the wastes are non-hazardous. The generator can then use knowledge of the wastes to support subsequent annual determinations.

ii) The annual testing requirements are reinstated if the manufacturing or waste treatment processes generating the wastes are significantly altered, resulting in an increase of the potential for the wastes to exceed the listing levels.

iii) If the annual testing requirements are suspended, the generator must keep records of the process knowledge information used to support a non-hazardous determination. If testing is reinstated, the generator must retain a description of the process change.

4) Recordkeeping for the landfill disposal and combustion exemptions. For the purposes of meeting the landfill disposal and combustion condition set out in the K181 waste listing description in subsection (a) ~~of this Section~~, the generator must maintain on site for three years documentation demonstrating that each shipment of waste was received by a landfill unit that is subject to or which meets the landfill design standards set out in the listing description or that the waste was treated in combustion units, as specified in the listing description in subsection (a) ~~of this Section~~.

5) Waste holding and handling. During the interim period, from the point of generation to completion of the hazardous waste determination, the generator must store the wastes appropriately. If the wastes are determined to be hazardous and the generator has not complied with the hazardous waste storage requirements of 35 Ill. Adm. Code 722.134 during the interim period, the generator could be subject to an enforcement action for improper hazardous waste management.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.133 Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof

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

a) Any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) ~~of this Section~~.

b) Any off-specification commercial chemical product or manufacturing chemical intermediate that, if it met specifications, would have the generic name listed in subsection (e) or (f) ~~of this Section~~.

c) Any residue remaining in a container or inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in subsection (e) or (f) ~~of this Section~~, unless the container is empty, as defined in Section 721.107(b)(3).

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

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

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

e) The commercial chemical products, manufacturing chemical intermediates, or off-

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

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

Alphabetical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
P023	107-20-0	Acetaldehyde, chloro-	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)	
P057	640-19-7	Acetamide, 2-fluoro-	
P058	62-74-8	Acetic acid, fluoro-, sodium salt	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P070	116-06-3	Aldicarb	
P203	1646-88-4	Aldicarb sulfone	
P004	309-00-2	Aldrin	
P005	107-18-6	Allyl alcohol	
P006	20859-73-8	Aluminum phosphide	(R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P008	504-24-5	4-Aminopyridine	
P009	131-74-8	Ammonium picrate	(R)
P119	7803-55-6	Ammonium vanadate	
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium	
P010	7778-39-4	Arsenic acid H_3AsO_4	
P012	1327-53-3	Arsenic oxide As_2O_3	
P011	1303-28-2	Arsenic oxide As_2O_5	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic trioxide	
P038	692-42-2	Arsine, diethyl-	
P036	696-28-6	Arsonous dichloride, phenyl-	

P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-
P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl) -, (R)-
P046	122-09-8	Benzeneethanamine, α,α-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b) indol-5-yl methylcarbamate ester (1:1)
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3 percent
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-6	2-Butanone,3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl) oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl) -5-methyl-1H-pyrazol-3-yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran
P022	75-15-0	Carbon disulfide

P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P202	64-00-6	m-Cumenyl methylcarbamate
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P191	644-64-4	Dimetilan
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5α,8α,8aβ)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-, and metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	α,α-Dimethylphenethylamine

P047	534-52-1*	4,6-Dinitro-o-cresol and salts	
P048	51-28-5	2,4-Dinitrophenol	
P020	88-85-7	Dinoseb	
P085	152-16-9	Diphosphoramide, octamethyl-	
P111	107-49-3	Diphosphoric acid, tetraethyl ester	
P039	298-04-4	Disulfoton	
P049	541-53-7	Dithiobiuret	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime	
P050	115-29-7	Endosulfan	
P088	145-73-3	Endothall	
P051	72-20-8	Endrin	
P051	72-20-8	Endrin, and metabolites	
P042	51-43-4	Epinephrine	
P031	460-19-5	Ethanedinitrile	
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	
P066	16752-77-5	Ethanimidothioic acid, N-(((methylamino)carbonyl)oxy)-, methyl ester	
P101	107-12-0	Ethyl cyanide	
P054	151-56-4	Ethyleneimine~~Ethylenimine~~	
P097	52-85-7	Famphur	
P056	7782-41-4	Fluorine	
P057	640-19-7	Fluoroacetamide	
P058	62-74-8	Fluoroacetic acid, sodium salt	
P198	23422-53-9	Formetanate hydrochloride	
P197	17702-57-7	Formparanate	
P065	628-86-4	Fulminic acid, mercury (2+) salt	(R, T)
P059	76-44-8	Heptachlor	
P062	757-58-4	Hexaethyl tetraphosphate	
P116	79-19-6	Hydrazinecarbothioamide	
P068	60-34-4	Hydrazine, methyl-	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P096	7803-51-2	Hydrogen phosphide	
P060	465-73-6	Isodrin	
P192	119-38-0	Isolan	
P202	64-00-6	3-Isopropylphenyl-N-methylcarbamate	

P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-	
P196	15339-36-3	Manganese dimethyldithiocarbamate	
P092	62-38-4	Mercury, (acetato-O)phenyl-	
P065	628-86-4	Mercury fulminate	(R, T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P064	624-83-9	Methane, isocyanato-	
P016	542-88-1	Methane, oxybis(chloro-	
P112	509-14-8	Methane, tetranitro-	(R)
P118	75-70-7	Methanethiol, trichloro-	
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride	
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino)carbonyl)oxy)phenyl)-	
P199	2032-65-7	Methiocarb	
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	
P066	16752-77-5	Methomyl	
P068	60-34-4	Methyl hydrazine	
P064	624-83-9	Methyl isocyanate	
P069	75-86-5	2-Methyllactonitrile	
P071	298-00-0	Methyl parathion	
P190	1129-41-5	Metolcarb	
P128	315-18-4	Mexacarbate	
P072	86-88-4	α-Naphthylthiourea	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel cyanide $Ni(CN)_2$	
P075	54-11-5*	Nicotine, and salts	
P076	10102-43-9	Nitric oxide	
P077	100-01-6	p-Nitroaniline	

P078	10102-44-0	Nitrogen dioxide	
P076	10102-43-9	Nitrogen oxide NO	
P078	10102-44-0	Nitrogen oxide NO_2	
P081	55-63-0	Nitroglycerine	(R)
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P085	152-16-9	Octamethylpyrophosphoramide	
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	
P194	23135-22-0	Oxamyl	
P089	56-38-2	Parathion	
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-	
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	
P048	51-28-5	Phenol, 2,4-dinitro-	
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts	
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate	
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P092	62-38-4	Phenylmercury acetate	
P093	103-85-5	Phenylthiourea	
P094	298-02-2	Phorate	
P095	75-44-5	Phosgene	
P096	7803-51-2	Phosphine	
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester	
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	

P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	
P097	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	
P204	57-47-6	Physostigmine	
P188	57-64-7	Physostigmine salicylate	
P110	78-00-2	Plumbane, tetraethyl-	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide KCN	
P099	506-61-6	Potassium silver cyanide	
P201	2631-37-0	Promecarb	
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl) oxime	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	
P101	107-12-0	Propanenitrile	
P027	542-76-7	Propanenitrile, 3-chloro-	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)
P017	598-31-2	2-Propanone, 1-bromo-	
P102	107-19-7	Propargyl alcohol	
P003	107-02-8	2-Propenal	
P005	107-18-6	2-Propen-1-ol	
P067	75-55-8	1,2-Propylenimine	
P102	107-19-7	2-Propyn-1-ol	
P008	504-24-5	4-Pyridinamine	
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and salts	
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	
P114	12039-52-0	Selenious acid, dithallium (1+) salt	
P103	630-10-4	Selenourea	
P104	506-64-9	Silver cyanide	

P104	506-64-9	Silver cyanide AgCN	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide NaCN	
P108	57-24-9*	Strychnidin-10-one, and salts	
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-	
P108	57-24-9*	Strychnine and salts	
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Tetranitromethane	(R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium oxide Tl_2O_3	
P114	12039-52-0	Thallium (I) selenite	
P115	7446-18-6	Thallium (I) sulfate	
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	
P045	39196-18-4	Thiofanox	
P049	541-53-7	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	
P014	108-98-5	Thiophenol	
P116	79-19-6	Thiosemicarbazide	
P026	5344-82-1	Thiourea, (2-chlorophenyl)-	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P093	103-85-5	Thiourea, phenyl-	
P123	8001-35-2	Toxaphene	
P185	26419-73-8	Tirpate	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Vanadic acid, ammonium salt	
P120	1314-62-1	Vanadium oxide V_2O_5	
P120	1314-62-1	Vanadium pentoxide	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P001	81-81-2*	Warfarin, and salts, when present at concentrations greater than 0.3 percent	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-	

P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10 percent	(R, T)
P205	137-30-4	Ziram	

Numerical Listing

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
P001	81-81-2*	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3 percent	
P001	81-81-2*	Warfarin, and salts, when present at concentrations greater than 0.3 percent	
P002	591-08-2	Acetamide, N-(aminothioxomethyl)	
P002	591-08-2	1-Acetyl-2-thiourea	
P003	107-02-8	Acrolein	
P003	107-02-8	2-Propenal	
P004	309-00-2	Aldrin	
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5α,8α,8aβ)-	
P005	107-18-6	Allyl alcohol	
P005	107-18-6	2-Propen-1-ol	
P006	20859-73-8	Aluminum phosphide	(R, T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol	
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-	
P008	504-24-5	4-Aminopyridine	
P008	504-24-5	4-Pyridinamine	
P009	131-74-8	Ammonium picrate	(R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt	(R)
P010	7778-39-4	Arsenic acid H_3AsO_4	
P011	1303-28-2	Arsenic oxide As_2O_5	
P011	1303-28-2	Arsenic pentoxide	
P012	1327-53-3	Arsenic oxide As_2O_3	
P012	1327-53-3	Arsenic trioxide	
P013	542-62-1	Barium cyanide	
P014	108-98-5	Benzenethiol	
P014	108-98-5	Thiophenol	
P015	7440-41-7	Beryllium powder	

P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis(chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $Ca(CN)_2$
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide CuCN
P030		Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride CNCl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-28-6	Arsonous dichloride, phenyl-
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P037	60-57-1	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester

P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl)ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester
P045	39196-18-6	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl) oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine, α,α-dimethyl-
P046	122-09-8	α,α-Dimethylphenethylamine
P047	534-52-1*	4,6-Dinitro-o-cresol and salts
P047	534-52-1*	Phenol, 2-methyl-4,6-dinitro-, and salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$
P050	115-29-7	Endosulfan
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P051	72-20-8*	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-, and metabolites
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P054	151-56-4	Aziridine
P054	151-56-4	Ethyleneimine~~Ethylenimine~~
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt

P058	62-74-8	Fluoroacetic acid, sodium salt	
P059	76-44-8	Heptachlor	
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-	
P060	465-73-6	Isodrin	
P062	757-58-4	Hexaethyl tetraphosphate	
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester	
P063	74-90-8	Hydrocyanic acid	
P063	74-90-8	Hydrogen cyanide	
P064	624-83-9	Methane, isocyanato-	
P064	624-83-9	Methyl isocyanate	
P065	628-86-4	Fulminic acid, mercury (2+) salt	(R, T)
P065	628-86-4	Mercury fulminate	(R, T)
P066	16752-77-5	Ethanimidothioic acid, N-(((methylamino)-carbonyl)oxy)-, methyl ester	
P066	16752-77-5	Methomyl	
P067	75-55-8	Aziridine, 2-methyl	
P067	75-55-8	1,2-Propylenimine	
P068	60-34-4	Hydrazine, methyl-	
P068	60-34-4	Methyl hydrazine	
P069	75-86-5	2-Methyllactonitrile	
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-	
P070	116-06-3	Aldicarb	
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	
P071	298-00-0	Methyl parathion	
P071	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	
P072	86-88-4	α-Naphthylthiourea	
P072	86-88-4	Thiourea, 1-naphthalenyl-	
P073	13463-39-3	Nickel carbonyl	
P073	13463-39-3	Nickel carbonyl $Ni(CO)_4$, (T-4)-	
P074	557-19-7	Nickel cyanide	
P074	557-19-7	Nickel cyanide $Ni(CN)_2$	
P075	54-11-5*	Nicotine, and salts	
P075	54-11-5*	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)- and salts	
P076	10102-43-9	Nitric oxide	
P076	10102-43-9	Nitrogen oxide NO	
P077	100-01-6	Benzenamine, 4-nitro-	

P077	100-01-6	p-Nitroaniline	
P078	10102-44-0	Nitrogen dioxide	
P078	10102-44-0	Nitrogen oxide NO_2	
P081	55-63-0	Nitroglycerine	(R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate-	(R)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-	
P082	62-75-9	N-Nitrosodimethylamine	
P084	4549-40-0	N-Nitrosomethylvinylamine	
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-	
P085	152-16-9	Diphosphoramide, octamethyl-	
P085	152-16-9	Octamethylpyrophosphoramide	
P087	20816-12-0	Osmium oxide OsO_4, (T-4)-	
P087	20816-12-0	Osmium tetroxide	
P088	145-73-3	Endothall	
P088	145-73-3	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	
P089	56-38-2	Parathion	
P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	
P092	62-38-4	Mercury, (acetato-O)phenyl-	
P092	62-38-4	Phenylmercury acetate	
P093	103-85-5	Phenylthiourea	
P093	103-85-5	Thiourea, phenyl-	
P094	298-02-2	Phorate	
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	
P095	75-44-5	Carbonic dichloride	
P095	75-44-5	Phosgene	
P096	7803-51-2	Hydrogen phosphide	
P096	7803-51-2	Phosphine	
P097	52-85-7	Famphur	
P097	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	
P098	151-50-8	Potassium cyanide	
P098	151-50-8	Potassium cyanide KCN	
P099	506-61-6	Argentate(1-), bis(cyano-C), potassium	
P099	506-61-6	Potassium silver cyanide	
P101	107-12-0	Ethyl cyanide	
P101	107-12-0	Propanenitrile	
P102	107-19-7	Propargyl alcohol	
P102	107-19-7	2-Propyn-1-ol	
P103	630-10-4	Selenourea	

P104	506-64-9	Silver cyanide	
P104	506-64-9	Silver cyanide AgCN	
P105	26628-22-8	Sodium azide	
P106	143-33-9	Sodium cyanide	
P106	143-33-9	Sodium cyanide NaCN	
P108	57-24-9*	Strychnidin-10-one, and salts	
P108	57-24-9*	Strychnine and salts	
P109	3689-24-5	Tetraethyldithiopyrophosphate	
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester	
P110	78-00-2	Plumbane, tetraethyl-	
P110	78-00-2	Tetraethyl lead	
P111	107-49-3	Diphosphoric acid, tetraethyl ester	
P111	107-49-3	Tetraethylpyrophosphate	
P112	509-14-8	Methane, tetranitro-	(R)
P112	509-14-8	Tetranitromethane	(R)
P113	1314-32-5	Thallic oxide	
P113	1314-32-5	Thallium oxide Tl_2O_3	
P114	12039-52-0	Selenious acid, dithallium (1+) salt	
P114	12039-52-0	Thallium (I) selenite	
P115	7446-18-6	Sulfuric acid, dithallium (1+) salt	
P115	7446-18-6	Thallium (I) sulfate	
P116	79-19-6	Hydrazinecarbothioamide	
P116	79-19-6	Thiosemicarbazide	
P118	75-70-7	Methanethiol, trichloro-	
P118	75-70-7	Trichloromethanethiol	
P119	7803-55-6	Ammonium vanadate	
P119	7803-55-6	Vanadic acid, ammonium salt	
P120	1314-62-1	Vanadium oxide V_2O_5	
P120	1314-62-1	Vanadium pentoxide	
P121	557-21-1	Zinc cyanide	
P121	557-21-1	Zinc cyanide $Zn(CN)_2$	
P122	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations greater than 10 percent	(R, T)
P123	8001-35-2	Toxaphene	
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	
P127	1563-66-2	Carbofuran	
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	
P128	315-18-4	Mexacarbate	
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)-carbonyl)oxime	

P185	26419-73-8	Tirpate
P188	57-64-7	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)
P188	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid, ((dibutylamino)-thio)methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester
P189	55285-14-8	Carbosulfan
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P190	1129-41-5	Metolcarb
P191	644-64-4	Carbamic acid, dimethyl-, 1-((dimethyl-amino)carbonyl)-5-methyl-1H-pyrazol-3-yl ester
P191	644-64-4	Dimetilan
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P192	119-38-0	Isolan
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioato-S,S')-
P196	15339-36-3	Manganese dimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino)carbonyl)oxy)phenyl)-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-carbonyl)oxy)phenyl)-, monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate
P202	64-00-6	3-Isopropylphenyl-N-methylcarbamate

P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	1646-88-4	Aldicarb sulfone
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-((methylamino)carbonyl) oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P205	137-30-4	Ziram

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

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

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

USEPA Hazardous Waste No.	Chemical Abstracts No. (CAS No.)	Substance	Hazard Code
U394	30558-43-1	A2213	
U001	75-07-0	Acetaldehyde	(I)
U034	75-87-6	Acetaldehyde, trichloro-	
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-	
U240	P 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U112	141-78-6	Acetic acid, ethyl ester	(I)
U144	301-04-2	Acetic acid, lead (2+) salt	
U214	563-68-8	Acetic acid, thallium (1+) salt	

See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	
U002	67-64-1	Acetone	(I)
U003	75-05-8	Acetonitrile	(I, T)
U004	98-86-2	Acetophenone	
U005	53-96-3	2-Acetylaminofluorene	
U006	75-36-5	Acetyl chloride	(C, R, T)
U007	79-06-1	Acrylamide	
U008	79-10-7	Acrylic acid	(I)
U009	107-13-1	Acrylonitrile	
U011	61-82-5	Amitrole	
U012	62-53-3	Aniline	(I, T)
U136	75-60-5	Arsinic acid, dimethyl-	
U014	492-80-8	Auramine	
U015	115-02-6	Azaserine	
U010	50-07-7	Azirino(2',3':3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-	
U280	101-27-9	Barban	
U278	22781-23-3	Bendiocarb	
U364	22961-82-6	Bendiocarb phenol	
U271	17804-35-2	Benomyl	
U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	
U016	225-51-4	Benz(c)acridine	
U017	98-87-3	Benzal chloride	
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	
U018	56-55-3	Benz(a)anthracene	
U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-	
U012	62-53-3	Benzenamine	(I, T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis(N,N-dimethyl-	
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride	
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	
U328	95-53-4	Benzenamine, 2-methyl-	
U353	106-49-0	Benzenamine, 4-methyl-	
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-	

U019	71-43-2	Benzene	(I, T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	
U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-	
U037	108-90-7	Benzene, chloro-	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	
U070	95-50-1	Benzene, 1,2-dichloro-	
U071	541-73-1	Benzene, 1,3-dichloro-	
U072	106-46-7	Benzene, 1,4-dichloro-	
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	
U017	98-87-3	Benzene, (dichloromethyl)-	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R, T)
U239	1330-20-7	Benzene, dimethyl-	(I)
U201	108-46-3	1,3-Benzenediol	
U127	118-74-1	Benzene, hexachloro-	
U056	110-82-7	Benzene, hexahydro-	(I)
U220	108-88-3	Benzene, methyl-	
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-	
U055	98-82-8	Benzene, (1-methylethyl)-	(I)
U169	98-95-3	Benzene, nitro-	(I, T)
U183	608-93-5	Benzene, pentachloro-	
U185	82-68-8	Benzene, pentachloronitro-	
U020	98-09-9	Benzenesulfonic acid chloride	(C, R)
U020	98-09-9	Benzenesulfonyl chloride	(C, R)
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	

U023	98-07-7	Benzene, (trichloromethyl)-	(C, R, T)
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R, T)
U021	92-87-5	Benzidene	
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-	
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	
U064	189-55-9	Benzo(rst)pentaphene	
U248	~~P~~ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3 percent or less	
U022	50-32-8	Benzo(a)pyrene	
U197	106-51-4	p-Benzoquinone	
U023	98-07-7	Benzotrichloride	(C, R, T)
U085	1464-53-5	2,2'-Bioxirane	(I, T)
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U225	75-25-2	Bromoform	
U030	101-55-3	4-Bromophenyl phenyl ether	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-	
U031	71-36-3	1-Butanol	(I)
U159	78-93-3	2-Butanone	(I, T)
U160	1338-23-4	2-Butanone, peroxide	(R, T)
U053	4170-30-3	2-Butenal	
U074	764-41-0	2-Butene, 1,4-dichloro-	(I, T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S-(1α(Z), 7(2S*,3R*), 7aα))-	
U031	71-36-3	n-Butyl alcohol	(I)

U136	75-60-5	Cacodylic acid	
U032	13765-19-0	Calcium chromate	
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	
U271	17804-35-2	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	
U238	51-79-6	Carbamic acid, ethyl ester	
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester	
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester	
U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl))bis-, dimethyl ester	
U097	79-44-7	Carbamic chloride, dimethyl-	
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	
U279	63-25-2	Carbaryl	
U372	10605-21-7	Carbendazim	
U367	1563-38-8	Carbofuran phenol	
U215	6533-73-9	Carbonic acid, dithallium (1+) salt	
U033	353-50-4	Carbonic difluoride	(R, T)
U156	79-22-1	Carbonochloridic acid, methyl ester	(I, T)
U033	353-50-4	Carbon oxyfluoride	(R, T)
U211	56-23-5	Carbon tetrachloride	
U034	75-87-6	Chloral	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, α and γ isomers	
U026	494-03-1	Chlornaphazin	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	p-Chloro-m-cresol	
U042	110-75-8	2-Chloroethyl vinyl ether	
U044	67-66-3	Chloroform	
U046	107-30-2	Chloromethyl methyl ether	

U047	91-58-7	β-Chloronaphthalene	
U048	95-57-8	o-Chlorophenol	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt	
U050	218-01-9	Chrysene	
U051		Creosote	
U052	1319-77-3	Cresol (Cresylic acid)	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Cumene	(I)
U246	506-68-3	Cyanogen bromide CNBr	
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione	
U056	110-82-7	Cyclohexane	(I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-	
U057	108-94-1	Cyclohexanone	(I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	
U058	50-18-0	Cyclophosphamide	
U240	P 94-75-7	2,4-D, salts and esters	
U059	20830-81-3	Daunomycin	
U060	72-54-8	DDD	
U061	50-29-3	DDT	
U062	2303-16-4	Diallate	
U063	53-70-3	Dibenz(a,h)anthracene	
U064	189-55-9	Dibenzo(a,i)pyrene	
U066	96-12-8	1,2-Dibromo-3-chloropropane	
U069	84-74-2	Dibutyl phthalate	
U070	95-50-1	o-Dichlorobenzene	
U071	541-73-1	m-Dichlorobenzene	
U072	106-46-7	p-Dichlorobenzene	
U073	91-94-1	3,3'-Dichlorobenzidine	
U074	764-41-0	1,4-Dichloro-2-butene	(I, T)
U075	75-71-8	Dichlorodifluoromethane	
U078	75-35-4	1,1-Dichloroethylene	
U079	156-60-5	1,2-Dichloroethylene	
U025	111-44-4	Dichloroethyl ether	
U027	108-60-1	Dichloroisopropyl ether	
U024	111-91-1	Dichloromethoxy ethane	
U081	120-83-2	2,4-Dichlorophenol	
U082	87-65-0	2,6-Dichlorophenol	
U084	542-75-6	1,3-Dichloropropene	
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I, T)
U395	5952-26-1	Diethylene glycol, dicarbamate	

U108	123-91-1	1,4-Diethyleneoxide	
U028	117-81-7	Diethylhexyl phthalate	
U086	1615-80-1	N,N'-Diethylhydrazine	
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	3,3'-Dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(I)
U093	60-11-7	p-Dimethylaminoazobenzene	
U094	57-97-6	7,12-Dimethylbenz(a)anthracene	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	α, α-Dimethylbenzylhydroperoxide	(R)
U097	79-44-7	Dimethylcarbamoyl chloride	
U098	57-14-7	1,1-Dimethylhydrazine	
U099	540-73-8	1,2-Dimethylhydrazine	
U101	105-67-9	2,4-Dimethylphenol	
U102	131-11-3	Dimethyl phthalate	
U103	77-78-1	Dimethyl sulfate	
U105	121-14-2	2,4-Dinitrotoluene	
U106	606-20-2	2,6-Dinitrotoluene	
U107	117-84-0	Di-n-octyl phthalate	
U108	123-91-1	1,4-Dioxane	
U109	122-66-7	1,2-Diphenylhydrazine	
U110	142-84-7	Dipropylamine	(I)
U111	621-64-7	Di-n-propylnitrosamine	
U041	106-89-8	Epichlorohydrin	
U001	75-07-0	Ethanal	(I)
U404	121-44-8	Ethanamine, N,N-diethyl-	
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-	
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	
U067	106-93-4	Ethane, 1,2-dibromo-	
U076	75-34-3	Ethane, 1,1-dichloro-	
U077	107-06-2	Ethane, 1,2-dichloro-	
U131	67-72-1	Ethane, hexachloro-	
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	
U117	60-29-7	Ethane, 1,1'-oxybis-	(I)
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	
U184	76-01-7	Ethane, pentachloro-	
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	

U218	62-55-5	Ethanethioamide	
U226	71-55-6	Ethane, 1,1,1-trichloro-	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U410	59669-26-0	Ethanimidothioic acid, N,N'-(thiobis((methylimino)carbonyloxy))bis-, dimethyl ester	
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	
U359	110-80-5	Ethanol, 2-ethoxy-	
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-	
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate	
U004	98-86-2	Ethanone, 1-phenyl-	
U043	75-01-4	Ethene, chloro-	
U042	110-75-8	Ethene, (2-chloroethoxy)-	
U078	75-35-4	Ethene, 1,1-dichloro-	
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	
U210	127-18-4	Ethene, tetrachloro-	
U228	79-01-6	Ethene, trichloro-	
U112	141-78-6	Ethyl acetate	(I)
U113	140-88-5	Ethyl acrylate	(I)
U238	51-79-6	Ethyl carbamate (urethane)	
U117	60-29-7	Ethyl ether	(I)
U114	P 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	
U067	106-93-4	Ethylene dibromide	
U077	107-06-2	Ethylene dichloride	
U359	110-80-5	Ethylene glycol monoethyl ether	
U115	75-21-8	Ethylene oxide	(I, T)
U116	96-45-7	Ethylenethiourea	
U076	75-34-3	Ethylidene dichloride	
U118	97-63-2	Ethyl methacrylate	
U119	62-50-0	Ethyl methanesulfonate	
U120	206-44-0	Fluoranthene	
U122	50-00-0	Formaldehyde	
U123	64-18-6	Formic acid	(C, T)
U124	110-00-9	Furan	(I)
U125	98-01-1	2-Furancarboxaldehyde	(I)
U147	108-31-6	2,5-Furandione	
U213	109-99-9	Furan, tetrahydro-	(I)
U125	98-01-1	Furfural	(I)
U124	110-00-9	Furfuran	(I)

U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl)amino)-	
U126	765-34-4	Glycidylaldehyde	
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-	
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	Hexachlorobutadiene	
U130	77-47-4	Hexachlorocyclopentadiene	
U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorophene	
U243	1888-71-7	Hexachloropropene	
U133	302-01-2	Hydrazine	(R, T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	
U134	7664-39-3	Hydrofluoric acid	(C, T)
U134	7664-39-3	Hydrogen fluoride	(C, T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H_2S	
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U116	96-45-7	2-Imidazolidinethione	
U137	193-39-5	Indeno(1,2,3-cd)pyrene	
U190	85-44-9	1,3-Isobenzofurandione	
U140	78-83-1	Isobutyl alcohol	(I, T)
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U143	303-34-4	Lasiocarpene	
U144	301-04-2	Lead acetate	
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-	
U145	7446-27-7	Lead phosphate	
U146	1335-32-6	Lead subacetate	
U129	58-89-9	Lindane	
U163	70-25-7	MNNG	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U149	109-77-3	Malononitrile	
U150	148-82-3	Melphalan	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I, T)
U092	124-40-3	Methanamine, N-methyl-	(I)
U029	74-83-9	Methane, bromo-	

U045	74-87-3	Methane, chloro-	(I, T)
U046	107-30-2	Methane, chloromethoxy-	
U068	74-95-3	Methane, dibromo-	
U080	75-09-2	Methane, dichloro-	
U075	75-71-8	Methane, dichlorodifluoro-	
U138	74-88-4	Methane, iodo-	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U211	56-23-5	Methane, tetrachloro-	
U153	74-93-1	Methanethiol	(I, T)
U225	75-25-2	Methane, tribromo-	
U044	67-66-3	Methane, trichloro-	
U121	75-69-4	Methane, trichlorofluoro-	
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	
U154	67-56-1	Methanol	(I)
U155	91-80-5	Methapyrilene	
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	
U247	72-43-5	Methoxychlor	
U154	67-56-1	Methyl alcohol	(I)
U029	74-83-9	Methyl bromide	
U186	504-60-9	1-Methylbutadiene	(I)
U045	74-87-3	Methyl chloride	(I, T)
U156	79-22-1	Methyl chlorocarbonate	(I, T)
U226	71-55-6	Methylchloroform	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U068	74-95-3	Methylene bromide	
U080	75-09-2	Methylene chloride	
U159	78-93-3	Methyl ethyl ketone (MEK)	(I, T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R, T)
U138	74-88-4	Methyl iodide	
U161	108-10-1	Methyl isobutyl ketone	(I)
U162	80-62-6	Methyl methacrylate	(I, T)
U161	108-10-1	4-Methyl-2-pentanone	(I)
U164	56-04-2	Methylthiouracil	
U010	50-07-7	Mitomycin C	
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy-α-L-lyxo-hexapyranosyl)oxyl)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	
U167	134-32-7	1-Naphthalenamine	

U168	91-59-8	2-Naphthalenamine	
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-	
U165	91-20-3	Naphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U166	130-15-4	1,4-Naphthalenedione	
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt	
U279	63-25-2	1-Naphthalenol, methylcarbamate	
U166	130-15-4	1,4-Naphthoquinone	
U167	134-32-7	α-Naphthylamine	
U168	91-59-8	β-Naphthylamine	
U217	10102-45-1	Nitric acid, thallium (1+) salt	
U169	98-95-3	Nitrobenzene	(I, T)
U170	100-02-7	p-Nitrophenol	
U171	79-46-9	2-Nitropropane	(I, T)
U172	924-16-3	N-Nitrosodi-n-butylamine	
U173	1116-54-7	N-Nitrosodiethanolamine	
U174	55-18-5	N-Nitrosodiethylamine	
U176	759-73-9	N-Nitroso-N-ethylurea	
U177	684-93-5	N-Nitroso-N-methylurea	
U178	615-53-2	N-Nitroso-N-methylurethane	
U179	100-75-4	N-Nitrosopiperidine	
U180	930-55-2	N-Nitrosopyrrolidine	
U181	99-55-8	5-Nitro-o-toluidine	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	
U115	75-21-8	Oxirane	(I, T)
U126	765-34-4	Oxiranecarboxyaldehyde	
U041	106-89-8	Oxirane, (chloromethyl)-	
U182	123-63-7	Paraldehyde	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Pentachloronitrobenzene (PCNB)	
See F027	87-86-5	Pentachlorophenol	
U161	108-10-1	Pentanol, 4-methyl-	(I)
U186	504-60-9	1,3-Pentadiene	(I)
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U048	95-57-8	Phenol, 2-chloro-	

U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U081	120-83-2	Phenol, 2,4-dichloro-	
U082	87-65-0	Phenol, 2,6-dichloro-	
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U101	105-67-9	Phenol, 2,4-dimethyl-	
U052	1319-77-3	Phenol, methyl-	
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate	
U170	100-02-7	Phenol, 4-nitro-	
See F027	87-86-5	Phenol, pentachloro-	
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-	
See F027	95-95-4	Phenol, 2,4,5-trichloro-	
See F027	88-06-2	Phenol, 2,4,6-trichloro-	
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	
U145	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)	
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester	
U189	1314-80-3	Phosphorus sulfide	(R)
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U179	100-75-4	Piperidine, 1-nitroso-	
U192	23950-58-5	Pronamide	
U194	107-10-8	1-Propanamine	(I, T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	
U110	142-84-7	1-Propanamine, N-propyl-	(I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	
U083	78-87-5	Propane, 1,2-dichloro-	
U149	109-77-3	Propanedinitrile	
U171	79-46-9	Propane, 2-nitro-	(I, T)
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	
U193	1120-71-4	1,3-Propane sultone	
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U140	78-83-1	1-Propanol, 2-methyl-	(I, T)
U002	67-64-1	2-Propanone	(I)
U007	79-06-1	2-Propenamide	
U084	542-75-6	1-Propene, 1,3-dichloro-	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U009	107-13-1	2-Propenenitrile	

U152	126-98-7	2-Propenenitrile, 2-methyl-	(I, T)
U008	79-10-7	2-Propenoic acid	(I)
U113	140-88-5	2-Propenoic acid, ethyl ester	(I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	(I, T)
U373	122-42-9	Propham	
U411	114-26-1	Propoxur	
See F027	93-72-1	Propionic acid, 2-(2,4,5-trichlorophenoxy)-	
U194	107-10-8	n-Propylamine	(I, T)
U083	78-87-5	Propylene dichloride	
U387	52888-80-9	Prosulfocarb	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	
U196	110-86-1	Pyridine	
U191	109-06-8	Pyridine, 2-methyl-	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl) amino)-	
U164	56-04-2~~58-04-2~~	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	
U180	930-55-2	Pyrrolidine, 1-nitroso-	
U200	50-55-5	Reserpine	
U201	108-46-3	Resorcinol	
U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	(R, T)
U205	7488-56-4	Selenium sulfide SeS_2	(R, T)
U015	115-02-6	L-Serine, diazoacetate (ester)	
See F027	93-72-1	Silvex (2,4,5-TP)	
U206	18883-66-4	Streptozotocin	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U189	1314-80-3	Sulfur phosphide	(R)
See F027	93-76-5	2,4,5-T	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	1,1,1,2-Tetrachloroethane	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Tetrachloroethylene	
See F027	58-90-2	2,3,4,6-Tetrachlorophenol	
U213	109-99-9	Tetrahydrofuran	(I)
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	

U216	7791-12-0	Thallium chloride TlCl	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Thioacetamide	
U410	59669-26-0	Thiodicarb	
U153	74-93-1	Thiomethanol	(I, T)
U244	137-26-8	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	
U409	23564-05-8	Thiophanate-methyl	
U219	62-56-6	Thiourea	
U244	137-26-8	Thiram	
U220	108-88-3	Toluene	
U221	25376-45-8	Toluenediamine	
U223	26471-62-5	Toluene diisocyanate	(R, T)
U328	95-53-4	o-Toluidine	
U353	106-49-0	p-Toluidine	
U222	636-21-5	o-Toluidine hydrochloride	
U389	2303-17-5	Triallate	
U011	61-82-5	1H-1,2,4-Triazol-3-amine	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U227	79-00-5	1,1,2-Trichloroethane	
U228	79-01-6	Trichloroethylene	
U121	75-69-4	Trichloromonofluoromethane	
See F027	95-95-4	2,4,5-Trichlorophenol	
See F027	88-06-2	2,4,6-Trichlorophenol	
U404	121-44-8	Triethylamine	
U234	99-35-4	1,3,5-Trinitrobenzene	(R, T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U235	126-72-7	Tris (2,3-dibromopropyl) phosphate	
U236	72-57-1	Trypan blue	
U237	66-75-1	Uracil mustard	
U176	759-73-9	Urea, N-ethyl-N-nitroso-	
U177	684-93-5	Urea, N-methyl-N-nitroso-	
U043	75-01-4	Vinyl chloride	
U248	~~P~~ 81-81-2	Warfarin, and salts, when present at concentrations of 0.3 percent or less	
U239	1330-20-7	Xylene	(I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10 percent or less	

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Numerical Listing

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

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U020	98-09-9	Benzenesulfonyl chloride	(C, R)
U021	92-87-5	Benzidene	
U021	92-87-5	(1,1'-Biphenyl)-4,4'-diamine	
U022	50-32-8	Benzo(a)pyrene	
U023	98-07-7	Benzene, (trichloromethyl)-	(C, R, T)
U023	98-07-7	Benzotrichloride	(C, R, T)
U024	111-91-1	Dichloromethoxy ethane	
U024	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-	
U025	111-44-4	Dichloroethyl ether	
U025	111-44-4	Ethane, 1,1'-oxybis(2-chloro-	
U026	494-03-1	Chlornaphazin	
U026	494-03-1	Naphthaleneamine, N,N'-bis(2-chloroethyl)-	
U027	108-60-1	Dichloroisopropyl ether	
U027	108-60-1	Propane, 2,2'-oxybis(2-chloro-	
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	
U028	117-81-7	Diethylhexyl phthalate	
U029	74-83-9	Methane, bromo-	
U029	74-83-9	Methyl bromide	
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-	
U030	101-55-3	4-Bromophenyl phenyl ether	
U031	71-36-3	1-Butanol	(I)
U031	71-36-3	n-Butyl alcohol	(I)
U032	13765-19-0	Calcium chromate	
U032	13765-19-0	Chromic acid H_2CrO_4, calcium salt	
U033	353-50-4	Carbonic difluoride	(R, T)
U033	353-50-4	Carbon oxyfluoride	(R, T)
U034	75-87-6	Acetaldehyde, trichloro-	
U034	75-87-6	Chloral	
U035	305-03-3	Benzenebutanoic acid, 4-(bis(2-chloroethyl)amino)-	
U035	305-03-3	Chlorambucil	
U036	57-74-9	Chlordane, α and γ isomers	
U036	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	
U037	108-90-7	Benzene, chloro-	
U037	108-90-7	Chlorobenzene	
U038	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	
U038	510-15-6	Chlorobenzilate	
U039	59-50-7	p-Chloro-m-cresol	

U039	59-50-7	Phenol, 4-chloro-3-methyl-	
U041	106-89-8	Epichlorohydrin	
U041	106-89-8	Oxirane, (chloromethyl)-	
U042	110-75-8	2-Chloroethyl vinyl ether	
U042	110-75-8	Ethene, (2-chloroethoxy)-	
U043	75-01-4	Ethene, chloro-	
U043	75-01-4	Vinyl chloride	
U044	67-66-3	Chloroform	
U044	67-66-3	Methane, trichloro-	
U045	74-87-3	Methane, chloro-	(I, T)
U045	74-87-3	Methyl chloride	(I, T)
U046	107-30-2	Chloromethyl methyl ether	
U046	107-30-2	Methane, chloromethoxy-	
U047	91-58-7	β-Chloronaphthalene	
U047	91-58-7	Naphthalene, 2-chloro-	
U048	95-57-8	o-Chlorophenol	
U048	95-57-8	Phenol, 2-chloro-	
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride	
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride	
U050	218-01-9	Chrysene	
U051		Creosote	
U052	1319-77-3	Cresol (Cresylic acid)	
U052	1319-77-3	Phenol, methyl-	
U053	4170-30-3	2-Butenal	
U053	4170-30-3	Crotonaldehyde	
U055	98-82-8	Benzene, (1-methylethyl)-	(I)
U055	98-82-8	Cumene	(I)
U056	110-82-7	Benzene, hexahydro-	(I)
U056	110-82-7	Cyclohexane	(I)
U057	108-94-1	Cyclohexanone	(I)
U058	50-18-0	Cyclophosphamide	
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide	
U059	20830-81-3	Daunomycin	
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy)-α-L-lyxo-hexapyranosyl)oxyl)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	
U060	72-54-8	DDD	

U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	
U061	50-29-3	DDT	
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	
U062	2303-16-4	Diallate	
U063	53-70-3	Dibenz(a,h)anthracene	
U064	189-55-9	Benzo(rst)pentaphene	
U064	189-55-9	Dibenzo(a,i)pyrene	
U066	96-12-8	1,2-Dibromo-3-chloropropane	
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-	
U067	106-93-4	Ethane, 1,2-dibromo-	
U067	106-93-4	Ethylene dibromide	
U068	74-95-3	Methane, dibromo-	
U068	74-95-3	Methylene bromide	
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	
U069	84-74-2	Dibutyl phthalate	
U070	95-50-1	Benzene, 1,2-dichloro-	
U070	95-50-1	o-Dichlorobenzene	
U071	541-73-1	Benzene, 1,3-dichloro-	
U071	541-73-1	m-Dichlorobenzene	
U072	106-46-7	Benzene, 1,4-dichloro-	
U072	106-46-7	p-Dichlorobenzene	
U073	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	
U073	91-94-1	3,3'-Dichlorobenzidine	
U074	764-41-0	2-Butene, 1,4-dichloro-	(I, T)
U074	764-41-0	1,4-Dichloro-2-butene	(I, T)
U075	75-71-8	Dichlorodifluoromethane	
U075	75-71-8	Methane, dichlorodifluoro-	
U076	75-34-3	Ethane, 1,1-dichloro-	
U076	75-34-3	Ethylidene dichloride	
U077	107-06-2	Ethane, 1,2-dichloro-	
U077	107-06-2	Ethylene dichloride	
U078	75-35-4	1,1-Dichloroethylene	
U078	75-35-4	Ethene, 1,1-dichloro-	
U079	156-60-5	1,2-Dichloroethylene	
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-	
U080	75-09-2	Methane, dichloro-	
U080	75-09-2	Methylene chloride	
U081	120-83-2	2,4-Dichlorophenol	
U081	120-83-2	Phenol, 2,4-dichloro-	

U082	87-65-0	2,6-Dichlorophenol	
U082	87-65-0	Phenol, 2,6-dichloro-	
U083	78-87-5	Propane, 1,2-dichloro-	
U083	78-87-5	Propylene dichloride	
U084	542-75-6	1,3-Dichloropropene	
U084	542-75-6	1-Propene, 1,3-dichloro-	
U085	1464-53-5	2,2'-Bioxirane	(I, T)
U085	1464-53-5	1,2:3,4-Diepoxybutane	(I, T)
U086	1615-80-1	N,N'-Diethylhydrazine	
U086	1615-80-1	Hydrazine, 1,2-diethyl-	
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate	
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester	
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	
U088	84-66-2	Diethyl phthalate	
U089	56-53-1	Diethylstilbestrol	
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	
U090	94-58-6	1,3-Benzodioxole, 5-propyl-	
U090	94-58-6	Dihydrosafrole	
U091	119-90-4	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	
U091	119-90-4	3,3'-Dimethoxybenzidine	
U092	124-40-3	Dimethylamine	(I)
U092	124-40-3	Methanamine, N-methyl-	(I)
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	
U093	60-11-7	p-Dimethylaminoazobenzene	
U094	57-97-6	Benz(a)anthracene, 7,12-dimethyl-	
U094	57-97-6	7,12-Dimethylbenz(a)anthracene	
U095	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	
U095	119-93-7	3,3'-Dimethylbenzidine	
U096	80-15-9	α, α-Dimethylbenzylhydroperoxide	(R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl-	(R)
U097	79-44-7	Carbamic chloride, dimethyl-	
U097	79-44-7	Dimethylcarbamoyl chloride	
U098	57-14-7	1,1-Dimethylhydrazine	
U098	57-14-7	Hydrazine, 1,1-dimethyl-	
U099	540-73-8	1,2-Dimethylhydrazine	
U099	540-73-8	Hydrazine, 1,2-dimethyl-	
U101	105-67-9	2,4-Dimethylphenol	

U101	105-67-9	Phenol, 2,4-dimethyl-	
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	
U102	131-11-3	Dimethyl phthalate	
U103	77-78-1	Dimethyl sulfate	
U103	77-78-1	Sulfuric acid, dimethyl ester	
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-	
U105	121-14-2	2,4-Dinitrotoluene	
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-	
U106	606-20-2	2,6-Dinitrotoluene	
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	
U107	117-84-0	Di-n-octyl phthalate	
U108	123-91-1	1,4-Diethyleneoxide	
U108	123-91-1	1,4-Dioxane	
U109	122-66-7	1,2-Diphenylhydrazine	
U109	122-66-7	Hydrazine, 1,2-diphenyl-	
U110	142-84-7	Dipropylamine	(I)
U110	142-84-7	1-Propanamine, N-propyl-	(I)
U111	621-64-7	Di-n-propylnitrosamine	
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-	
U112	141-78-6	Acetic acid, ethyl ester	(I)
U112	141-78-6	Ethyl acetate	(I)
U113	140-88-5	Ethyl acrylate	(I)
U113	140-88-5	2-Propenoic acid, ethyl ester	(I)
U114	P 111-54-6	Carbamodithioic acid, 1,2-ethanediylbis-, salts and esters	
U114	P 111-54-6	Ethylenebisdithiocarbamic acid, salts and esters	
U115	75-21-8	Ethylene oxide	(I, T)
U115	75-21-8	Oxirane	(I, T)
U116	96-45-7	Ethylenethiourea	
U116	96-45-7	2-Imidazolidinethione	
U117	60-29-7	Ethane, 1,1'-oxybis-	(I)
U117	60-29-7	Ethyl ether	(I)
U118	97-63-2	Ethyl methacrylate	
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	
U119	62-50-0	Ethyl methanesulfonate	
U119	62-50-0	Methanesulfonic acid, ethyl ester	
U120	206-44-0	Fluoranthene	
U121	75-69-4	Methane, trichlorofluoro-	
U121	75-69-4	Trichloromonofluoromethane	
U122	50-00-0	Formaldehyde	

U123	64-18-6	Formic acid	(C, T)
U124	110-00-9	Furan	(I)
U124	110-00-9	Furfuran	(I)
U125	98-01-1	2-Furancarboxaldehyde	(I)
U125	98-01-1	Furfural	(I)
U126	765-34-4	Glycidylaldehyde	
U126	765-34-4	Oxiranecarboxyaldehyde	
U127	118-74-1	Benzene, hexachloro-	
U127	118-74-1	Hexachlorobenzene	
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	
U128	87-68-3	Hexachlorobutadiene	
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4α,5α,6β)-	
U129	58-89-9	Lindane	
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	
U130	77-47-4	Hexachlorocyclopentadiene	
U131	67-72-1	Ethane, hexachloro-	
U131	67-72-1	Hexachloroethane	
U132	70-30-4	Hexachlorophene	
U132	70-30-4	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	
U133	302-01-2	Hydrazine	(R, T)
U134	7664-39-3	Hydrofluoric acid	(C, T)
U134	7664-39-3	Hydrogen fluoride	(C, T)
U135	7783-06-4	Hydrogen sulfide	
U135	7783-06-4	Hydrogen sulfide H_2S	
U136	75-60-5	Arsinic acid, dimethyl-	
U136	75-60-5	Cacodylic acid	
U137	193-39-5	Indeno(1,2,3-cd)pyrene	
U138	74-88-4	Methane, iodo-	
U138	74-88-4	Methyl iodide	
U140	78-83-1	Isobutyl alcohol	(I, T)
U140	78-83-1	1-Propanol, 2-methyl-	(I, T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	
U141	120-58-1	Isosafrole	
U142	143-50-0	Kepone	
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	

U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, (1S-(1α(Z), 7(2S*,3R*), 7aα))-	
U143	303-34-4	Lasiocarpene	
U144	301-04-2	Acetic acid, lead (2+) salt	
U144	301-04-2	Lead acetate	
U145	7446-27-7	Lead phosphate	
U145	7446-27-7	Phosphoric acid, lead (2+) salt (2:3)	
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-	
U146	1335-32-6	Lead subacetate	
U147	108-31-6	2,5-Furandione	
U147	108-31-6	Maleic anhydride	
U148	123-33-1	Maleic hydrazide	
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-	
U149	109-77-3	Malononitrile	
U149	109-77-3	Propanedinitrile	
U150	148-82-3	Melphalan	
U150	148-82-3	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	
U151	7439-97-6	Mercury	
U152	126-98-7	Methacrylonitrile	(I, T)
U152	126-98-7	2-Propenenitrile, 2-methyl-	(I, T)
U153	74-93-1	Methanethiol	(I, T)
U153	74-93-1	Thiomethanol	(I, T)
U154	67-56-1	Methanol	(I)
U154	67-56-1	Methyl alcohol	(I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	
U155	91-80-5	Methapyrilene	
U156	79-22-1	Carbonochloridic acid, methyl ester	(I, T)
U156	79-22-1	Methyl chlorocarbonate	(I, T)
U157	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	
U157	56-49-5	3-Methylcholanthrene	
U158	101-14-4	Benzenamine, 4,4'-methylenebis(2-chloro-	
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)	
U159	78-93-3	2-Butanone	(I, T)
U159	78-93-3	Methyl ethyl ketone (MEK)	(I, T)
U160	1338-23-4	2-Butanone, peroxide	(R, T)
U160	1338-23-4	Methyl ethyl ketone peroxide	(R, T)

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

U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-	
U183	608-93-5	Benzene, pentachloro-	
U183	608-93-5	Pentachlorobenzene	
U184	76-01-7	Ethane, pentachloro-	
U184	76-01-7	Pentachloroethane	
U185	82-68-8	Benzene, pentachloronitro-	
U185	82-68-8	Pentachloronitrobenzene (PCNB)	
U186	504-60-9	1-Methylbutadiene	(I)
U186	504-60-9	1,3-Pentadiene	(I)
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-	
U187	62-44-2	Phenacetin	
U188	108-95-2	Phenol	
U189	1314-80-3	Phosphorus sulfide	(R)
U189	1314-80-3	Sulfur phosphide	(R)
U190	85-44-9	1,3-Isobenzofurandione	
U190	85-44-9	Phthalic anhydride	
U191	109-06-8	2-Picoline	
U191	109-06-8	Pyridine, 2-methyl-	
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	
U192	23950-58-5	Pronamide	
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide	
U193	1120-71-4	1,3-Propane sultone	
U194	107-10-8	1-Propanamine	(I, T)
U194	107-10-8	n-Propylamine	(I, T)
U196	110-86-1	Pyridine	
U197	106-51-4	p-Benzoquinone	
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione	
U200	50-55-5	Reserpine	
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	
U201	108-46-3	1,3-Benzenediol	
U201	108-46-3	Resorcinol	
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	
U203	94-59-7	Safrole	
U204	7783-00-8	Selenious acid	
U204	7783-00-8	Selenium dioxide	
U205	7488-56-4	Selenium sulfide	(R, T)
U205	7488-56-4	Selenium sulfide SeS_2	(R, T)

U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-	
U206	18883-66-4	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)-carbonyl)amino)-	
U206	18883-66-4	Streptozotocin	
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-	
U207	95-94-3	1,2,4,5-Tetrachlorobenzene	
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-	
U208	630-20-6	1,1,1,2-Tetrachloroethane	
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-	
U209	79-34-5	1,1,2,2-Tetrachloroethane	
U210	127-18-4	Ethene, tetrachloro-	
U210	127-18-4	Tetrachloroethylene	
U211	56-23-5	Carbon tetrachloride	
U211	56-23-5	Methane, tetrachloro-	
U213	109-99-9	Furan, tetrahydro-	(I)
U213	109-99-9	Tetrahydrofuran	(I)
U214	563-68-8	Acetic acid, thallium (1+) salt	
U214	563-68-8	Thallium (I) acetate	
U215	6533-73-9	Carbonic acid, dithallium (1+) salt	
U215	6533-73-9	Thallium (I) carbonate	
U216	7791-12-0	Thallium (I) chloride	
U216	7791-12-0	Thallium chloride TlCl	
U217	10102-45-1	Nitric acid, thallium (1+) salt	
U217	10102-45-1	Thallium (I) nitrate	
U218	62-55-5	Ethanethioamide	
U218	62-55-5	Thioacetamide	
U219	62-56-6	Thiourea	
U220	108-88-3	Benzene, methyl-	
U220	108-88-3	Toluene	
U221	25376-45-8	Benzenediamine, ar-methyl-	
U221	25376-45-8	Toluenediamine	
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride	
U222	636-21-5	o-Toluidine hydrochloride	
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl-	(R, T)
U223	26471-62-5	Toluene diisocyanate	(R, T)
U225	75-25-2	Bromoform	
U225	75-25-2	Methane, tribromo-	
U226	71-55-6	Ethane, 1,1,1-trichloro-	
U226	71-55-6	Methylchloroform	
U227	79-00-5	Ethane, 1,1,2-trichloro-	
U227	79-00-5	1,1,2-Trichloroethane	
U228	79-01-6	Ethene, trichloro-	

U228	79-01-6	Trichloroethylene	
U234	99-35-4	Benzene, 1,3,5-trinitro-	(R, T)
U234	99-35-4	1,3,5-Trinitrobenzene	(R, T)
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)	
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate	
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl-(1,1'-biphenyl)-4,4'-diyl)bis(azo)bis(5-amino-4-hydroxy)-, tetrasodium salt	
U236	72-57-1	Trypan blue	
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	
U237	66-75-1	Uracil mustard	
U238	51-79-6	Carbamic acid, ethyl ester	
U238	51-79-6	Ethyl carbamate (urethane)	
U239	1330-20-7	Benzene, dimethyl-	(I, T)
U239	1330-20-7	Xylene	(I, T)
U240	P 94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	
U240	P 94-75-7	2,4-D, salts and esters	
U243	1888-71-7	Hexachloropropene	
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	
U244	137-26-8	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	
U244	137-26-8	Thiram	
U246	506-68-3	Cyanogen bromide CNBr	
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	
U247	72-43-5	Methoxychlor	
U248	~~P~~ 81-81-2	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations of 0.3 percent or less	
U248	~~P~~ 81-81-2	Warfarin, and salts, when present at concentrations of 0.3 percent or less	
U249	1314-84-7	Zinc phosphide Zn_3P_2, when present at concentrations of 10 percent or less	
U271	17804-35-2	Benomyl	
U271	17804-35-2	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	
U278	22781-23-3	Bendiocarb	

U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine
U359	110-80-5	Ethanol, 2-ethoxy-
U359	110-80-5	Ethylene glycol monoethyl ether
U364	22961-82-6	Bendiocarb phenol
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563-38-8	Carbofuran phenol
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U372	10605-21-7	Carbendazim
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U373	122-42-9	Propham
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U387	52888-80-9	Prosulfocarb
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U389	2303-17-5	Triallate
U394	30558-43-1	A2213
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	5952-26-1	Diethylene glycol, dicarbamate
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U404	121-44-8	Ethanamine, N,N-diethyl-
U404	121-44-8	Triethylamine
U409	23564-05-8	Carbamic acid, (1,2-phenylenebis(iminocarbonothioyl))bis-, dimethyl ester
U409	23564-05-8	Thiophanate-methyl

U410	59669-26-0	Ethanimidothioic acid, N,N'-(thiobis((methylimino)carbonyloxy))bis-, dimethyl ester
U410	59669-26-0	Thiodicarb
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U411	114-26-1	Propoxur

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.135 Wood Preserving Wastes

a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (b) and (c) ~~of this Section~~. These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

b) Generators must either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner that minimizes or eliminates the escape of hazardous waste or constituents, leachate, contaminated drippage or hazardous waste decomposition products to the groundwater, surface water, or atmosphere.

1) Generators must do one of the following:

A) Prepare and follow an equipment cleaning plan and clean equipment in accordance with subsection (b)(2) ~~this Section~~; or

B) Prepare and follow an equipment replacement plan and replace equipment in accordance with subsection (b)(3) ~~this Section~~; or

C) Document cleaning and replacement in accordance with subsections (b)(2) and (b)(3) ~~this Section~~, carried out after termination of use of chlorophenolic preservatives.

2) Cleaning requirements.

A) The generator must prepare and sign a written equipment cleaning plan that describes the following:

i) The equipment to be cleaned;

ii) How the equipment will be cleaned;

iii) The solvent to be used in cleaning;

iv) How solvent rinses will be tested; and

v) How cleaning residues will be disposed of.

B) Equipment must be cleaned as follows:

i) Remove all visible residues from process equipment; and

ii) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.

C) Analytical requirements.

i) Rinses must be tested by using an appropriate method.

ii) "Not detected" means at or below the following lower method calibration limit (MCL): the 2,3,7,8-TCDD-based MCL is 0.01 parts per trillion (ppt), using a sample weight of 1000 g, an IS spiking level of 1 ppt, and a final extraction volume of 10 to 50 µℓ. For other congeners, multiply the values by 1 for TCDF, PeCDD, or PeCDF; by 2.5 for HxCDD, HxCDF, HpCDD, or HpCDF; or by 5 for OCDD or OCDF.

D) The generator must manage all residues from the cleaning process as F032 waste.

3) Replacement requirements.

A) The generator must prepare~~Prepare~~ and sign a written equipment replacement plan that describes the following:

i) The equipment to be replaced;

ii) How the equipment will be replaced; and

iii) How the equipment will be disposed of.

B) The generator must manage the discarded equipment as F032 waste.

4) Documentation requirements. The generator must document~~Document~~ that previous equipment cleaning and replacement was performed in accordance with subsections (b)(2) and (b)(3)~~this Section~~ and that the equipment cleaning and replacement occurred~~ocurred~~ after cessation of use of chlorophenolic preservatives.

c) The generator must maintain the following records documenting the cleaning and replacement as part of the facility's operating record:

1) The name and address of the facility;

2) Formulations previously used and the date on which their use ceased in each process at the plant;

3) Formulations currently used in each process at the plant;

4) The equipment cleaning or replacement plan;

5) The name and address of any persons who conducted the cleaning and replacement;

6) The dates on which cleaning and replacement were accomplished;

7) The dates of sampling and testing;

8) A description of the sample handling and preparation techniques used for extraction, containerization, preservation and chain-of-custody of the samples;

9) A description of the tests performed, the date the tests were performed and the results of the tests;

10) The name and model numbers of the instruments used in performing the tests;

11) QA/QC documentation; and

12) The following statement signed by the generator or the generator's

authorized representative:

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

(Source: Amended at 40 Ill. Reg. _____, effective _____)

SUBPART E: EXCLUSIONS AND EXEMPTIONS

Section 721.138 Exclusion of Comparable Fuel and Syngas Fuel (Repealed)

~~a) Specifications for excluded fuels. Wastes that meet specifications for comparable fuel or syngas fuel under subsection (a)(1) or (a)(2) of this Section, respectively, and the other requirements of this Section, are not solid wastes:~~

~~1) Comparable fuel specifications.~~

~~A) Physical specifications.~~

~~i) Heating value. The heating value must exceed 5,000 Btu/lb (11,500 J/g).~~

~~ii) Viscosity. The viscosity must not exceed 50 cS, as fired.~~

~~B) Constituent specifications. For the compounds listed, the constituent specification levels and minimum required detection limits (where non-detect is the constituent specification) are set forth in the table in Appendix Y to this Part.~~

~~2) Synthesis gas fuel specifications. Synthesis gas fuel (i.e., syngas fuel) that is generated from hazardous waste must fulfill the following requirements:~~

~~A) It must have a minimum Btu value of 100 Btu/Scf;~~

~~B) It must contain less than 1 ppmv of total halogen;~~

~~C) It must contain less than 300 ppmv of total nitrogen other than diatomic nitrogen (N_2);~~

D) It must contain less than 200 ppmv of hydrogen sulfide; and

E) It must contain less than 1 ppmv of each hazardous constituent in the target list of constituents listed in Appendix H of this Part.

3) Blending to meet the specifications.

A) Hazardous waste shall not be blended to meet the comparable fuel specification under subsection (a)(1) of this Section, except as provided by subsection (a)(3)(B) of this Section.

B) Blending to meet the viscosity specification. A hazardous waste blended to meet the viscosity specification for comparable fuel must fulfill the following requirements:

i) As generated, and prior to any blending, manipulation, or processing, the hazardous waste must meet the constituent and heating value specifications of subsections (a)(1)(A)(i) and (a)(1)(B) of this Section;

ii) The hazardous waste must be blended at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727; and

iii) The hazardous waste must not violate the dilution prohibition of subsection (a)(6) of this Section.

4) Treatment to meet the comparable fuel specifications.

A) A hazardous waste may be treated to meet the specifications for comparable fuel set forth in subsection (a)(1) of this Section, provided the treatment fulfills the following requirements:

i) The treatment destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying hazardous constituents or materials;

ii) The treatment is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727; and

iii) The treatment does not violate the dilution prohibition of subsection (a)(6) of this Section.

B) ~~Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a comparable fuel remain a hazardous waste.~~

5) ~~Generation of a syngas fuel.~~

A) ~~A syngas fuel can be generated from the processing of hazardous wastes to meet the exclusion specifications of subsection (a)(2) of this Section, provided the processing fulfills the following requirements:~~

i) ~~The processing destroys or removes the constituent listed in the specification or raises the heating value by removing or destroying constituents or materials;~~

ii) ~~The processing is performed at a facility that is subject to the applicable requirements of 35 Ill. Adm. Code 722.134, 724, 725, or 727 or is an exempt recycling unit pursuant to 35 Ill. Adm. Code 721.106(e); and~~

iii) ~~The processing does not violate the dilution prohibition of subsection (a)(6) of this Section.~~

B) ~~Residuals resulting from the treatment of a hazardous waste listed in Subpart D of this Part to generate a syngas fuel remain a hazardous waste.~~

6) ~~Dilution prohibition. A generator, transporter, handler, or owner or operator of a treatment, storage, or disposal facility must not in any way dilute a hazardous waste to meet the specifications of subsections (a)(1)(A)(i) or (a)(1)(B) of this Section for comparable fuel, or subsection (a)(2) of this section for Syngas.~~

b) ~~Implementation.~~

1) ~~General.~~

A) ~~Wastes that meet the specifications provided by subsection (a) of this Section for comparable fuel or syngas fuel are excluded from the definition of solid waste provided that the following requirements are met. For purposes of this Section, such materials are called "excluded fuel," the person claiming and qualifying for~~

~~the exclusion is called the "excluded fuel generator," and the person burning the excluded fuel is called the "excluded fuel burner."~~

~~B)~~ ~~The person who generates the excluded fuel must claim the exclusion by complying with the conditions of this Section and keeping records necessary to document compliance with those conditions.~~

~~2)~~ ~~Notices.~~

~~A)~~ ~~Notice to the Agency.~~

~~i)~~ ~~The generator must submit a one-time notice, except as provided by subsection (b)(2)(A)(iii) of this Section, to the Agency, certifying compliance with the conditions of the exclusion and providing documentation, as required by subsection (b)(2)(C) of this Section;~~

~~BOARD NOTE: This subsection (b)(2)(A)(i) corresponds with 40 CFR 261.38(c)(2)(i)(A) (2009). Due to limitations on the maximum indent levels allowed in the Illinois Administrative Code, the Board found it necessary to move 40 CFR 261.38(c)(2)(i)(A)(1) through (c)(2)(i)(A)(5) to appear as subsections (c)(2)(C)(i) through (c)(2)(C)(v) of this Section.~~

~~ii)~~ ~~If there is a substantive change in the information provided in the one-time notice required under this subsection (b)(2)(A), the generator must submit a revised notification.~~

~~iii)~~ ~~An excluded fuel generator must include an estimate of the average and maximum monthly and annual quantity of material for which an exclusion would be claimed in notices for newly excluded fuel or for revised notices as required by subsection (b)(2)(A)(ii) of this Section.~~

~~B)~~ ~~Public notice. Prior to burning an excluded fuel, the burner must publish in a major newspaper of general circulation, local to the site where the fuel will be burned, a notice entitled "Notification of Burning a Fuel Excluded Under the Resource Conservation and Recovery Act" containing the following information:~~

~~i) The name, address, and USEPA identification number of the generating facility;~~

~~ii) The name and address of the burner and identification of the units that will burn the excluded fuel;~~

~~iii) A brief, general description of the manufacturing, treatment, or other process generating the excluded fuel;~~

~~iv) An estimate of the average and maximum monthly and annual quantity of the excluded fuel to be burned; and~~

~~v) The name and mailing address of the Agency office to which the generator submitted a claim for the exclusion.~~

~~C) The one-time notice required by subsection (b)(2)(A)(i) of this Section must certify compliance with the conditions of the exclusion and provide documentation, as follows:~~

~~i) The name, address, and USEPA identification number of the person or facility claiming the exclusion;~~

~~ii) The applicable USEPA hazardous waste codes for the hazardous waste;~~

~~iii) The name and address of the units that meet the requirements of subsections (b)(3) and (c) of this Section that will burn the excluded fuel;~~

~~iv) An estimate of the average and maximum monthly and annual quantity of material for which an exclusion would be claimed, except as provided by subsection (b)(2)(A)(iii) of this Section; and~~

~~v) The following statement must be signed and submitted by the person claiming the exclusion or its authorized representative:~~

~~Under penalty of criminal and civil prosecution for making or submitting false statements, representations, or omissions, I certify that the requirements of 35 Ill. Adm. Code 721.138 have been met for all waste identified in this notification.~~

Copies of the records and information required by 35 Ill. Adm. Code 721.138(b)(8) are available at the comparable or syngas fuel generator's facility. Based on my inquiry of the individuals immediately responsible for obtaining the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

BOARD NOTE: Subsections (b)(2)(C)(i) through (c)(2)(C)(v) are derived from 40 CFR 261.138(b)(2)(i)(A)(*1*) through (b)(2)(i)(A)(*5*), which the Board has codified here to comport with Illinois Administrative Code format requirements.

3) Burning. The exclusion applies only if the fuel is burned in the following units that also must be subject to federal, State, and local air emission requirements, including all applicable federal hazardous air pollutant emissions requirements implementing section 112 of the Clean Air Act (CAA) (42 USC 7412):

A) Industrial furnaces, as defined in 35 Ill. Adm. Code 720.110;

B) Boilers, as defined in 35 Ill. Adm. Code 720.110, that are further defined as follows:

i) Industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes; or

ii) Utility boilers used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale;

C) Hazardous waste incinerators subject to regulation pursuant to Subpart O of 35 Ill. Adm. Code 724 or Subpart O of 35 Ill. Adm. Code 725 and applicable CAA MACT standards.

D) Gas turbines used to produce electric power, steam, heated or cooled air, or other gases or fluids for sale.

4) Fuel analysis plan for generators. The generator of an excluded fuel must

~~develop and follow a written fuel analysis plan that describes the procedures for sampling and analysis of the material to be excluded. The plan must be followed and retained at the site of the generator claiming the exclusion.~~

~~A) At a minimum, the plan must specify the following:~~

~~i) The parameters for which each excluded fuel will be analyzed and the rationale for the selection of those parameters;~~

~~ii) The test methods that will be used to test for these parameters;~~

~~iii) The sampling method that will be used to obtain a representative sample of the excluded fuel to be analyzed;~~

~~iv) The frequency with which the initial analysis of the excluded fuel will be reviewed or repeated to ensure that the analysis is accurate and up to date; and~~

~~v) If process knowledge is used in the determination, any information prepared by the generator in making such determination.~~

~~B) For each analysis, the generator must also document the following:~~

~~i) The dates and times that waste samples were obtained, and the dates the samples were analyzed;~~

~~ii) The names and qualifications of the persons who obtained the samples;~~

~~iii) A description of the temporal and spatial locations of the samples;~~

~~iv) The name and address of the laboratory facility at which analyses of the samples were performed;~~

~~v) A description of the analytical methods used, including any clean-up and sample preparation methods;~~

~~vi) All quantitation limits achieved and all other quality control~~

~~results for the analysis (including method blanks, duplicate analyses, matrix spikes, etc.), laboratory quality assurance data, and description of any deviations from analytical methods written in the plan or from any other activity written in the plan that occurred;~~

~~vii) All laboratory results demonstrating whether the exclusion specifications have been met; and~~

~~viii) All laboratory documentation that supports the analytical results, unless a contract between the claimant and the laboratory provides for the documentation to be maintained by the laboratory for the period specified in subsection (b)(9) of this Section and also provides for the availability of the documentation to the claimant upon request.~~

~~C) A syngas fuel generator must submit for approval, prior to performing sampling, analysis, or any management of an excluded syngas fuel, a fuel analysis plan containing the elements of subsection (b)(4)(A) of this Section to the Agency. The approval of a fuel analysis plan must be stated in writing and received by the facility prior to sampling and analysis to demonstrate the exclusion of a syngas. The approval of the fuel analysis plan may contain such provisions and conditions as the regulatory authority deems appropriate.~~

~~5) Excluded fuel sampling and analysis.~~

~~A) General. For each waste for which an exclusion is claimed under the specifications provided by subsection (a)(1) or (a)(2) of this Section, the generator of the waste must test for all the constituents in Appendix H of this Part, except for those constituents that the generator determines, based on testing or knowledge, should not be present in the fuel. The generator is required to document the basis of each determination that a constituent with an applicable specification should not be present. The generator may not determine that any of the following categories of constituents with a specification in the table in Appendix Y to this Part should not be present:~~

~~i) A constituent that triggered the toxicity characteristic for the constituents that were the basis for listing the secondary material as a hazardous waste, or constituents for which~~

there is a treatment standard for the waste code in 35 Ill. Adm. Code 728.140;

ii) A constituent detected in previous analysis of the waste;

iii) Constituents introduced into the process that generates the waste; or

iv) Constituents that are byproducts or side reactions to the process that generates the waste.

B) Use of process knowledge. For each waste for which the comparable fuel or syngas exclusion is claimed where the generator of the excluded fuel is not the original generator of the hazardous waste, the generator of the comparable or syngas fuel may not use process knowledge pursuant to subsection (b)(5)(A) of this Section and must test to determine that all of the constituent specifications of subsections (a)(1) and (a)(2) of this Section, as applicable, have been met.

C) The excluded fuel generator may use any reliable analytical method to demonstrate that no constituent of concern is present at concentrations above the specification levels. It is the responsibility of the generator to ensure that the sampling and analysis are unbiased, precise, and representative of the excluded fuel. For the fuel to be eligible for exclusion, a generator must demonstrate the following:

i) That the 95% upper confidence limit of the mean concentration for each constituent of concern is not above the specification level; and

ii) That the analyses could have detected the presence of the constituent at or below the specification level.

D) Nothing in this subsection (b)(5) preempts, overrides, or otherwise negates the provision in 35 Ill. Adm. Code 722.111 that requires any person that generates a solid waste to determine if that waste is a hazardous waste.

E) In an enforcement action, the burden of proof to establish conformance with the exclusion specification must be on the generator claiming the exclusion.

~~F)~~ ~~The generator must conduct sampling and analysis in accordance with the fuel its waste analysis plan developed pursuant to subsection (b)(4) of this Section.~~

~~G)~~ ~~Viscosity condition for comparable fuel.~~

~~i)~~ ~~Excluded comparable fuel that has not been blended to meet the kinematic viscosity specification must be analyzed as generated.~~

~~ii)~~ ~~If hazardous waste is blended to meet the kinematic viscosity specification for comparable fuel, the generator must analyze the hazardous waste as generated to ensure that it meets the constituent and heating value specifications of subsection (a)(1) of this Section, and after blending, analyze the fuel again to ensure that the blended fuel meets all comparable fuel specifications.~~

~~BOARD NOTE: The Board found it necessary to combine the text of 40 CFR 261.38(b)(5)(vii)(B)(1) and (b)(5)(vii)(B)(2) together with the text of 40 CFR 261.38(b)(5)(vii)(B) to comport with the maximum indent level allowed by Illinois Administrative Code codification requirements.~~

~~H)~~ ~~Excluded fuel must be retested, at a minimum, annually and must be retested after a process change that could change its chemical or physical properties in a manner that may affect conformance with the specifications.~~

~~BOARD NOTE: Any claim pursuant to this Section must be valid and accurate for all hazardous constituents; a determination not to test for a hazardous constituent will not shield a generator from liability should that constituent later be found in the waste above the exclusion specifications.~~

~~6)~~ ~~This subsection (b)(6) corresponds with 40 CFR 261.38(b)(6), which USEPA has marked "reserved." This statement maintains structural parity with the corresponding federal regulations.~~

~~7)~~ ~~Speculative accumulation. Excluded fuel must not be accumulated speculatively, as such is defined in 35 Ill. Adm. Code 721.101(c)(8).~~

8) Operating record. The generator must maintain an operating record on site containing the following information:

A) All information required to be submitted to the implementing authority as part of the notification of the claim:

i) The owner or operator name, address, and USEPA identification number of the person claiming the exclusion;

ii) For each excluded fuel, the USEPA hazardous waste codes that would be applicable if the material were discarded; and

iii) The certification signed by the person claiming the exclusion or his authorized representative;

B) A brief description of the process that generated the excluded fuel. If the comparable fuel generator is not the generator of the original hazardous waste, provide a brief description of the process that generated the hazardous waste;

C) The monthly and annual quantities of each fuel claimed to be excluded;

D) Documentation for any claim that a constituent is not present in the excluded fuel, as required pursuant to subsection (b)(5)(A) of this Section;

E) The results of all analyses and all detection limits achieved, as required pursuant to subsection (b)(5) of this Section;

F) If the comparable fuel was generated through treatment or blending, documentation of compliance with the applicable provisions of subsections (a)(3) and (a)(4) of this Section;

G) If the excluded fuel is to be shipped off-site, a certification from the burner, as required pursuant to subsection (b)(10) of this Section;

H) The fuel analysis plan and documentation of all sampling and analysis results as required by subsection (b)(4) of this Section; and

I) If the generator ships excluded fuel off-site for burning, the

~~generator must retain for each shipment the following information on-site:~~

~~i) The name and address of the facility receiving the excluded fuel for burning;~~

~~ii) The quantity of excluded fuel shipped and delivered;~~

~~iii) The date of shipment or delivery;~~

~~iv) A cross-reference to the record of excluded fuel analysis or other information used to make the determination that the excluded fuel meets the specifications, as required pursuant to subsection (b)(5) of this Section; and~~

~~v) A one-time certification by the burner, as required pursuant to subsection (b)(10) of this Section.~~

~~9) Records retention. Records must be maintained for a period of three years.~~

~~10) Burner certification to the generator. Prior to submitting a notification to the Agency, a generator of excluded fuel that intends to ship the excluded fuel off-site for burning must obtain a one-time written, signed statement from the burner that includes the following:~~

~~A) A certification that the excluded fuel will only be burned in an industrial furnace, industrial boiler, utility boiler, or hazardous waste incinerator, as required pursuant to subsection (b)(3) of this Section;~~

~~B) Identification of the name and address of the facility that will burn the excluded fuel; and~~

~~C) A certification that the state in which the burner is located is authorized to exclude wastes as excluded fuel under the provisions of 40 CFR 261.38.~~

~~11) Ineligible waste codes. Wastes that are listed as hazardous waste because of the presence of dioxins or furans, as set out in Appendix G of this Part, are not eligible for these exclusions, and any fuel produced from or otherwise containing these wastes remains a hazardous waste subject to the full RCRA hazardous waste management requirements.~~

12) Regulatory status of boiler residues. Burning excluded fuel that was otherwise a hazardous waste listed under Sections 721.131 through 721.133 of this Part does not subject boiler residues, including bottom ash and emission control residues, to regulation as derived from hazardous wastes.

13) Residues in containers and tank systems upon cessation of operations.

A) Liquid and accumulated solid residues that remain in a container or tank system for more than 90 days after the container or tank system ceases to be operated for storage or transport of excluded fuel product are subject to regulation under 35 Ill. Adm. Code 702, 703, 722 through 725, 727, and 728.

B) Liquid and accumulated solid residues that are removed from a container or tank system after the container or tank system ceases to be operated for storage or transport of excluded fuel product are solid wastes subject to regulation as hazardous waste if the waste exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124 or if the fuel were otherwise a hazardous waste listed under Sections 721.131 through 721.133 when the exclusion was claimed.

C) Liquid and accumulated solid residues that are removed from a container or tank system and which do not meet the specifications for exclusion under subsection (a)(1) or (a)(2) of this Section are solid wastes subject to regulation as hazardous waste if either of the following conditions exist with regard to the residues:

i) The waste exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124; or

ii) The fuel was otherwise a hazardous waste listed under Sections 721.131 through 721.133. The hazardous waste code for the listed waste applies to these liquid and accumulated solid residues.

14) Waiver of RCRA closure requirements. Interim status and permitted storage and combustion units, and generator storage units exempt from the permit requirements under 35 Ill. Adm. Code 722.134, are not subject to the closure requirements of 35 Ill. Adm. Code 724, 725, or 727, provided that the storage and combustion unit has been used to manage only

~~hazardous waste that is subsequently excluded under the conditions of this Section, and that afterward will be used only to manage fuel excluded under this Section.~~

~~15)~~ ~~Spills and leaks.~~

~~A)~~ ~~Excluded fuel that is spilled or leaked and that therefore no longer meets the conditions of the exclusion is discarded and must be managed as a hazardous waste if it exhibits a characteristic of hazardous waste under Sections 721.121 through 721.124 or if the fuel were otherwise a hazardous waste listed in Sections 721.131 through 721.133.~~

~~B)~~ ~~For excluded fuel that would have otherwise been a hazardous waste listed in Sections 721.131 through 721.133 and which is spilled or leaked, the USEPA hazardous waste code for the listed waste applies to the spilled or leaked material.~~

~~16)~~ ~~In corresponding 40 CFR 261.38(b)(16), USEPA included the following disclaimer, which the Board quotes in full: "Nothing in this section preempts, overrides, or otherwise negates the provisions in CERCLA Section 103, which establish reporting obligations for releases of hazardous substances, or the Department of Transportation requirements for hazardous materials in 49 CFR parts 171 through 180."~~

~~e)~~ ~~Failure to comply with the conditions of the exclusion. An excluded fuel loses its exclusion if any person managing the fuel fails to comply with the conditions of the exclusion under this Section, and the material must be managed as a hazardous waste from the point of generation. In such situations, USEPA, the Agency, or any person may take enforcement action pursuant to section 31 of the Act [415 ILCS 5/31].~~

~~BOARD NOTE: Corresponding 40 CFR 261.38(c) provides that USEPA or an authorized state may take enforcement action pursuant to section 3008(a) of RCRA (42 USC 6927(a)). In Illinois, Section 31(a) and (d) of the Act [415 ILCS 5/31(a) and (d)] provide that the Agency or any person may pursue an enforcement action for violation of the Act or Board regulations.~~

(Source: Repealed at 40 Ill. Reg. _____, effective _____)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section 721.270 Applicability

This Subpart I applies to hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27) and stored in containers.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.271 Condition of Containers

If a container holding hazardous secondary material is not in good condition (e.g., the container has severe rusting, apparent structural defects, etc.) or if the container begins to leak, the hazardous secondary material must be transferred from this container to a container that is in good condition or managed in some other way that complies with the requirements of this Part.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.272 Compatibility of Hazardous Secondary Materials with Containers

A container holding hazardous secondary material must be made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous secondary material to be stored, so that the ability of the container to contain the material is not impaired.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.273 Management of Containers

a) A container holding hazardous secondary material must always be closed during storage, except when it is necessary to add or remove the hazardous secondary material.

b) A container holding hazardous secondary material must not be opened, handled, or stored in a manner that may rupture the container or cause it to leak.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.275 Secondary Containment

a) Container storage areas must have a secondary containment system that is designed and operated in accordance with subsection (b).

b) A secondary containment system must be designed and operated as follows:

1) A base must underlie the containers which is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed;

2) The base must be sloped or the secondary containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;

3) The secondary containment system must have sufficient capacity to contain ten percent of the volume of containers or the volume of the largest container, whichever is greater;

4) Run-on into the secondary containment system must be prevented unless the collection system has sufficient excess capacity in addition to that required in subsection (b)(3) to contain any run-on which might enter the system; and

5) Spilled or leaked material and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the secondary collection system.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.276 Special Requirements for Ignitable or Reactive Hazardous Secondary Material

Containers holding ignitable or reactive hazardous secondary material must be located at least 15 meters (50 feet) from the facility's property line.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.277 Special Requirements for Incompatible Materials

a) Incompatible materials must not be placed in the same container.

b) Hazardous secondary material must not be placed in an unwashed container that previously held an incompatible material.

c) A storage container holding a hazardous secondary material that is incompatible with any other materials stored nearby must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.279 Air Emission Standards

The remanufacturer or other person that stores or treats the hazardous secondary material must manage all hazardous secondary material placed in a container in accordance with the applicable requirements of Subparts AA, BB, and CC of this Part.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART J: TANK SYSTEMS

Section 721.290 Applicability

a) The requirements of this Subpart J apply to tank systems for storing or treating hazardous secondary material excluded under the remanufacturing exclusion at Section 721.104(a)(27).

b) Tank systems, including sumps, as defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous secondary materials are exempted from the requirements in Section 721.293(a).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.291 Assessment of Existing Tank System's Integrity

a) A tank system must meet the secondary containment requirements of Section 721.293, or the remanufacturer or other person that handles the hazardous secondary material must determine that the tank system is not leaking or is unfit for use. Except as provided in subsection (c), a written assessment reviewed and certified by a qualified Professional Engineer must be kept on file at the remanufacturer's facility or other facility that stores or treats the hazardous secondary material that attests to the tank system's integrity.

b) The qualified Professional Engineer's assessment must determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the materials to be stored or treated, to ensure that the tank system will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:

1) Design standards, if available, according to which the tank system and ancillary equipment were constructed;

2) Hazardous characteristics of the materials that have been and will be handled;

3) Existing corrosion protection measures;

4) Documented age of the tank system, if available (otherwise, an estimate of the age); and

5) Results of a leak test, internal inspection, or other tank system integrity examination such that:

A) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects; and

B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by a qualified Professional Engineer that addresses cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, Guide for Inspection of Refinery Equipment, Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," 4th edition, 1981, incorporated by reference in 35 Ill. Adm. Code 720.111, may be used, when applicable, as guidelines in conducting other than a leak test.

c) If, as a result of the assessment conducted in accordance with subsection (a), a tank system is found to be leaking or unfit for use, the remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of Section 721.196.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.293 Containment and Detection of Releases

a) The following must be true of a secondary containment system:

1) The system is designed, installed, and operated to prevent any migration of materials or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; and

2) The system is capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

BOARD NOTE: If the collected material is a hazardous waste under this Part, the material is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the United States, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6.

b) To meet the requirements of subsection (a), a secondary containment system must fulfill the following requirements:

1) The secondary containment system must be constructed of or lined with materials that are compatible with the materials to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the material to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);

2) The secondary containment system must be placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression, or uplift;

3) The secondary containment system must be provided with a leak-detection system that is designed and operated so that the system will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous secondary material or accumulated liquid in the secondary containment system at the earliest practicable time; and

4) The secondary containment system must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked material and accumulated precipitation must be removed from the secondary containment system in as timely a manner as is possible, but in no case later than 24 hours after the leak, spill, or accumulation of precipitation occurs, to prevent harm to human health and the environment.

c) Secondary containment for tanks must include one or more of the following devices:

1) A liner (external to the tank);

2) A vault; or

3) A double-walled tank.

d) In addition to the requirements of subsections (a), (b), and (c), secondary containment systems must satisfy the following requirements:

1) An external liner system must fulfill the following requirements:

A) The secondary containment system must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

B) The secondary containment system must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. The additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

C) The secondary containment system must be free of cracks or gaps; and

D) The secondary containment system must be designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the material if the material is released from the tanks (i.e., capable of preventing lateral as well as vertical migration of the material).

2) A vault system must fulfill the following requirements:

A) The vault system must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary;

B) The vault system must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. The additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;

C) The vault system must be constructed with chemical-resistant water stops in place at all joints (if any);

D) The vault system must be provided with an impermeable interior coating or lining that is compatible with the stored material and that will prevent migration of material into the concrete;

E) The vault system must be provided with a means to protect against the formation of and ignition of vapors within the vault, if the material being stored or treated is ignitable or reactive; and

F) The vault system must be provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

3) A double-walled tank must fulfill the following requirements:

A) The double-walled tank must be designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;

B) The double-walled tank must be protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and

C) The double-walled tank must be provided with a built-in continuous leak detection system capable of detecting a release at the earliest practicable time, but in no case later than 24 hours after the release occurs.

BOARD NOTE: The provisions outlined in the Steel Tank Institute's (STI) "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111, may be used as guidelines for aspects of the design of underground steel double-walled tanks.

e) This subsection (e) corresponds with 40 CFR 261.194(e), which USEPA has marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (a) and (b), except for the following equipment:

1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;

3) Seal-less or magnetic coupling pumps and seal-less valves that are visually inspected for leaks on a daily basis; and

4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.294 General Operating Requirements

a) Hazardous secondary materials or treatment reagents must not be placed in a tank system if the materials or reagents could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must use appropriate controls and practices to prevent spills and overflows from tank or containment systems. These include, at a minimum, the following controls and practices:

1) Spill prevention controls (e.g., check valves, dry disconnect couplings, etc.);

2) Overfill prevention controls (e.g., level sensing devices, high level alarms, automatic feed cutoff, or bypass to a standby tank); and

3) Maintenance of sufficient freeboard in uncovered tanks to prevent overtopping by wave or wind action or by precipitation.

c) The remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements of Section 721.196 if a leak or spill occurs in the tank system.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or that is unfit for use, must be removed from service immediately, and the remanufacturer or other person that stores or treats the hazardous secondary material must satisfy the following requirements:

a) Cessation of use; prevent flow or addition of materials. The remanufacturer or other person that stores or treats the hazardous secondary material must immediately stop the flow of hazardous secondary material into the tank system or secondary containment system and inspect the system to determine the cause of the release.

b) Removal of material from tank system or secondary containment system.

1) If the release was from the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material must, within 24 hours after detection of the leak or, if the remanufacturer or other person that stores or treats the hazardous secondary material demonstrates that it is not possible, at the earliest practicable time, remove as much of the material as is necessary to prevent further release of hazardous secondary material to the environment and to allow inspection and repair of the tank system to be performed.

2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or in as timely a manner as is possible to prevent harm to human health and the environment.

c) Containment of visible releases to the environment. The remanufacturer or other person that stores or treats the hazardous secondary material must immediately conduct a visual inspection of the release and, based upon that inspection:

1) The remanufacturer must prevent further migration of the leak or spill to soils or surface water; and

2) The remanufacturer must remove, and properly dispose of, any visible contamination of the soil or surface water.

d) Notifications, reports.

1) Any release to the environment, except as provided in subsection (d)(2), must be reported to the Agency and the Administrator of USEPA Region 5 within 24 hours of its detection. If the release has been reported pursuant to 40 CFR 302, that report will satisfy the requirement to notify USEPA, but the release must still be reported to the Agency.

2) A leak or spill of hazardous secondary material is exempted from the requirements of this subsection (d) if the following is true of the leak or spill:

A) The leak or spill is less than or equal to a quantity of one pound; and

B) The leak or spill is immediately contained and cleaned up.

3) Within 30 days after detection of a release to the environment, a report containing the following information must be submitted to the Agency and the Administrator of USEPA Region 5:

A) The likely route of migration of the release;

B) The characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

C) The results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency and the Administrator of USEPA Region 5 as soon as the results become available;

D) The proximity to downgradient drinking water, surface water, and populated areas; and

E) A description of response actions taken or planned.

e) Provision of secondary containment, repair, or closure.

1) Unless the remanufacturer or other person that stores or treats the hazardous secondary material satisfies the requirements of subsections (e)(2) through (e)(4), the tank system must cease to operate under the remanufacturing exclusion at Section 721.104(a)(27).

2) If the cause of the release was a spill that has not damaged the integrity of the tank system, the remanufacturer or other person that stores or treats the hazardous secondary material may return the tank system to service as soon as the released material is removed and repairs, if necessary, are made.

3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the primary tank system must be repaired prior to returning the tank system to service.

4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the remanufacturer or other person that stores or treats the hazardous secondary material must provide the component of the tank system from which the leak occurred with secondary containment that satisfies the requirements of Section 721.193 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment as long as the requirements of subsection (f) are satisfied. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an inground or onground tank), the entire component must be provided with secondary containment in accordance with Section 721.193 prior to being returned to use.

f) Certification of major repairs. If the remanufacturer or other person that stores or treats the hazardous secondary material has repaired a tank system in accordance with subsection (e), and the repair has been extensive (e.g., installation of an internal liner, repair of a ruptured primary containment or secondary containment

vessel, etc.), the tank system must not be returned to service, unless the remanufacturer or other person that stores or treats the hazardous secondary material has obtained a certification by a qualified Professional Engineer that the repaired system is capable of handling hazardous secondary materials without release for the intended life of the system. This certification must be kept on file at the facility and maintained until closure of the facility.

BOARD NOTE: USEPA stated in note 1 appended to corresponding 40 CFR 261.196 that the Regional Administrator may, on the basis of any information received that there is or has been a release of hazardous secondary material or hazardous constituents into the environment, issue an order under RCRA section 7003(a) (42 USC 6973(a)) requiring corrective action or such other response as deemed necessary to protect human health or the environment. USEPA stated in note 2 appended to corresponding 40 CFR 261.196 that 40 CFR 302 may require the owner or operator to notify the National Response Center of certain releases.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.297 Termination of Remanufacturing Exclusion

Hazardous secondary material stored in units more than 90 days after the unit ceases to operate under the remanufacturing exclusion at Section 721.4(a)(27) or otherwise ceases to be operated for manufacturing, or for storage of a product or a raw material, then becomes subject to regulation as hazardous waste under 35 Ill. Adm. Code 702, 703, 705, and 721 through 728, as applicable.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.298 Special Requirements for Ignitable or Reactive Materials

a) Ignitable or reactive material must not be placed in a tank system, unless the material is stored or treated in such a way that it is protected from any material or conditions that may cause the material to ignite or react.

b) The remanufacturer or other person that stores or treats hazardous secondary material that is ignitable or reactive must store or treat the hazardous secondary material in a tank system that is in compliance with the requirements for the maintenance of protective distances between the material management area and any public ways, streets, alleys, or an adjoining property line that can be built upon as required in Tables 2-1 through 2-6 of the National Fire Protection Association's "Flammable and Combustible Liquids Code," incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.299 Special Requirements for Incompatible Materials

a) Incompatible materials must not be placed together in the same tank system.

b) Hazardous secondary material must not be placed in a tank system that has not been decontaminated and that previously held an incompatible material.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.300 Air Emission Standards

The remanufacturer or other person that stores or treats the hazardous secondary material must manage all hazardous secondary material placed in a tank in accordance with the applicable requirements of Subparts AA, BB, and CC of this Part.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART M: EMERGENCY PREPAREDNESS AND RESPONSE FOR MANAGEMENT OF EXCLUDED HAZARDOUS SECONDARY MATERIALS

Section 721.500 Applicability

The requirements of this Subpart M apply to those areas of an entity managing hazardous secondary materials excluded under Section 721.104(a)(23) or (a)(24) where hazardous secondary materials are generated or accumulated on site.

a) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a solid waste determination under Section 720.131(d), that accumulates 6,000 kg or less of hazardous secondary material at any time must comply with Sections 721.510 and 261.511.

b) A generator of hazardous secondary material, or an intermediate or reclamation facility operating under a solid waste determination under Section 720.131(d) that accumulates more than 6,000 kg of hazardous secondary material at any time must comply with Sections 721.510 and 261.520.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.510 Preparedness and Prevention

a) Maintenance and operation of facility. Facilities generating or accumulating hazardous secondary material must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous secondary materials or hazardous secondary material constituents to air, soil, or surface water that could threaten human health or the environment.

b) Required equipment. All facilities generating or accumulating hazardous secondary material must be equipped with the following, unless none of the hazards posed by hazardous secondary material handled at the facility could require a particular kind of equipment specified below:

1) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

2) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams;

3) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment; and

4) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

c) Testing and maintenance of equipment. All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency.

d) Access to communications or alarm system.

1) Whenever hazardous secondary material is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation must have immediate access to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required under subsection (b).

2) If there is ever just one employee on the premises while the facility is operating, he or she must have immediate access to a device, such as a telephone (immediately available at the scene of operation) or a hand-held

two-way radio, capable of summoning external emergency assistance, unless such a device is not required under subsection (b).

e) Required aisle space. The hazardous secondary material generator or intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

f) Arrangements with local authorities.

1) The hazardous secondary material generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must attempt to make the following arrangements, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations:

A) Arrangements to familiarize police, fire departments, and emergency response teams with the layout of the facility, properties of hazardous secondary material handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes;

B) When more than one police and fire department might respond to an emergency, agreements designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to the primary emergency authority;

C) Agreements with state emergency response teams, emergency response contractors, and equipment suppliers; and

D) Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses that could result from fires, explosions, or releases at the facility.

2) When state or local authorities decline to enter into arrangements under this subsection (f), the hazardous secondary material generator or an intermediate or reclamation facility operating under a solid waste

determination under 35 Ill. Adm. Code 720.131(d) must document the refusal in the operating record.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.511 Emergency Procedures for Facilities Generating or Accumulating 6000 kg or Less of Hazardous Secondary Material

A generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) that generates or accumulates 6,000 kg or less of hazardous secondary material must comply 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). This employee is the emergency coordinator.

b) The generator or intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) must post the following information next to the telephone:

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

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

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

c) The generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies.

d) The emergency coordinator or his or her designee must respond to any emergencies that arise. The applicable responses are as follows:

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

2) 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;

3) In the event of a fire, explosion, or other release that could threaten human health outside the facility or when the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) has knowledge that a spill has reached surface water, the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) must immediately notify the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following information:

A) The name, address, and USEPA identification number of the facility;

B) The date, time, and type of incident (e.g., spill or fire);

C) The quantity and type of hazardous waste involved in the incident;

D) The extent of injuries, if any; and

E) The estimated quantity and disposition of recovered materials, if any.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.520 Contingency Planning and Emergency Procedures for Facilities Generating or Accumulating More Than 6000 kg of Hazardous Secondary Material

A generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) that generates or accumulates more than 6,000 kg of hazardous secondary material must comply with the following requirements:

a) Purpose and implementation of contingency plan.

1) Each generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) that accumulates more than 6,000 kg of hazardous secondary material must have a contingency plan for his facility. The contingency plan must be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of

hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water.

2) The provisions of the contingency plan must be carried out immediately whenever there is a fire, explosion, or release of hazardous secondary material or hazardous secondary material constituents that could threaten human health or the environment.

b) Content of contingency plan.

1) The contingency plan must describe the actions facility personnel must take to comply with subsections (a) and (f) in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous secondary material or hazardous secondary material constituents to air, soil, or surface water at the facility.

2) If the generator or an intermediate or reclamation facility operating under a solid waste determination under 35 Ill. Adm. Code 720.131(d) accumulating more than 6,000 kg of hazardous secondary material has already prepared a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112, or some other emergency or contingency plan, the facility needs only amend that plan to incorporate hazardous secondary material management provisions that are sufficient to comply with the requirements of this Part. The hazardous secondary material generator or an intermediate or reclamation facility operating under a verified recycler variance under 35 Ill. Adm. Code 720.131(d) may develop one contingency plan which meets all regulatory requirements. When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

BOARD NOTE: USEPA has recommended that the contingency plan be based on the National Response Team's Integrated Contingency Plan Guidance ("One Plan").

3) The contingency plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services, pursuant to 35 Ill. Adm. Code 722.510(f).

4) The contingency plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see subsection (e)), and this list must be kept up-to-date. When more

than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates.

5) The contingency plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each emergency equipment item on the list, and a brief outline of its capabilities.

6) The contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This evacuation plan must describe signals to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous secondary material or fires).

c) Copies of contingency plan. The facility owner or operator must do as follows with the contingency plan and all revisions to the plan:

1) Maintain a copy at the facility; and

2) Submit a copy to every local police department, fire department, hospital, and State and local emergency response team that may be called upon to provide emergency services.

d) Amendment of contingency plan. The facility owner or operator must review and immediately amend its contingency plan, if necessary, whenever any of the following occurs:

1) Applicable regulations are revised;

2) The plan fails in an emergency;

3) The facility changes, in its design, construction, operation, maintenance, or other circumstances, in a way that materially increases the potential for fires, explosions, or releases of hazardous secondary material or hazardous secondary material constituents, or the facility changes the response necessary in an emergency;

4) The list of emergency coordinators changes; or

5) The list of emergency equipment changes.

e) Emergency coordinator. At all times, there must be at least one employee, either on the facility premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time), with the responsibility for coordinating all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous secondary materials handled, the location of all records within the facility, and the facility layout. In addition, this person must have the authority to commit the resources needed to carry out the contingency plan. The emergency coordinator's responsibilities are more fully spelled out in subsection (f). Applicable responsibilities for the emergency coordinator vary, depending on factors such as type and variety of hazardous secondary materials handled by the facility, and type and complexity of the facility.

f) Emergency procedures.

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

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

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

2) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.

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

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

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

B) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following information:

i) The name and telephone number of reporter;

ii) The name and address of facility;

iii) The time and type of incident (e.g., release, fire);

iv) The name and quantity of materials involved, to the extent known;

v) The extent of injuries, if any; and

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

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

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

7) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered secondary material, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the hazardous secondary material generator can demonstrate, in accordance with Section 721.103(c) or (d), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage the recovered material in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 725.

8) The emergency coordinator must ensure that the following has occurred in the affected areas of the facility:

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

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

9) The hazardous secondary material generator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the emergency coordinator must submit a written report on the incident to the Regional Administrator. The report must include the following information:

A) The name, address, and telephone number of the hazardous secondary material generator;

B) The name, address, and telephone number of the facility;

C) The date, time, and type of incident (e.g., fire, explosion, etc.);

D) The name and quantity of materials involved;

E) The extent of injuries, if any;

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

G) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 721.930 Applicability

The regulations in this Subpart AA apply to process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or stream stripping operations that manage hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.104(a)(27) with organic concentrations of at least 10 ppmw (parts per million by weight), unless the process vents are equipped with operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.931 Definitions

As used in this Subpart AA, all terms not defined in this Section will have the meaning given them in the Resource Conservation and Recovery Act and 35 Ill. Adm. Code 720 through 726.

"Air stripping operation" is a desorption operation employed to transfer one or more volatile components from a liquid mixture into a gas (air) either with or without the application of heat to the liquid. Packed towers, spray towers, and bubble-cap, sieve, or valve-type plate towers are among the process configurations used for contacting the air and a liquid.

"Bottoms receiver" means a container or tank used to receive and collect the heavier bottoms fractions of the distillation feed stream that remain in the liquid phase.

"Closed-vent system" means a system that is not open to the atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.

"Condenser" means a heat-transfer device that reduces a thermodynamic fluid from its vapor phase to its liquid phase.

"Connector" means flanged, screwed, welded, or other joined fittings used to connect two pipelines or a pipeline and a piece of equipment. For the purposes of reporting and recordkeeping, connector means flanged fittings that are not covered by insulation or other materials that prevent location of the fittings.

"Continuous recorder" means a data-recording device recording an instantaneous data value at least once every 15 minutes.

"Control device" means an enclosed combustion device, vapor recovery system, or flare. Any device the primary function of which is the recovery or capture of solvents or other organics for use, reuse, or sale (e.g., a primary condenser on a solvent recovery unit) is not a control device.

"Control device shutdown" means the cessation of operation of a control device for any purpose.

"Distillate receiver" means a container or tank used to receive and collect liquid material (condensed) from the overhead condenser of a distillation unit and from which the condensed liquid is pumped to larger storage tanks or other process units.

"Distillation operation" means an operation, either batch or continuous, separating one or more feed streams into two or more exit streams, each exit stream having component concentrations different from those in the feed streams. The separation is achieved by the redistribution of the components between the liquid and vapor phase as they approach equilibrium within the distillation unit.

"Double block and bleed system" means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

"Equipment" means each valve, pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, or flange or other connector, and any control devices or systems required by this Subpart AA.

"Flame zone" means the portion of the combustion chamber in a boiler occupied by the flame envelope.

"Flow indicator" means a device that indicates whether gas flow is present in a vent stream.

"First attempt" at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to the atmosphere using best practices.

"Fractionation operation" means a distillation operation or method used to separate a mixture of several volatile components of different boiling points in successive stages, each stage removing from the mixture some proportion of one of the components.

"Hazardous secondary material management unit shutdown" means a work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit. An unscheduled work practice or operational procedure that stops operation of a hazardous secondary material management unit or part of a hazardous secondary material management unit for less than 24 hours is not a hazardous secondary material management unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping operation are not hazardous secondary material management unit shutdowns.

"Hot well" means a container for collecting condensate as in a steam condenser serving a vacuum-jet or steam-jet ejector.

"In gas/vapor service" means that the piece of equipment contains or contacts a hazardous secondary material stream that is in the gaseous state at operating conditions.

"In heavy liquid service" means that the piece of equipment is not in gas/vapor service or in light liquid service.

"In light liquid service" means that the piece of equipment contains or contacts a material stream where the vapor pressure of one or more of the organic components in the stream is greater than 0.3 kilopascals (kPa) at 20° C, the total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20° C is equal to or greater than 20 percent by weight, and the fluid is a liquid at operating conditions.

"In situ sampling systems" means non-extractive samplers or in-line samplers.

"In vacuum service" means that equipment is operating at an internal pressure that is at least 5 kPa below ambient pressure.

"Malfunction" means any sudden failure of a control device or a hazardous secondary material management unit or failure of a hazardous secondary material management unit to operate in a normal or usual manner, so that organic emissions are increased.

"Open-ended valve or line" means any valve, except pressure relief valves, having one side of the valve seat in contact with hazardous secondary material and one side open to the atmosphere, either directly or through open piping.

"Pressure release" means the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

"Process heater" means a device that transfers heat liberated by burning fuel to fluids contained in tubes, including all fluids except water that are heated to produce steam.

"Process vent" means any open-ended pipe or stack that is vented to the atmosphere either directly, through a vacuum-producing system, or through a tank (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator tank, or hot well) associated with hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations.

"Repaired" means that equipment is adjusted, or otherwise altered, to eliminate a leak.

"Sampling connection system" means an assembly of equipment within a process or material management unit used during periods of representative operation to take samples of the process or material fluid. Equipment used to take non-routine grab samples is not considered a sampling connection system.

"Sensor" means a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

"Separator tank" means a device used for separation of two immiscible liquids.

"Solvent extraction operation" means an operation or method of separation in which a solid or solution is contacted with a liquid solvent (the two being mutually insoluble) to preferentially dissolve and transfer one or more components into the solvent.

"Startup" means the setting in operation of a hazardous secondary material management unit or control device for any purpose.

"Steam stripping operation" means a distillation operation in which vaporization of the volatile constituents of a liquid mixture takes place by the introduction of steam directly into the charge.

"Surge control tank" means a large-sized pipe or storage reservoir sufficient to contain the surging liquid discharge of the process tank to which it is connected.

"Thin-film evaporation operation" means a distillation operation that employs a heating surface consisting of a large diameter tube that may be either straight or tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating

assembly of blades that maintain a close clearance from the wall or actually ride on the film of liquid on the wall.

"Vapor incinerator" means any enclosed combustion device that is used for destroying organic compounds and does not extract energy in the form of steam or process heat.

"Vented" means discharged through an opening, typically an open-ended pipe or stack, allowing the passage of a stream of liquids, gases, or fumes into the atmosphere. The passage of liquids, gases, or fumes is caused by mechanical means such as compressors or vacuum-producing systems or by process-related means such as evaporation produced by heating and not caused by tank loading and unloading (working losses) or by natural means such as diurnal temperature changes.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.932 Standards: Process Vents

a) The remanufacturer or other person that stores or treats hazardous secondary materials in hazardous secondary material management units with process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations managing hazardous secondary material with organic concentrations of at least 10 ppmw must either:

1) Reduce total organic emissions from all affected process vents at the facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr); or

2) Reduce, by use of a control device, total organic emissions from all affected process vents at the facility by 95 weight percent.

b) If the remanufacturer or other person that stores or treats the hazardous secondary material installs a closed-vent system and control device to comply with the provisions of subsection (a) the closed-vent system and control device must meet the requirements of Section 721.933.

c) Determinations of vent emissions and emission reductions or total organic compound concentrations achieved by add-on control devices may be based on engineering calculations or performance tests. If performance tests are used to determine vent emissions, emission reductions, or total organic compound concentrations achieved by add-on control devices, the performance tests must conform with the requirements of Section 721.934(c).

d) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on determinations of vent emissions or emission reductions or total organic compound concentrations achieved by add-on control devices based on engineering calculations, the procedures in Section 721.934(c) must be used to resolve the disagreement. The Agency must state any disagreement on a determination of vent emissions or emission reductions in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.933 Standards: Closed-Vent Systems and Control Devices

a) Applicability.

1) The remanufacturer or other person that stores or treats the hazardous secondary materials in hazardous secondary material management units using closed-vent systems and control devices used to comply with provisions of this Part must comply with the provisions of this Section.

2) This subsection (a)(2) corresponds with 40 CFR 261.1033, which USEPA has marked "reserved." This statement maintains structural consistency with the federal regulations.

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 721.932(a)(1) for all affected process vents can be attained at an efficiency less than 95 weight percent.

c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds, not carbon equivalents, on a dry basis corrected to three percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° 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 five minutes during any two consecutive hours.

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

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 non-assisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2).

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), less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (C).

B) A steam-assisted or non-assisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

C) A steam-assisted or non-assisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), less than the velocity, V_{max}, 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_{max}, as determined by the method specified in subsection (e)(5).

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

e) Compliance determination and equations.

1) Reference Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40

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

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

$$H_T = K\left[\sum_{i=1}^{n} C_i H_i\right]$$

Where:

H_T = Net heating value of the sample, MJ/scm, where the net enthalpy per mol of offgas is based on combustion at 25° C and 760 mmHg, but the standard temperature for determining the volume corresponding to one mol is 20° C;

K = Constant, 1.74×10^{-7} (1/ppm) (g mol/scm) (MJ/kcal) where standard temperature for (g mol/scm) is 20° C;

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, and measured for hydrogen and carbon monoxide by ASTM D 1946-90, incorporated by reference in Section 720.111; and

H_i = Net heat of combustion of sample component i, kcal/g mol at 25° C and 760 mmHg. The heats of combustion may be determined using ASTM D 2382-83, incorporated by reference in Section 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 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), or 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts) in appendix A to 40 CFR 60 (Test Methods), each 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_{max}, for a flare complying with subsection (d)(4)(C) must be determined by the following equation:

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

Where:

28.8 = Constant;
31.7 = Constant; and
H_T = The net heating value as determined in subsection (e)(2).

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

$$V_{max} = 8.706 + 0.7084\ (H_T)$$

Where:

8.706 = Constant;
0.7084 = Constant; and
T = The net heating value as determined in subsection (e)(2).

f) The remanufacturer or other person that stores or treats the hazardous secondary material must monitor and inspect each control device required to comply with this section to ensure proper operation and maintenance of the control device by implementing the following requirements:

1) Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow from each affected process vent to the control device at least once every hour. The flow indicator sensor must be installed in the vent stream at the nearest feasible point to the control device inlet but before 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 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 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 parameters 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 with an accuracy of ±1 percent of the temperature being monitored in ° C or ±0.5° C, whichever is greater. The temperature sensor must be

installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).

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

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

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

3) Inspect the readings from each monitoring device required by subsections (f)(1) and (f)(2) 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) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is no longer than the carbon service life established as a requirement of Section 721.935(b)(4)(C)(vi).

h) A remanufacturer or other person that stores or treats hazardous secondary material in a hazardous secondary material management unit using a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device must replace the existing carbon in the control device with fresh carbon on a regular basis by using one of the following procedures:

1) Monitor the concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system on a regular schedule, and replace the existing carbon with fresh carbon immediately when carbon breakthrough is indicated. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the

total carbon working capacity established as a requirement of Section 721.935(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 721.935(b)(4)(C)(vii).

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

j) A remanufacturer or other person that stores or treats hazardous secondary material at an affected facility seeking to comply with the provisions of this part by using a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system is required to develop documentation including sufficient information to describe the control device operation and identify the process parameter or parameters that indicate proper operation and maintenance of the control device.

k) A closed-vent system must meet either of the following design requirements:

1) A closed-vent system must be designed to operate with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background as determined by the procedure in Section 721.934(b), and by visual inspections; or

2) A closed-vent system must be designed to operate at a pressure below atmospheric pressure. The system must be equipped with at least one pressure gauge or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.

l) The remanufacturer or other person that stores or treats the hazardous secondary material must monitor and inspect each closed-vent system required to comply with this section to ensure proper operation and maintenance of the closed-vent system by implementing the following requirements:

1) Each closed-vent system that is used to comply with subsection (k)(1) must be inspected and monitored in accordance with the following requirements:

A) An initial leak detection monitoring of the closed-vent system must be conducted by the remanufacturer or other person that stores or treats the hazardous secondary material on or before the date that the system becomes subject to this section. The remanufacturer or other person that stores or treats the hazardous secondary material must monitor the closed-vent system components and connections using the procedures specified in Section 721.934(b) to demonstrate that the closed-vent system operates with no detectable emissions, as indicated by an instrument reading of less than 500 ppmv above background.

B) After initial leak detection monitoring required in subsection (l)(1)(A), the remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the closed-vent system as follows:

i) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) must be visually inspected at least once per year to check for defects that could result in air pollutant emissions. The remanufacturer or other person that stores or treats the hazardous secondary material must monitor a component or connection using the procedures specified in Section 721.934(b) to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).

ii) Closed-vent system components or connections other than those specified in subsection (l)(1)(B)(i) must be monitored annually and at other times as requested by the Agency, except as provided for in subsection (o), using the procedures specified in Section 721.934(b) to demonstrate that the components or connections operate with no detectable emissions. The Agency must make any request for monitoring in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

C) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material

must repair the defect or leak in accordance with the requirements of subsection (l)(3).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 721.935.

2) Each closed-vent system that is used to comply with subsection (k)(2) must be inspected and monitored in accordance with the following requirements:

A) The closed-vent system must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this Section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year.

C) In the event that a defect or leak is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (l)(3).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 721.935.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must repair all detected defects as follows:

A) Detectable emissions, as indicated by visual inspection, or by an instrument reading greater than 500 ppmv above background, must be controlled as soon as practicable, but not later than 15 calendar days after the emission is detected, except as provided for in subsection (l)(3)(C).

B) A first attempt at repair must be made no later than 5 calendar days after the emission is detected.

C) Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown, or if the remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment must be completed by the end of the next process unit shutdown.

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the defect repair in accordance with the requirements specified in Section 721.935.

m) Closed-vent systems and control devices used to comply with provisions of this Subpart AA must be operated at all times when emissions may be vented to them.

n) The owner or operator using a carbon adsorption system to control air pollutant emissions must document that all carbon that is a hazardous waste and that is removed from the control device is managed in one of the following manners, regardless of the average volatile organic concentration of the carbon:

1) Regenerated or reactivated in a thermal treatment unit that meets one of the following:

A) The owner or operator of the unit has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart X of this Part;

B) The unit is equipped with and operating air emission controls in accordance with the applicable requirements of Subparts AA and CC of this Part or Subparts AA and CC of 35 Ill. Adm. Code 725; or

C) The unit is equipped with and operating air emission controls in accordance with a national emission standard for hazardous air pollutants under 40 CFR 61 (National Emission Standards for Hazardous Air Pollutants) or 40 CFR 63 (National Emission

Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111(b).

2) Incinerated in a hazardous waste incinerator for which the owner or operator either:

A) Has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of this Part; or

B) Has designed and operates the incinerator in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.

3) Burned in a boiler or industrial furnace for which the owner or operator either:

A) Has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or

B) Has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726.

o) Any components of a closed-vent system that are designated, as described in Section 721.935(c)(9), as unsafe to monitor are exempt from the requirements of subsection (l)(1)(B)(ii) if both of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system determines that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (l)(1)(B)(ii); and

2) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management unit using a closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in subsection (l)(1)(B)(ii) as frequently as practicable during safe-to-monitor times.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.934 Test Methods and Procedures

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart AA must comply with the test methods and procedural requirements provided in this Section.

b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 721.933(l) of this Subpart AA, the test must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be:

A) Zero air (less than 10 ppm of hydrocarbon in air).

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The background level must be determined as set forth in Reference Method 21.

6) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

c) Performance tests to determine compliance with Section 721.932(a) and with the total organic compound concentration limit of Section 721.933(c) must comply with the following:

1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices must be conducted and data reduced in accordance with the following reference methods and calculation procedures:

A) Reference Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111 for velocity and volumetric flow rate.

B) Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) or Reference Method 25A (Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, for organic content. If Reference Method 25A is used, the organic HAP used as the calibration gas must be the single organic HAP representing the largest percent by volume of the emissions. The use of Reference Method 25A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

C) Each performance test must consist of three separate runs; each run shall be conducted for at least one hour under the conditions that exist when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. For the purpose of determining total organic compound concentrations and mass flow rates, the average of results of all runs must apply. The average must be computed on a time-weighted basis.

D) Total organic mass flow rates must be determined by the following equation:

i) For sources utilizing Reference Method 18.

$$E_{2sd}\left\{\sum_{i=1}^{n} C_i MW_i\right\}[0.0416][10^{-6}]$$

Where:

E_h = Total organic mass flow rate, kg/h;
E_{2sd} = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;
n = Number of organic compounds in the vent gas;
C_i = Organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Reference Method 18;
MW_i = Molecular weight of organic compound i in the vent gas, kg/kg-mol;
0.0416 = Conversion factor for molar volume, kg-mol/m3 (@293° K and 760 mmHg);
10^{-6} = Conversion from ppm.

ii) For sources utilizing Reference Method 25A.

$$E_h = (Q)(C)(MW)(0.0416)(10^{-6})$$

Where:

E_h = Total organic mass flow rate, kg/h;
Q = Volumetric flow rate of gases entering or exiting control device, as determined by Reference Method 2, dscm/h;
C = Organic concentration in ppm, dry basis, as determined by Reference Method 25A;
MW = Molecular weight of propane (44);
0.0416 = Conversion factor for molar volume, kg-mol/m^3 (@293° K and 760 mmHg);
10^{-6} = Conversion from ppm.

E) The annual total organic emission rate must be determined by the following equation:

$$E_A = (E_h)(H)$$

Where:

E_A = Total organic mass emission rate (kg/y);
F_h = Total organic mass flow rate for the process vent, kg/h;
H = Total annual hours of operations for the affected unit (h).

F) Total organic emissions from all affected process vents at the facility must be determined by summing the hourly total organic mass emission rates (E_h, as determined in subsection (c)(1)(F)) and by summing the annual total organic mass emission rates (E_A, as determined in subsection (c)(1)(E)) for all affected process vents at the facility.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must record process information necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction must not constitute representative conditions for the purpose of a performance test.

3) The remanufacturer or other person that stores or treats the hazardous secondary material at an affected facility must provide, or cause to be provided, performance testing facilities, as follows:

A) Sampling ports adequate for the test methods specified in subsection (c)(1).

B) Safe sampling platforms.

C) Safe access to sampling platforms.

D) Utilities for sampling and testing equipment.

4) For the purpose of making compliance determinations, the time-weighted average of the results of the three runs must apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the control of the remanufacturer or other person that stores or treats the hazardous secondary material, the Agency may approve compliance determination using the average of the results of the two other runs. The Agency must state any approval or disapproval of a compliance determination in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

d) To show that a process vent associated with a hazardous secondary material distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation is not subject to the requirements of this Subpart AA, the

remanufacturer or other person that stores or treats the hazardous secondary material must make an initial determination that the time-weighted, annual average total organic concentration of the material managed by the hazardous secondary material management unit is less than 10 ppmw using one of the following two methods:

1) Direct measurement of the organic concentration of the material using the following procedures:

A) The remanufacturer or other person that stores or treats the hazardous secondary material must take a minimum of four grab samples of material for each material stream managed in the affected unit under process conditions expected to cause the maximum material organic concentration.

B) For material generated onsite, the grab samples must be collected at a point before the material is exposed to the atmosphere such as in an enclosed pipe or other closed system that is used to transfer the material after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For material generated offsite, the grab samples must be collected at the inlet to the first material management unit that receives the material provided the material has been transferred to the facility in a closed system such as a tank truck and the material is not diluted or mixed with other material.

C) Each sample must be analyzed and the total organic concentration of the sample must be computed using Method 9060A of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, or analyzed for its individual organic constituents.

D) The arithmetic mean of the results of the analyses of the four samples must apply for each material stream managed in the unit in determining the time-weighted, annual average total organic concentration of the material. The time-weighted average is to be calculated using the annual quantity of each material stream processed and the mean organic concentration of each material stream managed in the unit.

2) Using knowledge of the material to determine that its total organic concentration is less than 10 ppmw. Documentation of the material determination 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 material is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a material stream having a total organic content less than 10 ppmw, or prior speciation analysis results on the same material stream where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

e) The determination that distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operations manage hazardous secondary materials with time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:

1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the material is first managed in a hazardous secondary material management unit, whichever is later; and

2) For continuously generated material:

A) annually; or

B) Whenever there is a change in the material being managed or a change in the process that generates or treats the material.

f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous secondary material with organic concentrations of at least 10 ppmw based on knowledge of the material, the dispute may be resolved by using direct measurement, as specified at subsection (d)(1). The Agency must state any disagreement in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.935 Recordkeeping Requirements

a) Compliance Required.

1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart AA must comply with the recordkeeping requirements of this Section.

2) A remanufacturer or other person that stores or treats the hazardous secondary material of more than one hazardous secondary material management unit subject to the provisions of this Subpart AA may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must keep the following records on-site:

1) For facilities that comply with the provisions of Section 721.933(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule must also include a rationale of why the installation cannot be completed at an earlier date. The implementation schedule must be kept on-site at the facility by the effective date that the facility becomes subject to the provisions of this Subpart AA.

2) Up-to-date documentation of compliance with the process vent standards in Section 721.932, including the following:

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

B) Information and data supporting determinations of vent emissions and emission reductions achieved by add-on control devices based on engineering calculations or source tests. For the purpose of determining compliance, determinations of vent emissions and emission reductions must be made using operating parameter values (e.g., temperatures, flow rates, or vent stream organic compounds and concentrations) that represent the conditions that result in maximum organic emissions, such as when the hazardous

secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action (e.g., managing a material of different composition or increasing operating hours of affected hazardous secondary material management units) that would result in an increase in total organic emissions from affected process vents at the facility, then a new determination is required.

3) Where a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to determine the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan must be developed and include the following:

A) A description of how it is determined that the planned test is going to be conducted when the hazardous secondary material management unit is operating at the highest load or capacity level reasonably expected to occur. This must include the estimated or design flow rate and organic content of each vent stream and define the acceptable operating ranges of key process and control device parameters during the test program.

B) A detailed engineering description of the closed-vent system and control device, including the following:

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

ii) Type of control device.

iii) Dimensions of the control device.

iv) Capacity.

v) Construction materials.

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

4) Documentation of compliance with Section 721.933 must include the following information:

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

B) Records, including the dates, of each compliance test required by Section 721.933(k).

C) If engineering calculations are used, a design analysis, specifications, drawings, schematics, and piping and instrumentation diagrams based on the appropriate sections of "APTI Course 415: Control of Gaseous Emissions," incorporated by reference as specified in 35 Ill. Adm. Code 720.111, or other engineering texts acceptable to the Agency that present basic control device design information. Documentation provided by the control device manufacturer or vendor that describes the control device design in accordance with subsections (b)(4)(C)(i) through (b)(4)(C)(G) may be used to comply with this requirement. The design analysis must address the vent stream characteristics and control device operation parameters, as specified below. The Agency must state whether or not the other engineering texts are acceptable or unacceptable in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

i) For a thermal vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.

ii) For a catalytic vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.

iii) For a boiler or process heater, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone.

iv) For a flare, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also consider the requirements specified in Section 721.933(d).

v) For a condenser, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet.

vi) For a carbon adsorption system such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total steam flow over the period of each complete carbon bed regeneration cycle, duration of the carbon bed steaming and cooling/ drying cycles, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

vii) For a carbon adsorption system such as a carbon canister that does not regenerate the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature. The design analysis must also establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

D) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the operating parameters used in the design analysis reasonably represent the conditions that exist when the hazardous secondary material management unit is or would be operating at the highest load or capacity level reasonably expected to occur.

E) A statement signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material certifying that the control device is designed to operate at an efficiency of 95 percent or greater unless the total organic concentration limit of Section 721.932(a) is achieved at an efficiency less than 95 weight percent or the total organic emission limits of Section 721.932(a) for affected process vents at the facility can be attained by a control device involving vapor recovery at an efficiency of less than 95 weight percent. A statement provided by the control device manufacturer or vendor certifying that the control equipment meets the design specifications may be used to comply with this requirement.

F) If performance tests are used to demonstrate compliance, all test results.

c) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of this part must be recorded and kept up-to-date at the facility. The information must include the following:

1) Description and date of each modification that is made to the closed-vent system or control device design.

2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 721.933 (f)(1) and (f)(2).

3) Monitoring, operating, and inspection information required by Section 721.933(f) through (k).

4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis, as specified below:

A) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760° C, period when the combustion temperature is below 760° C.

B) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, period when the combustion zone temperature is more than 28° C below the design average combustion zone temperature established as a requirement of subsection (b)(4)(C)(i).

C) For a catalytic vapor incinerator, period when either of the following occurs:

i) Temperature of the vent stream at the catalyst bed inlet is more than 28° C below the average temperature of the inlet vent stream established as a requirement of subsection (b)(4)(C)(ii), or

ii) Temperature difference across the catalyst bed is less than 80 percent of the design average temperature difference established as a requirement of subsection (b)(4)(C)(ii).

D) For a boiler or process heater, period when either of the following occurs:

i) Flame zone temperature is more than 28° C below the design average flame zone temperature established as a requirement of subsection (b)(4)(C)(iii); or

ii) Position changes where the vent stream is introduced to the combustion zone from the location established as a requirement of subsection (b)(4)(C)(iii).

E) For a flare, period when the pilot flame is not ignited.

F) For a condenser that complies with Section 721.933(f)(2)(F)(i), period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the condenser are more than 20 percent greater than the design outlet organic compound concentration level established as a requirement of subsection (b)(4)(C)(v).

G) For a condenser that complies with Section 721.933(f)(2)(F)(ii), period when either of the following occurs:

i) Temperature of the exhaust vent stream from the condenser is more than 6° C above the design average exhaust vent stream temperature established as a requirement of subsection (b)(4)(C)(v); or

ii) Temperature of the coolant fluid exiting the condenser is more than 6° C above the design average coolant fluid temperature at the condenser outlet established as a requirement of subsection (b)(4)(C)(v).

H) For a carbon adsorption system, such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and which complies with Section 721.933(f)(2)(G)(i), any period when the organic compound concentration level or readings of organic compounds in the exhaust vent stream from the carbon bed are more than 20 percent greater than the design exhaust vent stream organic compound concentration level established as a requirement of subsection (b)(4)(C)(vi).

I) For a carbon adsorption system, such as a fixed-bed carbon adsorber that regenerates the carbon bed directly onsite in the control device and which complies with Section 721.933(f)(2)(G)(ii), any period when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time established as a requirement of subsection (b)(4)(C)(vi).

5) Explanation for each period recorded under subsection (c)(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.

6) For a carbon adsorption system operated subject to requirements specified in Section 721.933(g) or (h)(2), any date when existing carbon in the control device is replaced with fresh carbon.

7) For a carbon adsorption system operated subject to requirements specified in Section 721.933(h)(1), a log that records:

A) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading.

B) Date when existing carbon in the control device is replaced with fresh carbon.

8) Date of each control device startup and shutdown.

9) A remanufacturer or other person that stores or treats the hazardous secondary material designating any components of a closed-vent system as unsafe to monitor pursuant to Section 721.933(o) must record in a log that is kept at the facility the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Section 721.933(o), an explanation for each closedvent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.

10) When each leak is detected as specified in Section 721.933(l), the following information must be recorded:

A) The instrument identification number, the closed-vent system component identification number, and the operator name, initials, or identification number.

B) The date the leak was detected and the date of first attempt to repair the leak.

C) The date of successful repair of the leak.

D) Maximum instrument reading measured by Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, after it is successfully repaired or determined to be nonrepairable.

E) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

i) The remanufacturer or other person that stores or treats the hazardous secondary material may develop a written procedure that identifies the conditions that justify a delay of repair. In such cases, reasons for delay of repair may be

documented by citing the relevant sections of the written procedure.

ii) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion.

d) Records of the monitoring, operating, and inspection information required by subsections (c)(3) through (c)(10) must be maintained by the owner or operator for at least three years following the date of each occurrence, measurement, maintenance, corrective action, or record.

e) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify the appropriate recordkeeping requirements. The Agency must specify the appropriate recordkeeping requirements in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

f) Up-to-date information and data used to determine whether or not a process vent is subject to the requirements in Section 721.932, including supporting documentation as required by Section 721.934(d)(2) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used, must be recorded in a log that is kept at the facility.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 721.950 Applicability

The regulations in this this Subpart BB apply to equipment that contains hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27), unless the equipment operations are subject to the requirements of an applicable federal Clean Air Act regulation in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

BOARD NOTE: 415 ILCS 5/9.1(b) and (d) make the federal new source performance standards and national emission standards for hazardous air pollutants directly applicable in Illinois and

prohibit operation of an emission source without a permit issued by the Agency. The Agency issues permits that incorporate the federal new soruce performance standards and national emission standards for hazardous air pollutants pursuant to 415 ILCS 5/39.5.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.951 Definitions

As used in this this Subpart BB, all terms will have the meaning given them in Section 721.931; section 1004 of the federal Resource Conservation and Recovery Act (42 USC 6903), incorporated by reference in 35 Ill. Adm. Code 720.111, and 35 Ill. Adm. Code 720 through 726.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.952 Standards: Pumps in Light Liquid Service

a) Monitoring.

1) Each pump in light liquid service must be monitored monthly to detect leaks by the methods specified in Section 721.963(b), except as provided in subsections (d), (e), and (f).

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

b) Leaks.

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

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

c) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

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

1) Each dual mechanical seal system must be as follows:

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

B) Equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of Section 721.960; or

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

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

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

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

5) Alarms.

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

B) The remanufacturer or other person that stores or treats the hazardous secondary material must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

6) Leaks.

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

B) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

e) Any pump that is designated, as described in Section 721.964(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsections (a), (c), and (d) if the pump meets the following requirements:

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

2) Must operate with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Section 721.963(c).

3) Must be tested for compliance with subsection (e)(2) initially upon designation, annually, and at other times as requested by the Agency. The Agency must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

f) If any pump is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Section 721.960, it is exempt from the requirements of subsections (a) through (e).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.953 Standards: Compressors

a) Each compressor must be equipped with a seal system that includes a barrier fluid system and that prevents leakage of total organic emissions to the atmosphere, except as provided in subsections (h) and (i).

b) Each compressor seal system as required in subsection (a) must be:

1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure; or

2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section 721.960; or

3) Equipped with a system that purges the barrier fluid into a hazardous secondary material stream with no detectable emissions to atmosphere.

c) The barrier fluid must not be a hazardous secondary material with organic concentrations 10 percent or greater by weight.

d) Each barrier fluid system, as described in subsections (a) through (c), must be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

e) Inspections.

1) Each sensor as required in subsection (d) must be checked daily or must be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under subsection (e)(2), a leak is detected.

g) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

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

h) A compressor is exempt from the requirements of subsections (a) and (b) if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Section 721.960, except as provided in subsection (i).

i) Any compressor that is designated, as described in Section 721.964(g)(2), for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background is exempt from the requirements of subsections (a) through (h) if the compressor:

1) Is determined to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

2) Is tested for compliance with subsection (i)(1) initially upon designation, annually, and at other times as requested by the Agency. The Agency must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.954 Standards: Pressure Relief Devices in Gas/Vapor Service

a) Except during pressure releases, each pressure relief device in gas/vapor service must be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

b) Actions following pressure release.

1) After each pressure release, the pressure relief device must be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than five calendar days after each pressure release, except as provided in Section 721.959.

2) No later than five calendar days after the pressure release, the pressure relief device must be monitored to confirm the condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Section 721.963(c).

c) Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Section 721.960 is exempt from the requirements of subsections (a) and (b).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.955 Standards: Sampling Connection Systems

a) Each sampling connection system must be equipped with a closed-purge, closed-loop, or closed-vent system. This system must collect the sample purge for return to the process or for routing to the appropriate treatment system. Gases displaced during filling of the sample container are not required to be collected or captured.

b) Each closed-purge, closed-loop, or closed-vent system as required in subsection (a) must meet one of the following requirements:

1) It must return the purged process fluid directly to the process line;

2) It must collect and recycle the purged process fluid; or

3) It must be designed and operated to capture and transport all the purged process fluid to a material management unit that complies with the applicable requirements of Sections 721.984 through 264.986 or a control device that complies with the requirements of Section 721.960.

c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of subsections (a) and (b).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.956 Standards: Open-Ended Valves or Lines

a) Equipment.

1) Each open-ended valve or line must be equipped with a cap, blind flange, plug, or a second valve.

2) The cap, blind flange, plug, or second valve must seal the open end at all times except during operations requiring hazardous secondary material stream flow through the open-ended valve or line.

b) Each open-ended valve or line equipped with a second valve must be operated in a manner such that the valve on the hazardous secondary material stream end is closed before the second valve is closed.

c) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but must comply with subsection (a) at all other times.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.957 Standards: Valves in Gas/Vapor Service or in Light Liquid Service

a) Each valve in gas/vapor or light liquid service must be monitored monthly to detect leaks by the methods specified in Section 721.963(b) and must comply with subsections (b) through (e), except as provided in subsections (f), (g), and (h) and Sections 721.961 and 721.962.

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

c) Monitoring Frequency.

1) Any valve for which a leak is not detected for two successive months may be monitored the first month of every succeeding quarter, beginning with the next quarter, until a leak is detected.

2) If a leak is detected, the valve must be monitored monthly until a leak is not detected for two successive months.

d) Leak repair.

1) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Section 721.959.

2) A first attempt at repair must be made no later than five calendar days after each leak is detected.

e) First attempts at repair include, but are not limited to, the following best practices where practicable:

1) Tightening of bonnet bolts.

2) Replacement of bonnet bolts.

3) Tightening of packing gland nuts.

4) Injection of lubricant into lubricated packing.

f) Any valve that is designated, as described in Section 721.964(g)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subsection (a) if the valve:

1) Has no external actuating mechanism in contact with the hazardous secondary material stream.

2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Section 721.963(c).

3) Is tested for compliance with subsection (f)(2) initially upon designation, annually, and at other times as requested by the Agency. The Agency must request any compliance testing at times other than annually in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

g) Any valve that is designated, as described in Section 721.964(h)(1), as an unsafe-to-monitor valve is exempt from the requirements of subsection (a) if both of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (a); and

2) The remanufacturer or other person that stores or treats the hazardous secondary material adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

h) Any valve that is designated, as described in Section 721.964(h)(2), as a difficult-to-monitor valve is exempt from the requirements of subsection (a) if all of the following conditions are fulfilled:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that the valve cannot be monitored without elevating the monitoring personnel more than two meters above a support surface;

2) The hazardous secondary material management unit within which the valve is located was in operation before January 13, 2015; and

3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.958 Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and Other Connectors

a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors must be monitored within five days by the method specified in Section 721.963(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

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

c) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 721.959.

2) The first attempt at repair must be made no later than five calendar days after each leak is detected.

d) First attempts at repair include, but are not limited to, the best practices described under Section 721.957(e).

e) Any connector that is inaccessible or which is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined) is exempt from the monitoring requirements of subsection (a) and from the recordkeeping requirements of Section 721.964.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.959 Standards: Delay of Repair

a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a hazardous secondary material management unit shutdown. In such a case, repair of this equipment must occur before the end of the next hazardous secondary material management unit shutdown.

b) Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the hazardous secondary material management

unit and that does not continue to contain or contact hazardous secondary material with organic concentrations at least 10 percent by weight.

c) Delay of repair for valves will be allowed if:

1) The remanufacturer or other person that stores or treats the hazardous secondary material determines that emissions of purged material resulting from immediate repair are greater than the emissions likely to result from delay of repair.

2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Section 721.960.

d) Delay of repair for pumps will be allowed if both of the following conditions are fulfilled:

1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

2) Repair is completed as soon as practicable, but not later than six months after the leak was detected.

e) Delay of repair beyond a hazardous secondary material management unit shutdown will be allowed for a valve if valve assembly replacement is necessary during the hazardous secondary material management unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next hazardous secondary material management unit shutdown will not be allowed unless the next hazardous secondary material management unit shutdown occurs sooner than six months after the first hazardous secondary material management unit shutdown.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.960 Standards: Closed-Vent Systems and Control Devices

a) The remanufacturer or other person that stores or treats the hazardous secondary material in a hazardous secondary material management units using closed-vent systems and control devices subject to this Subpart BB must comply with the provisions of Section 721.933.

b) Implementation Schedule.

1) The remanufacturer or other person that stores or treats the hazardous secondary material at an existing facility who cannot install a closed-vent system and control device to comply with the provisions of this Subpart BB on the effective date that the facility becomes subject to the provisions of this Subpart BB must prepare an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The controls must be installed as soon as possible, but the implementation schedule may allow up to 30 months after the effective date that the facility becomes subject to this Subpart BB for installation and startup.

2) Any unit that begins operation after July 13, 2015 and which is subject to the provisions of this Subpart BB when operation begins, must comply with the rules immediately (i.e., must have control devices installed and operating on startup of the affected unit); the 30-month implementation schedule does not apply.

3) The remanufacturer or other person that stores or treats the hazardous secondary material at any facility in existence on the effective date of a statutory or regulatory amendment that renders the facility subject to this Subpart BB must comply with all requirements of this Subpart BB as soon as practicable but no later than 30 months after the amendment's effective date. When control equipment required by this Subpart BB cannot be installed and begin operation by the effective date of the amendment, the facility owner or operator must prepare an implementation schedule that includes the following information: specific calendar dates for award of contracts or issuance of purchase orders for the control equipment, initiation of on-site installation of the control equipment, completion of the control equipment installation, and performance of any testing to demonstrate that the installed equipment meets the applicable standards of this Subpart BB. The remanufacturer or other person that stores or treats the hazardous secondary material must keep a copy of the implementation schedule at the facility.

4) Remanufacturers or other persons that store or treat the hazardous secondary materials at facilities and units that become newly subject to the requirements of this Subpart BB after January 13, 2015, due to an action other than those described in subsection (b)(3), must comply with all applicable requirements immediately (i.e., must have control devices installed and operating on the date the facility or unit becomes subject to this Subpart BB; the 30-month implementation schedule does not apply).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.961 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Percentage of Valves Allowed to Leak

a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section 721.957 may elect to have all valves within a hazardous secondary material management unit comply with an alternative standard that allows no greater than two percent of the valves to leak.

b) The following requirements must be met if a remanufacturer or other person that stores or treats the hazardous secondary material decides to comply with the alternative standard of allowing two percent of valves to leak:

1) A performance test, as specified in subsection (c), must be conducted initially upon designation, annually, and at other times requested by the Agency in writing to the remanufacturer or other persons that stores or treats the hazardous secondary material; and

2) If a valve leak is detected, it must be repaired in accordance with Section 721.957(d) and (e).

c) Performance tests must be conducted in the following manner:

1) All valves subject to the requirements in Section 721.957 within the hazardous secondary material management unit must be monitored within one week by the methods specified in Section 721.963(b).

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

3) The leak percentage must be determined by dividing the number of valves subject to the requirements in Section 721.957 for which leaks are detected by the total number of valves subject to the requirements in Section 721.957 within the hazardous secondary material management unit.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.962 Alternative Standards for Valves in Gas/Vapor Service or in Light Liquid Service: Skip Period Leak Detection and Repair

a) A remanufacturer or other person that stores or treats the hazardous secondary material subject to the requirements of Section 721.957 may elect for all valves within a hazardous secondary material management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3).

b) Reduced Monitoring.

1) A remanufacturer or other person that stores or treats the hazardous secondary material must comply with the requirements for valves, as described in Section 721.957, except as described in subsections (b)(2) and (b)(3).

2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip one of the quarterly leak detection periods (i.e., monitor for leaks once every six months) for the valves subject to the requirements in Section 721.957.

3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, a remanufacturer or other person that stores or treats the hazardous secondary material may begin to skip three of the quarterly leak detection periods (i.e., monitor for leaks once every year) for the valves subject to the requirements in Section 721.957.

4) If the percentage of valves leaking is greater than two percent, the remanufacturer or other person that stores or treats the hazardous secondary material must monitor monthly in compliance with the requirements in Section 721.957, but may again elect to use this Section after meeting the requirements of Section 721.957(c)(1).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.963 Test Methods and Procedures

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart BB must comply with the test methods and procedures requirements provided in this Section.

b) Leak detection monitoring, as required in Sections 721.952 through 721.962, must comply with the following requirements:

1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The detection instrument must meet the performance criteria of Reference Method 21.

3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

4) Calibration gases must be as follows:

A) Zero air (less than 10 ppm of hydrocarbon in air); and

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

5) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.

c) When equipment is tested for compliance with no detectable emissions, as required in Sections 721.952(e), 721.953(i), 721.954, and 721.957(f), the test must comply with the following requirements:

1) The requirements of subsections (b)(1) through (b)(4) must 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) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

d) A remanufacturer or other person that stores or treats the hazardous secondary material must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous secondary material with organic concentration that equals or exceeds 10 percent by weight using the following:

1) Methods described in ASTM Methods D 2267-88, E 169-87, E 168-88, E 260-85, incorporated by reference in 35 Ill. Adm. Code 720.111;

2) Method 9060A of "Test Methods for Evaluating Solid Waste," USEPA Publication SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111, for computing total organic concentration of the sample, or analyzed for its individual organic constituents; or

3) Application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced. Documentation of a material 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 material 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 material stream, where it can also be documented that no process changes have occurred since that analysis that could affect the material total organic concentration.

e) If a remanufacturer or other person that stores or treats the hazardous secondary material determines that a piece of equipment contains or contacts a hazardous secondary material 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).

f) When a remanufacturer or other person that stores or treats the hazardous secondary material and the Agency do not agree on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) can be used to resolve the dispute. The Agency must state any disagreement on whether a piece of equipment contains or contacts a hazardous secondary material with organic concentrations at least 10 percent by weight in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

g) Samples used in determining the percent organic content must be representative of the highest total organic content hazardous secondary material 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 may be obtained from standard reference texts or may be determined by ASTM D 2879-92, 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 721.934(c)(1) through (c)(4).

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.964 Recordkeeping Requirements

a) Lumping Units.

1) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to the provisions of this Subpart BB must comply with the recordkeeping requirements of this Section.

2) A remanufacturer or other person that stores or treats the hazardous secondary material in more than one hazardous secondary material management unit subject to the provisions of this Subpart BB may comply with the recordkeeping requirements for these hazardous secondary material management units in one recordkeeping system if the system identifies each record by each hazardous secondary material management unit.

b) Remanufacturers and other persons that store or treat the hazardous secondary material must record and keep the following information at the facility:

1) For each piece of equipment to which this Subpart BB applies:

A) The equipment identification number and hazardous secondary material management unit identification.

B) The approximate locations within the facility (e.g., identify the hazardous secondary material management unit on a facility plot plan).

C) The type of equipment (e.g., a pump or pipeline valve).

D) The percent-by-weight total organics in the hazardous secondary material stream at the equipment.

E) The hazardous secondary material state at the equipment (e.g., gas/vapor or liquid).

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

2) For facilities that comply with the provisions of Section 721.933(a)(2), an implementation schedule, as specified in Section 721.933(a)(2).

3) When a remanufacturer or other person that stores or treats the hazardous secondary material chooses to use test data to demonstrate the organic removal efficiency or total organic compound concentration achieved by the control device, a performance test plan, as specified in Section 721.935(b)(3).

4) Documentation of compliance with Section 721.960, including the detailed design documentation or performance test results specified in Section 721.935(b)(4).

c) When each leak is detected, as specified in Sections 721.952, 721.953, 721.957, and 721.958, the following requirements apply:

1) A weatherproof and readily visible identification, marked with the equipment identification number, the date evidence of a potential leak was found in accordance with Section 721.958(a), and the date the leak was detected, must be attached to the leaking equipment.

2) The identification on equipment, except on a valve, may be removed after it has been repaired.

3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Section 721.957(c) and no leak has been detected during those two months.

d) When each leak is detected, as specified in Sections 721.952, 721.953, 721.957, and 721.958, the following information must be recorded in an inspection log and must be kept at the facility:

1) The instrument and operator identification numbers and the equipment identification number.

2) The date evidence of a potential leak was found in accordance with Section 721.958(a).

3) The date the leak was detected and the dates of each attempt to repair the leak.

4) Repair methods applied in each attempt to repair the leak.

5) "Above 10,000" if the maximum instrument reading measured by the methods specified in Section 721.963(b) after each repair attempt is equal to or greater than 10,000 ppm.

6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

7) Documentation supporting the delay of repair of a valve in compliance with Section 721.959(c).

8) The signature of the remanufacturer or other person that stores or treats the hazardous secondary material (or designate) whose decision it was that repair could not be effected without a hazardous secondary material management unit shutdown.

9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

10) The date of successful repair of the leak.

e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 721.960 must be recorded and kept up-to-date at the facility, as specified in Section 721.935(c). Design documentation is specified in Section 721.935(c)(1) and (c)(2) and monitoring, operating, and inspection information in Section 721.935(c)(3) through (c)(8).

f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify in writing the appropriate recordkeeping requirements.

g) The following information pertaining to all equipment subject to the requirements in Sections 721.952 through 721.960 must be recorded in a log that is kept at the facility:

1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subpart BB.

2) List of Equipment.

A) A list of identification numbers for equipment that the remanufacturer or other person that stores or treats the hazardous secondary material elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 721.952(e), 721.953(i), and 721.957(f).

B) The designation of this equipment as subject to the requirements of Sections 721.952(e), 721.953(i), or 721.957(f) must be signed by the remanufacturer or other person that stores or treats the hazardous secondary material.

3) A list of equipment identification numbers for pressure relief devices required to comply with Section 721.954(a).

4) Compliance Tests.

A) The dates of each compliance test required in Sections 721.952(e), 721.953(i), 721.954, and 721.957(f).

B) The background level measured during each compliance test.

C) The maximum instrument reading measured at the equipment during each compliance test.

5) A list of identification numbers for equipment in vacuum service.

6) Identification, either by list or location (area or group) of equipment that contains or contacts hazardous secondary material with an organic concentration of at least 10 percent by weight for less than 300 hours per calendar year.

h) The following information pertaining to all valves subject to the requirements of Section 721.957(g) and (h) must be recorded in a log that is kept at the facility:

1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

i) The following information must be recorded in a log that is kept at the facility for valves complying with Section 721.962:

1) A schedule of monitoring.

2) The percent of valves found leaking during each monitoring period.

j) The following information must be recorded in a log that is kept at in the facility:

1) Criteria required in Sections 721.952(d)(5)(B) and 721.953(e)(2) and an explanation of the design criteria.

2) Any changes to these criteria and the reasons for the changes.

k) The following information must be recorded in a log that is kept at the facility for use in determining exemptions, as provided in the applicability Sections of this Subpart BB and other specific Subparts:

1) An analysis determining the design capacity of the hazardous secondary material management unit.

2) A statement listing the hazardous secondary material influent to and effluent from each hazardous secondary material management unit subject to the requirements in Sections 721.952 through 721.960 and an analysis determining whether these hazardous secondary materials are heavy liquids.

3) An up-to-date analysis and the supporting information and data used to determine whether equipment is subject to the requirements in Sections 721.952 through 721.960. The record must include supporting documentation as required by Section 721.963(d)(3) when application of the knowledge of the nature of the hazardous secondary material stream or the process by which it was produced is used. If the remanufacturer or other person that stores or treats the hazardous secondary material takes any action (e.g., changing the process that produced the material) that could result in an increase in the total organic content of the material contained in or contacted by equipment determined not to be subject to the requirements in Sections 721.952 through 721.960, then a new determination is required.

l) Records of the equipment leak information required by subsection (d) and the operating information required by subsection (e) need be kept only three years.

m) The remanufacturer or other person that stores or treats the hazardous secondary material at a facility with equipment that is subject to this Subpart BB and to regulations in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), incorporated by reference in 35 Ill. Adm. Code 720.111, may elect to determine compliance with this Subpart BB either by documentation pursuant to Section 721.964, or by documentation of compliance with the regulations in 40 CFR 60, 61, or 63 pursuant to the relevant provisions of the regulations in 40 CFR 60, 61, or 63. The documentation of compliance under regulations in 40 CFR 60, 61, or 63 must be kept with or made readily available at the facility.

BOARD NOTE: 415 ILCS 5/9.1(b) and (d) make the federal new source performance standards and national emission standards for hazardous air pollutants directly applicable in Illinois and prohibit operation of an emission source without a permit issued by the Agency. The Agency issues permits that incorporate the federal new soruce performance standards and national emission standards for hazardous air pollutants pursuant to 415 ILCS 5/39.5.

(Source: Added at 40 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS AND CONTAINERS

Section 721.980 Applicability

The regulations in this Subpart CC apply to tanks and containers that contain hazardous secondary materials excluded under the remanufacturing exclusion at Section 721.4(a)(27), unless the tanks and containers are equipped with and operating air emission controls in accordance with the requirements of an applicable federal Clean Air Act regulations codified in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.981 Definitions

As used in this this Subpart CC, all terms not defined in this Section will have the meaning given to them in section 1004 of the federal Resource Conservation and Recovery Act (42 USC 6903), incorporated by reference in 35 Ill. Adm. Code 720.111, 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

secondary material as determined in accordance with the requirements of Section 721.984.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover such that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous secondary material managed in a unit to prevent or reduce air pollutant emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, gauge wells) that are necessary for operation, inspection, maintenance, and repair of the unit on which the cover is used. A cover may be a separate piece of equipment that can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Empty hazardous secondary material container" means any of the following:

A container from which all hazardous secondary materials have been removed that can be removed using the practices commonly employed to remove materials from that type of container (e.g., pouring, pumping, or aspirating), and no more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner;

A container that is less than or equal to 119 gallons (450 liters) in size and no more than three percent by weight of the total capacity of the container remains in the container or inner liner; or

A container that is greater than 119 (450 liters) gallons in size and no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner.

"Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

"External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of the material managed in a tank with no fixed roof.

"Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous secondary material being managed in a surface impoundment.

"Floating roof" means a cover consisting of a double deck, pontoon single deck, or internal floating cover which rests upon and is supported by the material being contained, and is equipped with a continuous seal.

"Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

"In light material service" means the container is used to manage a material for which both of the following conditions apply: The vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20° C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20° C is equal to or greater than 20 percent by weight.

"Internal floating roof" means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

"Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous secondary material between the tank wall and the floating roof continuously around the circumference of the tank.

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

"Material determination" means performing all applicable procedures in accordance with the requirements of Section 721.984 to determine whether a hazardous secondary material meets standards specified in this Subpart CC. Examples of a material determination include performing the procedures in accordance with the requirements of Section 721.984 to determine the average VO concentration of a hazardous secondary material at the point of material

origination; the average VO concentration of a hazardous secondary material at the point of material treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous secondary material; the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous secondary material and comparing the results to the applicable standards; or the maximum volatile organic vapor pressure for a hazardous secondary material in a tank and comparing the results to the applicable standards.

"Maximum organic vapor pressure" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank, at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining materials, etc.) reasonably expected to occur in the tank. For the purpose of this Subpart CC, maximum organic vapor pressure is determined using the procedures specified in Section 721.984(c).

"Metallic shoe seal" means a continuous seal that is constructed of metal sheets which are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

"No detectable organic emissions" means no escape of organics to the atmosphere as determined using the procedure specified in Section 721.984(d).

"Point of material origination" means as follows:

If the remanufacturer or other person that stores or treats the hazardous secondary material is the generator of the hazardous secondary material, the point of material origination means the point at which a material produced by a system, process, or material management unit is determined to be a hazardous secondary material excluded under Section 721.104(a)(27).

BOARD NOTE: Where the person that stores or treats the hazardous secondary material is the generator of the hazardous secondary material, "point of material origination" is being used in a manner similar to the use of the term "point of generation" in air standards established under authority of the federal Clean Air Act in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), each incorporated by reference in 35 Ill. Adm. Code 720.111.

Where the remanufacturer or other person that stores or treats the hazardous secondary material is not the generator of the hazardous secondary material, point of material origination means the point where the remanufacturer or other person that stores or treats the hazardous secondary material accepts delivery or takes possession of the hazardous secondary material.

"Safety device" means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart CC, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted such that there is a vapor space between the hazardous secondary material in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of the volatile organic compounds contained in a hazardous secondary material expressed in terms of parts per million (ppmw) as determined by direct measurement or by knowledge of the material in accordance with the requirements of Section 721.984. For the purpose of determining the VO concentration of a hazardous secondary material, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C must be included.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.982 Standards: General

a) This Section applies to the management of hazardous secondary material in tanks and containers subject to this Subpart CC.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each hazardous secondary material management unit in accordance with standards specified in Sections 721.984 through 721.987, as applicable to the hazardous secondary material management unit, except as provided for in subsection (c).

c) A tank or container is exempt from standards specified in Sections 721.984 through 721.987, as applicable, provided that the hazardous secondary material management unit is a tank or container for which all hazardous secondary material entering the unit has an average VO concentration at the point of material origination of less than 500 parts per million by weight (ppmw). The average VO concentration must be determined using the procedures specified in Section 721.983(a). The remanufacturer or other person that stores or treats the hazardous secondary material must review and update, as necessary, this determination at least once every 12 months following the date of the initial determination for the hazardous secondary material streams entering the unit.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.983 Material Determination Procedures

a) Material determination procedure to determine average volatile organic (VO) concentration of a hazardous secondary material at the point of material origination.

1) Determining average VO concentration at the point of material origination. A remanufacturer or other person that stores or treats the hazardous secondary material must determine the average VO concentration at the point of material origination for each hazardous secondary material placed in a hazardous secondary material management unit exempted under the provisions of Section 721.982(c)(1) from using air emission controls in accordance with standards specified in Sections 721.984 through 721.987, as applicable to the hazardous secondary material management unit.

A) An initial determination of the average VO concentration of the material stream must be made before the first time any portion of the material in the hazardous secondary material stream is placed in a hazardous secondary material management unit exempted under the provisions of Section 721.982(c)(1) from using air emission controls, and thereafter an initial determination of the average VO concentration of the material stream must be made for each averaging period that a hazardous secondary material is managed in the unit; and

B) Perform a new material determination whenever changes to the source generating the material stream are reasonably likely to cause the average VO concentration of the hazardous secondary material to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 721.982.

2) Determination of average VO concentration using direct measurement or knowledge. For a material determination that is required by subsection (a)(1), the average VO concentration of a hazardous secondary material at the point of material origination must be determined using either direct measurement, as specified in subsection (a)(3), or by knowledge of the hazardous secondary material, as specified in subsection (a)(4).

3) Direct measurement to determine average VO concentration of a hazardous secondary material at the point of material origination, as follows:

A) Identification. The remanufacturer or other person that stores or treats the hazardous secondary material must identify and record in a log that is kept at the facility the point of material origination for the hazardous secondary material.

B) Sampling. Samples of the hazardous secondary material stream must be collected at the point of material origination in a manner such that volatilization of organics contained in the material and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous secondary material stream on a mass-weighted average basis must be designated and recorded. The averaging period can

represent any time interval that the remanufacturer or other person that stores or treats the hazardous secondary material determines is appropriate for the hazardous secondary material stream but must not exceed one year.

ii) A sufficient number of samples, but no less than four samples, must be collected and analyzed for a hazardous secondary material determination. All of the samples for a given material determination must be collected within a one-hour period. The average of the four or more sample results constitutes a material determination for the material stream. One or more material determinations may be required to represent the complete range of material compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous secondary material stream. Examples of such normal variations are seasonal variations in material quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous secondary material stream are collected such that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained at the facility. An example of acceptable sample collection and handling procedures for a total volatile organic constituent concentration may be found in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the material quantity represented by the samples and, as applicable, the operating

conditions for the source or process generating the hazardous secondary material represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, for the total concentration of volatile organic constituents, or using one or more methods when the individual organic compound concentrations are identified and summed and the summed material concentration accounts for and reflects all organic compounds in the material with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C. At the discretion of the remanufacturer or other person that stores or treats the hazardous secondary material, the test data obtained may be adjusted by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25° C. To adjust these data, the measured concentration of each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (fm_{25D}). If the remanufacturer or other person that stores or treats the hazardous secondary material elects to adjust the test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25° C contained in the material. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factors (fm_{25D}) obtained in writing from the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement to reflect all organic compounds in the material with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C, is met.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63 (Alternative Validation Procedure for EPA Waste and Wastewater Methods), incorporated by reference in 35 Ill. Adm. Code 720.111.

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or Section 5.3, and the corresponding calculations in Section 6.1 or Section 6.3, of Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111. The data are acceptable if they meet the criteria specified in Section 6.1.5 or Section 6.3.3 of Method 301. If correction is required under section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations.

i) The average VO concentration (C) on a mass-weighted basis must be calculated by using the results for all material determinations conducted in accordance with subsections (a)(3)(B) and (a)(3)(C) and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} Q_i \times C_i$$

Where:

C = Average VO concentration of the hazardous secondary material at the point of material origination on a mass-weighted basis, in ppmw.

i = Individual material determination "i" of the hazardous secondary material.

n = Total number of material determinations of the hazardous secondary material conducted for the averaging period (not to exceed one year).

Q_i = Mass quantity of hazardous secondary material stream represented by C_i, in kg/hr.

Q_T = Total mass quantity of hazardous secondary material during the averaging period, in kg/hr.

C_i = Measured VO concentration of material determination "i" in ppmw, as determined in accordance with the requirements of subsection (a)(3)(C) (i.e., the average of the

four or more samples specified in subsection (a)(3)(B)(ii))

ii) For the purpose of determining C_i, for individual material samples analyzed in accordance with subsection (a)(3)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must account for VO concentrations determined to be below the limit of detection of the analytical method by using the VO concentration that is one-half the blank value determined in the method at section 4.4 of Reference Method 25D, if Reference Method 25D is used for the analysis; or that is one-half the sum of the limits of detection established for each organic constituent in the material that has a Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25° C, if any other analytical method is used.

4) Use of knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material to determine average VO concentration of a hazardous secondary material at the point of material origination.

A) Documentation must be prepared that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material of the hazardous secondary material stream's average VO concentration. Examples of information that may be used as the basis for knowledge include material balances for the source or process generating the hazardous secondary material stream; constituent-specific chemical test data for the hazardous secondary material stream from previous testing that are still applicable to the current material stream; previous test data for other locations managing the same type of material stream; or other knowledge based on information included in shipping papers or material certification notices.

B) If test data are used as the basis for knowledge, then the remanufacturer or other person that stores or treats the hazardous secondary material must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the

average VO concentration. For example, a remanufacturer or other person that stores or treats the hazardous secondary material may use organic concentration test data for the hazardous secondary material stream that are validated in accordance with Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods) as the basis for knowledge of the material.

C) A remanufacturer or other person that stores or treats the hazardous secondary material using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous secondary material may adjust the test data to the corresponding average VO concentration value which would have been obtained had the material samples been analyzed using Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). To adjust these data, the measured concentration for each individual chemical constituent contained in the material is multiplied by the appropriate constituent-specific adjustment factor (fm_{25D}).

D) In the event that the Agency and the remanufacture or other person that stores or treats the hazardous secondary material disagree on a determination of the average VO concentration for a hazardous secondary material stream using knowledge, then the results from a determination of average VO concentration using direct measurement as specified in subsection (a)(3) must be used to establish compliance with the applicable requirements of this Subpart CC. The Agency may perform or request that the remanufacturer or other person that stores or treats the hazardous secondary material perform this determination using direct measurement. The remanufacturer or other person that stores or treats the hazardous secondary material may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of subsection (a)(3)(C). The Agency must state any disagreement on determination of the average VO concentration for a hazardous secondary material stream using knowledge in writing to the remanufacturer or other person that stores or treats the hazardous secondary material.

b) This subsection (b) corresponds with 40 CFR 261.1083(b), marked "reserved" by USEPA. This statement maintains structural consistency with the federal regulations.

c) Procedure to determine the maximum organic vapor pressure of a hazardous secondary material in a tank.

1) A remanufacturer or other person that stores or treats the hazardous secondary material must determine the maximum organic vapor pressure for each hazardous secondary material placed in a tank using Tank Level 1 controls in accordance with standards specified in Section 721.984(c).

2) A remanufacturer or other person that stores or treats the hazardous secondary material must use either direct measurement as specified in subsection (c)(3) or knowledge of the waste as specified by subsection (c)(4) to determine the maximum organic vapor pressure which is representative of the hazardous secondary material composition stored or treated in the tank.

3) Direct measurement to determine the maximum organic vapor pressure of a hazardous secondary material.

A) Sampling. A sufficient number of samples must be collected to be representative of the hazardous secondary material contained in the tank. All samples must be collected and handled in accordance with written procedures prepared by the remanufacturer or other person that stores or treats the hazardous secondary material and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous secondary material are collected such that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained at the facility. An example of acceptable sample collection and handling procedures may be found in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

B) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous secondary material:

i) Reference Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples) in appendix A to

40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

ii) Methods described in American Petroleum Institute Publication 2517, Third Edition, February 1989, "Evaporative Loss from External Floating-Roof Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111;

iii) Methods obtained from standard reference texts;

iv) ASTM Method 2879-92, incorporated by reference in 35 Ill. Adm. Code 720.111; and

v) Any other method approved in writing by the Agency.

4) Use of knowledge to determine the maximum organic vapor pressure of the hazardous secondary material. Documentation must be prepared and recorded that presents the information used as the basis for the knowledge by the remanufacturer or other person that stores or treats the hazardous secondary material that the maximum organic vapor pressure of the hazardous secondary material is less than the maximum vapor pressure limit listed in Section 721.984(b)(1)(A) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous secondary material is generated by a process for which at other locations it previously has been determined by direct measurement that the hazardous secondary material's maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

d) Procedure for determining no detectable organic emissions for the purpose of complying with this Subpart CC:

1) The test must be conducted in accordance with the procedures specified in Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices must be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to, the interface of the cover and its foundation mounting, the periphery of any opening on the cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure relief valve.

2) The test must be performed when the unit contains a hazardous secondary material having an organic concentration representative of the range of concentrations for the hazardous secondary material expected to be managed in the unit. During the test, the cover and closure devices must be secured in the closed position.

3) The detection instrument must meet the performance criteria of Reference Method 21, except the instrument response factor criteria in section 3.1.2(a) of Reference Method 21, must be for the average composition of the organic constituents in the hazardous secondary material placed in the hazardous secondary management unit, not for each individual organic constituent.

4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

5) Calibration gases must be as follows:

A) Zero air (less than 10 ppmv hydrocarbon in air), and

B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

6) The background level must be determined according to the procedures in Reference Method 21.

7) Each potential leak interface must be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Reference Method 21. If the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface must be sampled. If the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet must be placed at approximately the center of the exhaust area to the atmosphere.

8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison must be as specified in subsection (d)(9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.984 Standards: Tanks

a) The provisions of this Section apply to the control of air pollutant emissions from tanks for which Section 721.982(b) references the use of this Section for that air emission control.

b) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each tank subject to this Section in accordance with the following requirements, as applicable:

1) For a tank that manages hazardous secondary material that meets all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the tank in accordance with the Tank Level 1 controls specified in subsection (c) or the Tank Level 2 controls specified in subsection (d).

A) The hazardous secondary material in the tank has a maximum organic vapor pressure that is less than the maximum organic vapor pressure limit for the tank's design capacity category, as follows:

i) For a tank design capacity equal to or greater than 151 m3, the maximum organic vapor pressure limit for the tank is 5.2 kPa.

ii) For a tank design capacity equal to or greater than 75 m^3 but less than 151 m^3, the maximum organic vapor pressure limit for the tank is 27.6 kPa.

iii) For a tank design capacity less than 75 m^3, the maximum organic vapor pressure limit for the tank is 76.6 kPa.

B) The hazardous secondary material in the tank is not heated by the remanufacturer or other person that stores or treats the hazardous secondary material to a temperature that is greater than the temperature at which the maximum organic vapor pressure of the hazardous secondary material is determined for the purpose of complying with subsection (b)(1)(A).

2) For a tank that manages hazardous secondary material that does not meet all of the conditions specified in subsections (b)(1)(A) through (b)(1)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the tank by using Tank Level 2 controls in accordance with the requirements of subsection (d). An example of tanks required to use Tank Level 2 controls is a tank for which the hazardous secondary material in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category, as specified in subsection (b)(1)(A).

c) A remanufacturer or other person that stores or treats the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 1 controls must meet the requirements specified in subsections (c)(1) through (c)(4) of this Section:

1) The remanufacturer or other person that stores or treats that hazardous secondary material must determine the maximum organic vapor pressure for a hazardous secondary material to be managed in the tank using Tank Level 1 controls before the first time the hazardous secondary material is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 721.983(c). Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform a new determination whenever changes to the hazardous secondary material managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in subsection (b)(1)(A), as applicable to the tank.

2) The tank must be equipped with a fixed roof designed to meet the following specifications:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the hazardous secondary material in the tank. The fixed roof may be a separate

cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).

B) The fixed roof must be installed in a manner such that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.

C) Each opening in the fixed roof, and any manifold system associated with the fixed roof, must fulfill either of the following requirements:

i) It must be equipped with a closure device designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

ii) It must be connected by a closed-vent system that is vented to a control device. The control device must remove or destroy organics in the vent stream, and must be operating whenever hazardous secondary material is managed in the tank, except as provided in this subsection (c)(2)(C)(ii). During any period of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank. During any period when it is necessary to provide access to the tank for performing the foregoing activities, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device.

BOARD NOTE: This subsection (c)(2)(C)(ii) corresponds with 40 CFR 261.1083(c)(2)(iii)(B). The Board combined the texts of 40 CFR 261.1083(c)(2)(iii)(B)(1) and (c)(2)(iii)(B)(2) into this single subsection to comport with codification requirements.

D) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the organic vapor permeability; the effects of any contact with the hazardous secondary material or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

3) Whenever a hazardous secondary material is in the tank, the fixed roof must be installed with each closure device secured in the closed position, except as follows:

A) Opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of tank.

B) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the

closed position whenever the tank internal pressure is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

C) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the air emission control equipment in accordance with the following requirements.

A) The fixed roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except under the special conditions provided for in subsection (l).

C) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

D) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

d) Remanufacturers or other persons that store or treat the hazardous secondary material controlling air pollutant emissions from a tank using Tank Level 2 controls must use one of the following tanks:

1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in subsection (e);

2) A tank equipped with an external floating roof in accordance with the requirements specified in subsection (f);

3) A tank vented through a closedvent system to a control device in accordance with the requirements specified in subsection (g);

4) A pressure tank designed and operated in accordance with the requirements specified in subsection (h); or

5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in subsection (i).

e) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using a fixed roof with an internal floating roof must meet the requirements specified in subsections (e)(1) through (e)(3).

1) The tank must be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

A) The internal floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The internal floating roof must be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

i) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in Section 721.981; or

ii) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

C) The internal floating roof must meet the following specifications:

i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

ii) Each opening in the internal floating roof must be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

iii) Each penetration of the internal floating roof for the purpose of sampling must have a slit fabric cover that covers at least 90 percent of the opening.

iv) Each automatic bleeder vent and rim space vent must be gasketed.

v) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.

vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

C) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof must be bolted or fastened closed (i.e., no visible gaps). Rim space vents are to be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the internal floating roof in accordance with the procedures specified as follows:

A) The floating roof and its closure devices must be visually inspected by the remanufacture or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, the internal floating roof is not floating on the surface of the liquid inside the tank; liquid has accumulated on top of the internal floating roof; any portion of the roof seals have detached from the roof rim; holes, tears, or other openings are visible in the seal fabric; the gaskets no longer close off the hazardous secondary material surface from the atmosphere; or the slotted membrane has more than 10 percent open area.

B) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the internal floating roof components as follows, except as provided in subsection (e)(3)(C):

i) It must visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and

ii) It must visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every 10 years.

C) As an alternative to performing the inspections specified in subsection (e)(3)(B), for an internal floating roof equipped with two continuous seals mounted one above the other, the remanufacturer or other person that stores or treats the hazardous

secondary material must visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years.

D) Prior to each inspection required by subsection (e)(3)(B) or (e)(3)(C), the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency of the date and location of the inspection as follows:

i) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned as provided for in subsection (e)(3)(D)(ii).

ii) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

E) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

F) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

4) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any tank complying with the requirements of subsection (e).

f) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank using an external floating roof must meet the requirements specified in subsections (f)(1) through (f)(3).

1) The remanufacturer or other person that stores or treats the hazardous secondary material must design the external floating roof in accordance with the following requirements:

A) The external floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The floating roof must be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.

i) The primary seal must be a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 721.981. The total area of the gaps between the tank wall and the primary seal must not exceed 212 square centimeters (cm^2) per meter of tank diameter, and the width of any portion of these gaps must not exceed 3.8 centimeters (cm). If a metallic shoe seal is used for the primary seal, the metallic shoe seal must be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least 61 cm above the liquid surface.

ii) The secondary seal must be mounted above the primary seal and cover the annular space between the floating roof and the wall of the tank. The total area of the gaps between the tank wall and the secondary seal must not exceed 21.2

cm^2 per meter of tank diameter, and the width of any portion of these gaps must not exceed 1.3 cm.

C) The external floating roof must meet the following specifications:

i) Except for automatic bleeder vents (vacuum breaker vents) and rim space vents, each opening in a noncontact external floating roof must provide a projection below the liquid surface.

ii) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal, or lid.

iii) Each access hatch and each gauge float well must be equipped with a cover designed to be bolted or fastened when the cover is secured in the closed position.

iv) Each automatic bleeder vent and each rim space vent must be equipped with a gasket.

v) Each roof drain that empties into the liquid managed in the tank must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.

vi) Each unslotted and slotted guide pole well must be equipped with a gasketed sliding cover or a flexible fabric sleeve seal.

vii) Each unslotted guide pole must be equipped with a gasketed cap on the end of the pole.

viii) Each slotted guide pole must be equipped with a gasketed float or other device which closes off the liquid surface from the atmosphere.

ix) Each gauge hatch and each sample well must be equipped with a gasketed cover.

2) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the tank in accordance with the following requirements:

A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.

B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be secured and maintained in a closed position at all times except when the closure device must be open for access.

C) Covers on each access hatch and each gauge float well must be bolted or fastened when secured in the closed position.

D) Automatic bleeder vents must be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.

E) Rim space vents must be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.

F) The cap on the end of each unslotted guide pole must be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.

G) The cover on each gauge hatch or sample well must be secured in the closed position at all times except when the hatch or well must be opened for access.

H) Both the primary seal and the secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect the external floating roof in accordance with the following procedures:

A) The remanufacturer or other person that stores or treats the hazardous secondary material must measure the external floating roof seal gaps in accordance with the following requirements:

i) The remanufacturer or other person that stores or treats the hazardous secondary material must perform measurements of gaps between the tank wall and the primary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every five years.

ii) The remanufacturer or other person that stores or treats the hazardous secondary material must perform measurements of gaps between the tank wall and the secondary seal within 60 calendar days after initial operation of the tank following installation of the floating roof and, thereafter, at least once every year.

iii) If a tank ceases to hold hazardous secondary material for a period of one year or more, subsequent introduction of hazardous secondary material into the tank must be considered an initial operation for the purposes of subsections (f)(3)(A)(i) and (f)(3)(A)(ii).

iv) The remanufacturer or other person that stores or treats the hazardous secondary material must determine the total surface area of gaps in the primary seal and in the secondary seal individually using the procedure described in subsection (f)(3)(D):

BOARD NOTE: The Board moved corresponding 40 CFR 261.1084(f)(3)(i)(D)(1) through (f)(3)(i)(D)(4) to appear as subsections (f)(3)(D)(i) through (f)(3)(A)(iv) to comport with codification requirements.

v) In the event that the seal gap measurements do not conform to the specifications in subsection (f)(1)(B), the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

vi) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

B) The remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the external floating roof in accordance with the following requirements:

i) The floating roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, holes, tears, or other openings in the rim seal or seal fabric of the floating roof; a rim seal detached from the floating roof; all or a portion of the floating roof deck being submerged below the surface of the liquid in the tank; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

ii) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the external floating roof and its closure devices on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except for the special conditions provided for in subsection (l).

iii) In the event that a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

iv) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

C) Prior to each inspection required by subsection (f)(3)(A) or (f)(3)(B), the remanufacturer or other person that stores or treats the hazardous secondary material must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The remanufacturer or other person that stores or treats the hazardous

secondary material must notify the Agency of the date and location of the inspection as follows:

i) Prior to each inspection to measure external floating roof seal gaps, as required under subsection (f)(3)(A), written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before the date the measurements are scheduled to be performed.

ii) Prior to each visual inspection of an external floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the remanufacturer or other person that stores or treats the hazardous secondary material so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned as provided for in subsection (f)(3)(C)(iii).

iii) When a visual inspection is not planned and the remanufacturer or other person that stores or treats the hazardous secondary material could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

D) Procedure for determining the total surface area of gaps in the primary seal and in the secondary seal individually.

i) The seal gap measurements must be performed at one or more floating roof levels when the roof is floating off the roof supports.

ii) Seal gaps, if any, must be measured around the entire perimeter of the floating roof in each place where a 0.32

cm diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.

iii) For a seal gap measured under this subsection (f)(3), the gap surface area must be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

iv) The total gap area must be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type as specified in subsection (f)(1)(B).

BOARD NOTE: The texts of corresponding 40 CFR 261.1084(f)(3)(i)(D)(1) through (f)(3)(i)(D)(4), which would normally appear in subsection (f)(3)(A)(iv), appear as subsections (f)(3)(D)(i) through (f)(3)(D)(iv) to comport with codification requirements.

4) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any tank complying with the requirements of subsection (f).

g) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions from a tank by venting the tank to a control device must meet the requirements specified in subsections (g)(1) through (g)(3).

1) The tank must be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:

A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the tank.

B) Each opening in the fixed roof not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions.

C) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include, organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 721.987.

2) Whenever a hazardous secondary material is in the tank, the fixed roof must be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device, except as follows:

A) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:

i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of these activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of

the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.

ii) To remove accumulated sludge or other residues from the bottom of a tank.

B) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

3) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the air emission control equipment in accordance with the following procedures:

A) The fixed roof and its closure devices must be visually inspected by the remanufacturer or other person that stores or treats the hazardous secondary material to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

B) The closed-vent system and control device must be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in Section 721.987.

C) The remanufacturer or other person that stores or treats the hazardous secondary material must perform an initial inspection of the air emission control equipment on or before the date that the tank becomes subject to this section. Thereafter, the remanufacturer or other person that stores or treats the hazardous secondary material must perform the inspections at least once every year except for the special conditions provided for in subsection (l).

D) In the event that a defect is detected, the remanufacture or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (k).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain a record of the inspection in accordance with the requirements specified in Section 721.989(b).

h) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using a pressure tank must meet the following requirements:

1) The tank must be designed not to vent to the atmosphere as a result of compression of the vapor headspace in the tank during filling of the tank to its design capacity.

2) All tank openings must be equipped with closure devices designed to operate with no detectable organic emissions as determined using the procedure specified in Section 721.983(d).

3) Whenever a hazardous secondary material is in the tank, the tank must be operated as a closed system that does not vent to the atmosphere, except under either or the following conditions described in subsection (h)(3)(A) or (h)(3)(B).

A) At those times when opening of a safety device, as defined in Section 721.981, is required to avoid an unsafe condition.

B) At those times when purging of inerts from the tank is required and the purge stream is routed to a closed-vent system and control device designed and operated in accordance with the requirements of Section 721.987.

i) The remanufacturer or other person that stores or treats the hazardous secondary material who controls air pollutant emissions by using an enclosure vented through a closed-vent system to an enclosed combustion control device must meet the following requirements:

1) The tank must be located inside an enclosure. The enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111. The enclosure may have permanent or temporary openings to allow worker access; passage of material into or out of the enclosure by conveyor,

vehicles, or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material must perform the verification procedure for the enclosure as specified in Section 5.0 to "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and annually thereafter.

2) The enclosure must be vented through a closed-vent system to an enclosed combustion control device that is designed and operated in accordance with the standards for either a vapor incinerator, boiler, or process heater specified in Section 721.987.

3) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any enclosure, closed-vent system, or control device used to comply with the requirements of subsections (i)(1) and (i)(2).

4) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor the closed-vent system and control device, as specified in Section 721.987.

j) The remanufacturer or other person that stores or treats the hazardous secondary material must transfer hazardous secondary material to a tank subject to this section in accordance with the following requirements:

1) Transfer of hazardous secondary material, except as provided in subsection (j)(2), to the tank from another tank subject to this section must be conducted using continuous hard-piping or another closed system that does not allow exposure of the hazardous secondary material to the atmosphere. For the purpose of complying with this provision, an individual drain system is considered to be a closed system when it meets the requirements of subpart RR of 40 CFR 63 (National Emission Standards for Individual Drain Systems), incorporated by reference in 35 Ill. Adm. Code 720.111.

2) The requirements of subsection (j)(1) do not apply when transferring a hazardous secondary material to the tank under any of the following conditions:

A) The hazardous secondary material meets the average VO concentration conditions specified in Section 721.982(c)(1) at the point of material origination.

B) The hazardous secondary material has been treated by an organic destruction or removal process to meet the requirements in Section 721.982(c)(2).

C) The hazardous secondary material meets the requirements of Section 721.982(c)(4).

k) The remanufacturer or other person that stores or treats the hazardous secondary material must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(4), (e)(3), (f)(3), or (g)(3), as follows:

1) The remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than five calendar days after detection, and repair must be completed as soon as possible, but no later than 45 calendar days after detection, except as provided in subsection (k)(2).

2) Repair of a defect may be delayed beyond 45 calendar days if the remanufacturer or other person that stores or treats the hazardous secondary material determines that repair of the defect requires emptying or temporary removal from service of the tank and no alternative tank capacity is available at the site to accept the hazardous secondary material normally managed in the tank. In this case, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect the next time the process or unit that is generating the hazardous secondary material managed in the tank stops operation. Repair of the defect must be completed before the process or unit resumes operation.

l) Following the initial inspection and monitoring of the cover as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year under the following special conditions:

1) In the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions, then the remanufacturer or other person that stores or treats the hazardous secondary material may designate a cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

A) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

B) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable section of this Subpart CC, as frequently as practicable during those times when a worker can safely access the cover.

2) In the case when a tank is buried partially or entirely underground, a remanufacturer or other person that stores or treats the hazardous secondary material is required to inspect and monitor, as required by the applicable provisions of this section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.986 Standards: Containers

a) Applicability. The provisions of this Section apply to the control of air pollutant emissions from containers for which Section 721.982(b) references the use of this Section for that air emission control.

b) General requirements.

1) The remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from each container subject to this Section in accordance with the following requirements, as applicable to the container.

A) For a container having a design capacity greater than 0.1 m^3 and less than or equal to 0.46 m^3, the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).

B) For a container having a design capacity greater than 0.46 m^3 that is not in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).

C) For a container having a design capacity greater than 0.46 m^3 that is in light material service, the remanufacturer or other person that stores or treats the hazardous secondary material must control air

pollutant emissions from the container in accordance with the Container Level 2 standards specified in subsection (d).

2) This subsection (b)(2) corresponds with 40 CFR 261.1086(b)(2), marked "reserved" by USEPA. This statement maintains structural consistency with the federal regulations

c) Container Level 1 standards.

1) A container using Container Level 1 controls is one of the following:

A) A container that meets the applicable U.S. Department of Transportation (USDOT) regulations on packaging hazardous materials for transportation, as specified in subsection (f).

B) A container equipped with a cover and closure devices that form a continuous barrier over the container openings such that, when the cover and closure devices are secured in the closed position, there are no visible holes, gaps, or other open spaces into the interior of the container. The cover may be a separate cover installed on the container (e.g., a lid on a drum or a suitably secured tarp on a roll-off box) or may be an integral part of the container structural design (e.g., a "portable tank" or bulk cargo container equipped with a screw-type cap).

C) An open-top container in which an organic-vapor suppressing barrier is placed on or over the hazardous secondary material in the container such that no hazardous secondary material is exposed to the atmosphere. One example of such a barrier is application of a suitable organic-vapor suppressing foam.

2) A container used to meet the requirements of subsection (c)(1)(B) or (c)(1)(C) must be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous secondary material to the atmosphere and to maintain the equipment integrity, for as long as the container is in service. Factors to be considered in selecting the construction materials construction and designing the cover and closure devices must include, organic vapor permeability; the effects of contact with the hazardous secondary material or its vapor managed in the container; the effects of outdoor exposure of the closure device or cover material to wind, moisture, and sunlight; and the operating practices for which the container is intended to be used.

3) Whenever a hazardous secondary material is in a container using Container Level 1 controls, the remanufacturer or other person that stores or treats the hazardous secondary material must install all covers and closure devices for the container, as applicable to the container, and secure and maintain each closure device in the closed position except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container as follows:

i) When the container is filled to the intended final level in one continuous operation, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) When discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the hazardous secondary material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container, as follows:

i) For the purpose of meeting the requirements of this section, an empty hazardous secondary material container may be open to the atmosphere at any time (i.e., covers and closure devices on such a container are not required to be secured in the closed position).

ii) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary material container, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of routine activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other persons that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for

the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 1 controls must inspect the containers and their covers and closure devices, as follows:

A) When a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., is not an empty hazardous secondary material container) the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the container standards of this Subpart CC).

B) When a container used for managing hazardous secondary material remains at the facility for a period of one year or more, the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices initially, and, thereafter, at least once every 12 months to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (c)(4)(C).

C) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than 24 hours after detection and repair must be completed as soon as possible but no later than five calendar days

after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous secondary material must be removed from the container and the container must not be used to manage hazardous secondary material until the defect is repaired.

5) The remanufacturer or other person that stores or treats the hazardous secondary material must maintain at the facility a copy of the procedure used to determine that containers with capacity of 0.46 m^3 or greater, that do not meet applicable USDOT regulations as specified in subsection (f), are not managing hazardous secondary material in light material service.

d) Container Level 2 standards.

1) A container using Container Level 2 controls is one of the following:

A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in subsection (f).

B) A container that operates with no detectable organic emissions, as defined in Section 721.981, and determined in accordance with the procedure specified in subsection (g).

C) A container that has been demonstrated within the preceding 12 months to be vapor-tight by using Reference Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Unis Pressure-Vacuum Test) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111, in accordance with the procedure specified in subsection (h).

2) Transfer of hazardous secondary material in or out of a container using Container Level 2 controls must be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA has stated that it considers to meet the requirements of this subsection (d) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and

subsequently purging the transfer line before removing it from the container opening.

3) Whenever a hazardous secondary material is in a container using Container Level 2 controls, the remanufacturer or other person that stores or treats the hazardous secondary material must install all covers and closure devices for the container, and secure and maintain each closure device in the closed position, except as follows:

A) Opening of a closure device or cover is allowed for the purpose of adding hazardous secondary material or other material to the container, as follows:

i) In the case when the container is filled to the intended final level in one continuous operation, the remanufacture or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install the covers, as applicable to the container, upon conclusion of the filling operation.

ii) In the case when discrete quantities or batches of material intermittently are added to the container over a period of time, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon either the container being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container, whichever condition occurs first.

B) Opening of a closure device or cover is allowed for the purpose of removing hazardous secondary material from the container, as follows:

i) For the purpose of meeting the requirements of this Section, an empty hazardous secondary material container may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).

ii) In the case when discrete quantities or batches of material are removed from the container, but the container is not an empty hazardous secondary materials container, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.

C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous secondary material. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the remanufacturer or other person that stores or treats the hazardous secondary material must promptly secure the closure device in the closed position or reinstall the cover, as applicable to the container.

D) Opening of a spring-loaded, pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device which vents to the atmosphere is allowed during normal operations for the purpose of maintaining the internal pressure of the container in accordance with the container design specifications. The device must be designed to operate with no detectable organic emission when the device is secured in the closed position. The settings at which the device opens must be established such that the device remains in the closed position whenever the internal pressure of the container is within the internal pressure operating range determined by the remanufacturer or other person that stores or treats the hazardous secondary material based on container manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the internal pressure of the container exceeds the internal pressure operating range for

the container as a result of loading operations or diurnal ambient temperature fluctuations.

E) Opening of a safety device, as defined in Section 721.981, is allowed at any time conditions require doing so to avoid an unsafe condition.

4) The remanufacture or other person that stores or treats the hazardous secondary material using containers with Container Level 2 controls must inspect the containers and their covers and closure devices as follows:

A) When a hazardous secondary material already is in the container at the time the remanufacturer or other person that stores or treats the hazardous secondary material first accepts possession of the container at the facility and the container is not emptied within 24 hours after the container is accepted at the facility (i.e., is not an empty hazardous secondary material container), the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. The container visual inspection must be conducted on or before the date that the container is accepted at the facility (i.e., the date the container becomes subject to the container standards of this Subpart CC).

B) In the case when a container used for managing hazardous secondary material remains at the facility for a period of one year or more, the remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the container and its cover and closure devices initially and thereafter, at least once every 12 months, to check for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If a defect is detected, the remanufacturer or other person that stores or treats the hazardous secondary material must repair the defect in accordance with the requirements of subsection (d)(4)(C).

C) When a defect is detected for the container, cover, or closure devices, the remanufacturer or other person that stores or treats the hazardous secondary material must make first efforts at repair of the defect no later than 24 hours after detection, and repair must be

completed as soon as possible but no later than five calendar days after detection. If repair of a defect cannot be completed within five calendar days, then the hazardous secondary material must be removed from the container and the container must not be used to manage hazardous secondary material until the defect is repaired.

e) Container Level 3 standards.

1) A container using Container Level 3 controls is one of the following:

A) A container that is vented directly through a closed-vent system to a control device in accordance with the requirements of subsection (e)(2)(B).

B) A container that is vented inside an enclosure that is exhausted through a closed-vent system to a control device in accordance with the requirements of subsections (e)(2)(A) and (e)(2)(B).

2) The remanufacturer or other person that stores or treats the hazardous secondary material must meet the following requirements, as applicable to the type of air emission control equipment selected by the remanufacturer or other person that stores or treats the hazardous secondary material:

A) The container enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111. The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The remanufacturer or other person that stores or treats the hazardous secondary material must perform the verification procedure for the enclosure as specified in Section 5.0 of "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" initially when the enclosure is first installed and, thereafter, annually.

B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 721.987.

3) Safety devices, as defined in Section 721.981, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of subsection (e)(1).

4) Remanufacturers or other persons that store or treat the hazardous secondary material using Container Level 3 controls in accordance with the provisions of this Subpart CC must inspect and monitor the closed-vent systems and control devices as specified in Section 721.987.

5) Remanufacturers or other persons that store or treat the hazardous secondary material that use Container Level 3 controls in accordance with the provisions of this Subpart CC must prepare and maintain the records specified in Section 721.989(d).

6) Transfer of hazardous secondary material in or out of a container using Container Level 3 controls must be conducted in such a manner as to minimize exposure of the hazardous secondary material to the atmosphere, to the extent practical, considering the physical properties of the hazardous secondary material and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA has stated that it considers to meet the requirements of this subsection (e) include using any one of the following: a submerged-fill pipe or other submerged-fill method to load liquids into the container; a vapor-balancing system or a vapor-recovery system to collect and control the vapors displaced from the container during filling operations; or a fitted opening in the top of a container through which the hazardous secondary material is filled and subsequently purging the transfer line before removing it from the container opening.

f) For the purpose of compliance with subsection (c)(1)(A) or (d)(1)(A), containers must be used that meet the applicable USDOT regulations on packaging hazardous materials for transportation, as follows:

1) The container meets the applicable requirements specified in 49 CFR 178 (Specifications for Packagings) or 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111.

2) Hazardous secondary material is managed in the container in accordance with the applicable requirements specified in subpart B of 49 CFR 107 (Hazardous Material Program Procedures) and 49 CFR 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training

Requirements, and Security Plans), 173 (Shippers – General Requirements for Shipments and Packagings), and 180 (Continuing Qualification and Maintenance of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111.

3) For the purpose of complying with this Subpart CC, no exceptions to the 49 CFR 178 (Specifications for Packagings) or 179 (Specifications for Tank Cars) regulations are allowed.

g) To determine compliance with the no detectable organic emissions requirement of subsection (d)(1)(B), the procedure specified in Section 721.983(d) must be used.

1) Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the container, its cover, and associated closure devices, as applicable to the container, must be checked. Potential leak interfaces that are associated with containers include, but are not limited to: the interface of the cover rim and the container wall; the periphery of any opening on the container or container cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure-relief valve.

2) The test must be performed when the container is filled with a material having a volatile organic concentration representative of the range of volatile organic concentrations for the hazardous secondary materials expected to be managed in this type of container. During the test, the container cover and closure devices must be secured in the closed position.

h) Procedure for determining a container to be vapor-tight using Reference Method 27 (Determination of Vapor Tightness of Gasoline Delivery Tank Unis Pressure-Vacuum Test) in appendix A (Test Methods) to 40 CFR 60, incorporated by reference in 35 Ill. Adm. Code 720.111, for the purpose of complying with subsection (d)(1)(C).

1) The test must be performed in accordance with Reference Method 27 of appendix A to 40 CFR 60.

2) A pressure measurement device must be used 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.

3) If the test results determined by Reference Method 27 indicate that the container sustains a pressure change less than or equal to 750 Pascals within five minutes after it is pressurized to a minimum of 4,500 Pascals, then the container is determined to be vapor-tight.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.987 Standards: Closed-Vent Systems and Control Devices

a) This Section applies to each closed-vent system and control device installed and operated by the remanufacturer or other person who stores or treats the hazardous secondary material to control air emissions in accordance with standards of this Subpart CC.

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 secondary material in the hazardous secondary material management unit to a control device that meets the requirements specified in subsection (c).

2) The closed-vent system must be designed and operated in accordance with the requirements specified in Section 721.933(k).

3) In the case when the closed-vent system includes bypass devices that could be used to divert the gas or vapor stream to the atmosphere before entering the control device, each bypass device must be equipped with either a flow indicator as specified in subsection (b)(3)(A) or a seal or locking device as specified in subsection (b)(3)(B). For the purpose of complying with this subsection (b), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring loaded pressure relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

A) If a flow indicator is used to comply with subsection (b)(3), the indicator must be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For this subsection (b), a flow indicator means a device which indicates the presence of either gas or vapor flow in the bypass line.

B) If a seal or locking device is used to comply with subsection (b)(3), the device must be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle, damper lever, etc.) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not

limited to, a car-seal or a lock-and-key configuration valve. The remanufacturer or other person that stores or treats the hazardous secondary material must visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

4) The closed-vent system must be inspected and monitored by the remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the procedure specified in Section 721.933(l).

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 721.933(c); or

C) A flare designed and operated in accordance with the requirements of Section 721.933(d).

2) The remanufacturer or other person that stores or treats the hazardous secondary material who elects to use a closed-vent system and control device to comply with the requirements of this section must comply with the requirements specified in subsections (c)(2)(A) through (c)(2)(F).

A) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of subsection (c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, must not exceed 240 hours per year.

B) The specifications and requirements in subsections (c)(1)(A) through (c)(1)(C) for control devices do not apply during periods of planned routine maintenance.

C) The specifications and requirements in subsections (c)(1)(A) through (c)(1)(C) for control devices do not apply during a control device system malfunction.

D) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate compliance with the requirements of subsection (c)(2)(A) (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of subsection (c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, must not exceed 240 hours per year) by recording the information specified in Section 721.989(e)(1)(E).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.

F) The remanufacturer or other person that stores or treats the hazardous secondary material must operate the closed-vent system such that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally) except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.

3) The remanufacturer or other person that stores or treats the hazardous secondary material using a carbon adsorption system to comply with subsection (c)(1) must 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 721.933(g) or (h).

B) All carbon that is hazardous waste and that is removed from the control device must be managed in accordance with the requirements of Section 721.933(n), regardless of the average volatile organic concentration of the carbon.

4) A remanufacturer or other person that stores or treats the hazardous secondary material 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) must operate and maintain the control device in accordance with the requirements of Section 721.933(j).

5) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate that a control device achieves the performance requirements of subsection (c)(1) as follows:

A) A remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate the performance of each control device, using either a performance test, as specified in subsection (c)(5)(C), or a design analysis, as specified in subsection (c)(5)(D), except for the following:

i) A flare;

ii) A boiler or process heater with a design heat input capacity of 44 megawatts or greater; or

iii) A boiler or process heater into which the vent stream is introduced with the primary fuel.

B) A remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate the performance of each flare in accordance with the requirements specified in Section 721.933(e).

C) For a performance test conducted to meet the requirements of subsection (c)(5)(A), the remanufacturer or other person that stores or treats the hazardous secondary material must use the test methods and procedures specified in Section 721.934(c)(1) through (c)(4).

D) For a design analysis conducted to meet the requirements of subsection (c)(5)(A), the design analysis must meet the requirements specified in Section 721.935(b)(4)(C).

E) The remanufacturer or other person that stores or treats the hazardous secondary material must demonstrate that a carbon adsorption system achieves the performance requirements of subsection (c)(1) 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 remanufacturer or other person that stores or treats the hazardous secondary material 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 remanufacturer or other person that stores or treats the hazardous secondary material in accordance with the requirements of subsection (c)(5)(C). The Agency may choose to have an authorized representative observe the performance test. The Agency must state any disagreement on a demonstration of control device performance using a design analysis in writing to the remanufacturer or other person that treats or stores hazardous secondary material.

7) The closed-vent system and control device must be inspected and monitored by the remanufacture or other person that stores or treats the hazardous secondary material in accordance with the procedures specified in Section 721.933(f)(2) and (l). The readings from each monitoring device required by Section 721.933(f)(2) must be inspected at least once each operating day to check control device operation. Any necessary corrective measures must be immediately implemented to ensure the control device is operated in compliance with the requirements of this Section.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.988 Inspection and Monitoring Requirements

a) The remanufacturer or other person that stores or treats the hazardous secondary material must inspect and monitor air emission control equipment used to comply with this Subpart CC in accordance with the applicable requirements specified in Sections 721.984 through 261.987.

b) The remanufacture or other person that stores or treats the hazardous secondary material must develop and implement a written plan and schedule to perform the inspections and monitoring required by subsection (a). The remanufacturer or other person that stores or treats the hazardous secondary material must keep the plan and schedule at the facility.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.989 Recordkeeping Requirements

a) Each remanufacturer or other person that stores or treats the hazardous secondary material subject to requirements of this Subpart CC must record and maintain the

information specified in subsections (b) through (j), as applicable to the facility. Except for air emission control equipment design documentation and information required by subsections (i) and (j), records required by this section must be maintained at the facility for a minimum of three years. Air emission control equipment design documentation must be maintained at the facility until the air emission control equipment is replaced or otherwise no longer in service. Information required by subsections (i) and (j) must be maintained at the facility for as long as the hazardous secondary material management unit is not using air emission controls specified in Sections 721.984 through 261.987 in accordance with the conditions specified in Section 721.980(b)(7) or (d), respectively.

b) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank with air emission controls in accordance with the requirements of Section 721.984 must prepare and maintain records for the tank that include the following information:

1) For each tank using air emission controls in accordance with the requirements of Section 721.984, the remanufacturer or other person that stores or treats the hazardous secondary material must record:

A) A tank identification number (or other unique identification description as selected by the remanufacturer or other person that stores or treats the hazardous secondary material).

B) A record for each inspection required by Section 721.984 that includes the following information:

i) The date inspection was conducted.

ii) For each defect detected during the inspection, the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section 721.984, the remanufacturer or other person that stores or treats the hazardous secondary material must also record the reason for the delay and the date that completion of repair of the defect is expected.

2) In addition to the information required by subsection (b)(1), the remanufacturer or other person that stores or treats the hazardous secondary material must record the following information, as applicable to the tank:

A) The remanufacturer or other person that stores or treats the hazardous secondary material using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 721.984(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous secondary material in the tank performed in accordance with the requirements of Section 721.984(c). The records must include the date and time the samples were collected, the analysis method used, and the analysis results.

B) The remanufacturer or other person that stores or treats the hazardous secondary material using an internal floating roof to comply with the Tank Level 2 control requirements specified in Section 721.1084(e) of this Subpart CC must prepare and maintain documentation describing the floating roof design.

C) Remanufacturer or other persons that store or treat the hazardous secondary material using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 721.984(f) must prepare and maintain the following records:

i) Documentation describing the floating roof design and the dimensions of the tank.

ii) Records for each seal gap inspection required by Section 721.984(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 721.984(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

D) Each remanufacturer or other person that stores or treats the hazardous secondary material using an enclosure to comply with the Tank Level 2 control requirements specified in Section 721.984(i) must prepare and maintain the following records:

i) Records for the most recent set of calculations and measurements performed by the remanufacturer or other

person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111.

ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e).

c) This subsection (c) corresponds with 40 CFR 261.1089(c), marked "reserved" by USEPA. This statement maintains structural consistency with the federal regulations

d) The remanufacturer or other person that stores or treats the hazardous secondary material using containers with Container Level 3 air emission controls in accordance with the requirements of Section 721.986 must prepare and maintain records that include the following information:

1) Records for the most recent set of calculations and measurements performed by the remanufacturer or other person that stores or treats the hazardous secondary material to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" in appendix B (VOM Measurement Techniques for Capture Efficiency) to 40 CFR 52.741, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e).

e) The remanufacturer or other person that stores or treats the hazardous secondary material using a closed-vent system and control device in accordance with the requirements of Section 721.987 must prepare and maintain records that include the following information:

1) Documentation for the closed-vent system and control device that includes:

A) Certification that is signed and dated by the remanufacturer or other person that stores or treats the hazardous secondary material stating that the control device is designed to operate at the

performance level documented by a design analysis, as specified in subsection (e)(1)(B), or by performance tests as specified in subsection (e)(1)(C) when the tank 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 721.935(b)(4). The documentation must include information prepared by the remanufacturer or other person that stores or treats the hazardous secondary material or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 721.935(b)(4)(C) and certification by the remanufacturer or other person that stores or treats the hazardous secondary material that the control equipment meets the applicable specifications.

C) If performance tests are used, then a performance test plan, as specified in Section 721.935(b)(3), and all test results.

D) Information as required by Section 721.935(c)(1) and (c)(2), as applicable.

E) A remanufacturer or other person that stores or treats the hazardous secondary material must record, on a semiannual basis, the information specified in subsections (e)(1)(E)(i) and (e)(1)(E)(ii) for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable.

i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.

ii) A description of the planned routine maintenance that was performed for the control device during the previous six-month period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance.

F) A remanufacturer or other person that stores or treats the hazardous secondary material must record the information specified in subsections (e)(1)(F)(i) through (e)(1)(F)(iii) for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Section 721.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable.

i) The occurrence and duration of each malfunction of the control device system.

ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the hazardous secondary material management unit through the closedvent system to the control device while the control device is not properly functioning.

iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.

G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 721.987(c)(3)(B).

f) The remanufacturer or other person that stores or treats the hazardous secondary material using a tank or container exempted under the hazardous secondary material organic concentration conditions specified in Section 721.982(c)(1) or (c)(2)(A) through (c)(2)(F), must prepare and maintain at the facility records documenting the information used for each material determination (e.g., test results, measurements, calculations, and other documentation). If analysis results for material samples are used for the material determination, then the remanufacturer or other person that stores or treats the hazardous secondary material must record the date, time, and location that each material sample is collected in accordance with applicable requirements of Section 721.983.

BOARD NOTE: Corresponding 40 CFR 261.1089(f) includes a subsection (f)(2) that USEPA marked "reserved." Because there is no 40 CFR 1089(f)(1), the Board included no text to correspond with subsection (f)(2).

g) A remanufacturer or other person that stores or treats the hazardous secondary material designating a cover as "unsafe to inspect and monitor" pursuant to Section 721.984(l) or Section 721.985(g) must record and keep at facility the

following information: the identification numbers for hazardous secondary material management units with covers that are designated as "unsafe to inspect and monitor," the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.

h) The remanufacturer or other person that stores or treats the hazardous secondary material that is subject to this Subpart CC and to the control device standards in subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, on or Before November 7, 2006) of 40 CFR 60 or subpart V of 40 CFR 61 (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), each incorporated by reference in 35 Ill. Adm. Code 720.111, may elect to demonstrate compliance with the applicable sections of this Subpart CC by documentation either pursuant to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60 or subpart V of 40 CFR 61, to the extent that the documentation required by 40 CFR 60 or 61 duplicates the documentation required by this Section.

(Source: Added at 40 Ill. Reg. _____, effective _____)

Section 721.APPENDIX H Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number (CAS No.)	USEPA Hazardous Waste Number
A2213	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-((methylamino)carbonyl)oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2-(methylsulfonyl)-, O-((methylamino)carbonyl)oxime	1646-88-4	P203
Aldrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1-α,4-α,4a-β,5-α,8-α,8a-β)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propene, 3-chloro-	107-05-1	
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	(1,1'-Biphenyl)-4-amine	92-67-1	
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(amino-methyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119 ~~U119~~
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90-04-0	
Antimony	Same	7440-36-0	

Antimony compounds, N.O.S. (not otherwise specified)			
Aramite	Sulfurous acid, 2-chloroethyl-, 2(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester	140-57-8	
Arsenic	Arsenic	7440-38-2	
Arsenic compounds, N.O.S.			
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbon-imidoylbis(N, N-dimethyl-	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	
Barium compounds, N.O.S.			
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol-2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol-2,2-dimethyl-,	22961-82-6	U364
Benomyl	Carbamic acid, (1-((butylamino)carbonyl)-1H-benzimidazol-2-yl)-, methyl ester	17804-35-2	U271
Benz(c)acridine	Same	225-51-4	U016
Benz(a)anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019 ~~U018~~
Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5	
Benzidine	(1,1'-Biphenyl)-4,4'-diamine	92-87-5	U021
Benzo(b)fluoranthene	Benz(e)acephenanthrylene	205-99-2	
Benzo(j)fluoranthene	Same	205-82-3	
Benzo(k)fluoranthene	Same	207-08-9	
Benzo(a)pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.			
Bis(pentamethylene)thiuram tetrasulfide	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7	
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017

Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018
Butylate	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008-41-5	
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	
Cacodylic acid	Arsenic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	
Cadmium compounds, N.O.S.			
Calcium chromate	Chromic acid H_2CrO_4, calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide $Ca(CN)_2$	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbosulfan	Carbamic acid, ((dibutylamino)thio) methyl-2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	P189
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difuoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4(bis-(2-chloroethyl)amino)-	305-03-3	U035
Chlordane	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9	U036
Chlordane, α and γ isomers			U036
Chlorinated benzenes, N.O.S.			
Chlorinated ethane, N.O.S.			
Chlorinated fluorocarbons, N.O.S.			
Chlorinated naphthalene, N.O.S.			
Chlorinated phenol, N.O.S.			
Chlornaphazine	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.			
p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037

Chlorobenzilate	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	
Chromium compounds, N.O.S.			
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-((2,5-dimethoxyphenyl)azo)-	6358-53-8	
Coal tar creosote	Same	8007-45-2	
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamodithioato-S,S')-	137-29-1	
Creosote	Same		U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120-71-8	
Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202
Cyanides (soluble salts and complexes), N.O.S.			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	β-D-glucopyranoside, (methyl-ONN-azoxy)methyl-	14901-08-7	
Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240
2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters		U240

Daunomycin	5, 12-Naphthacenedione, 8-acetyl-10-((3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy)-7,8,9,10-tetrahydro-6,8,11-trihydroxy-l-methoxy-, 8S-cis)-	20830-81-3	U059
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro-	72-55-9	
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz(a,h)acridine	Same	226-36-8	
Dibenz(a,j)acridine	Same	224-42-0	
Dibenz(a,h)anthracene	Same	53-70-3	U063
7H-Dibenzo(c,g)carbazole	Same	194-59-2	
Dibenzo(a,e)pyrene	Naphtho(1,2,3,4-def)chrysene	192-65-4	
Dibenzo(a,h)pyrene	Dibenzo(b,def)chrysene	189-64-0	
Dibenzo(a,i)pyrene	Benzo(rst)pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'-oxybis(2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis(2-chloro-	108-60-1	U027
Dichloromethoxyethane	Ethane, 1,1'-(methylenebis(oxy)-bis(2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis(chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081

2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7	
Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3	
Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-8	
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth(2, 3-b)oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6, 6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl-S-methyl dithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester	60-51-5	P044
3,3'-Dimethoxybenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	
7,12-Dimethylbenz(a)anthracene	Benz(a)anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098

1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099
α,α-Dimethylphenethylamine	Benzeneethanamine, α, α-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1-((dimethylamino) carbonyl)-5-methyl-1H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-5	
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts			P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide $((H_2N)C(S))_2NH$	541-53-7	P049
Endosulfan	6, 9-Methano-2,4,3-benzodioxathiepen,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,	115-29-7	P050
Endothal	7-Oxabicyclo(2.2.1)heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-,	72-20-8	P051
Endrin metabolites			P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-(1-hydroxy-2-(methylamino)ethyl)-, (R)-	51-43-4	P042

EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidine dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Ethyl Ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	U407
Famphur	Phosphorothioc acid, O-(4-((dimethylamino)sulfonyl)phenyl) O,O-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamodithioato-S,S')-,	14484-64-1	
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'-(3-(((methylamino)-carbonyl) oxy)phenyl)-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-16	U123
Formparanate	Methanimidamide, N,N-dimethyl-N'-(2-methyl-4-(((methylamino) carbonyl)oxy)phenyl)-	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxaldehyde	765-34-4	U126
Halomethanes, N.O.S.			
Heptachlor	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059

Heptachlor epoxide	2,5-Methano-2H-indeno(1, 2b)oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα,1bβ,2α,5α,5aβ,6β,6aα)-	1024-57-3	
Heptachlor epoxide (α, β, and γ isomers)			
Heptachlorodibenzofurans			
Heptachlorodibenzo-p-dioxins			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclo-pentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis(3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H_2S	7783-06-4	U135
Indeno(1,2,3-cd)pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl-n-butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4:5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1α,4α,4aβ,5β,8β,8aβ)-,	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta(cd)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-,	143-50-0	U142

Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-((2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl)-2,3,5,7a-tetrahydro-1H-pyrrolizin-l-yl ester, (1S-(1-α(Z),7(2S*,3R*),7aα))-	303-34-4	U143
Lead	Same	7439-92-1	
Lead and compounds, N.O.S.			
Lead acetate	Acetic acid, lead (2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead (2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, 1α,2α,3β,4α,5α,6β)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithiocarbamate	Manganese, bis(dimethylcarbamodithioato-S,S')-,	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-(bis(2-chloroethyl)amino)-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.			
Mercury fulminate	Fulminic acid, mercury (2+) salt	628-86-4	P065
Metam Sodium	Carbamodithioic acid, methyl-, monosodium salt	137-42-8	
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155
Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7	P199
Metholmyl	Ethanimidothioic acid, N-(((methylamino)carbonyl)oxy)-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methylchlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz(j)aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis(2-chloroaniline)	Benzenamine, 4,4'-methylenebis(2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068

Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino(2', 3':3, 4)pyrrolo(1, 2-a)indole-4, 7-dione, 6-amino-8-(((aminocarbonyl)oxy)methyl)-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, (1a-S-(1aα,8β,8aα,8bα))-,	50-07-7	U010
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas	Ethane, 1,1'-thiobis(2-chloro-	505-60-2	U165
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
α-Naphthylamine	1-Naphthalenamine	134-32-7	U167
β-Naphthylamine	2-Naphthalenamine	91-59-8	U168
α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	
Nickel compounds, N.O.S.			
Nickel carbonyl	Nickel carbonyl $Ni(CO)_4$, (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide $Ni(CN)_2$	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077

Nitrobenzene	Benzene, nitro-	98-95-3	U169 ~~P078~~
Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride salt			
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.		35576-91-1	
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin.	3268-87-9	
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran.	39001-02-0	
Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO_4, (T-4)	20816-12-0	P087
Oxamyl	Ethanimidothioc acid, 2-(dimethylamino)-N-(((methylamino)carbonyl)oxy)-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182

Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofurans			
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
1,2-Phenylenediamine	1,2-Benzenediamine	95-54-5	
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester	298-02-2	P094
Phthalic acid esters, N.O.S.			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo(2,3-b)indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethyl-, methylcarbamate (ester), (3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compound with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo(2,3-b)indol-5-yl methylcarbamate ester (1:1)	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.			
Potassium cyanide	Same	151-50-8	P098
Potassium dimethyldithiocarbamate	Carbamodithioc acid, dimethyl, potassium salt	128-03-0	
Potassium n-hydroxymethyl-n-methyl-dithiocarbamate	Carbamodithioc acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	
Potassium n-methyldithiocarbamate	Carbamodithioc acid, methyl-monopotassium salt	137-41-7	

Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium)	506-61-6	P099
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-((3,4,5-trimethoxybenzoyl)oxy)-, methyl ester, (3β,16β,17α,18β,20α)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	
Selenium compounds, N.O.S.			
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS_2	7488-56-4	U205
Selenium, tetrakis(dimethyl-dithiocarbamate	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid	144-34-3	
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	
Silver compounds, N.O.S.			
Silver cyanide	Silver cyanide AgCN	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide NaCN	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl-, sodium salt	136-30-1	

Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, 2-deoxy-2-(((methylnitrosoamino)carbonyl) amino)-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	
TCDD	Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans			
Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7	
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol, potassium salt	Same	53535276	None
2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567559	None
Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	
Thallium compounds			
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium (I) acetate	Acetic acid, thallium (1+) salt	563-68-8	U214
Thallium (I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium (I) chloride	Thallium chloride TlCl	7791-12-0	U216
Thallium (I) nitrate	Nitric acid, thallium (1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium (1+) salt	12039-52-0	P114
Thallium (I) sulfate	Sulfuric acid, dithallium (1+) salt	7446-18-6	P115

Thioacetamide	Ethanethioamide	62-55-5	U218
Thiodicarb	Ethanimidothioic acid, N,N'-(thiobis((methylimino)carbonyloxy))-bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-((methylamino)carbonyl)oxime	39196-18-4	P045
Thiophanate-methyl	Carbamic acid, (1,2-phyenylenebis(iminocarbonothioyl))-bis-, dimethyl ester	23564-05-8	U409
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	P219
Thiram	Thioperoxydicarbonic diamide $((H_2N)C(S))_2S_2$, tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-((methylamino)carbonyl) oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzeneamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	

Triethylamine	Ethanamine, N,N-diethyl-	121-44-8	U404
O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(l-aziridinyl)phosphine sulfide	Aziridine, 1,1',1"-phosphinothioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-((3,3'-dimethyl(1,1'-biphenyl)-4,4'-diyl)bis(azo))bis(5-amino-4-hydroxy)-, tetrasodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-(bis(2-chloroethyl)amino)-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1	P120
Vernolate	Carbamothioc acid, dipropyl-, S-propyl ester	1929-77-7	
Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3 percent	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3 percent	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3 percent			U248
Warfarin salts, when present at concentrations greater than 0.3 percent			P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations greater than 10 percent	1314-84-7	P122
Zinc phosphide	Zinc phosphide P_2Zn_3, when present at concentrations of 10 percent or less	1314-84-7	U249
Ziram	Zinc, bis(dimethylcarbamodithioato-S,S')- (T-4)-	137-30-4	P205

Note: The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class that are not specifically listed by name in this Section.

(Source: Amended at 40 Ill. Reg. _____, effective _____)

Section 721.APPENDIX Z Table to Section 721.102: Recycled Materials That Are Solid Waste

The following table lists the instances when a recycled secondary material is solid waste, based on the type of secondary material and the mode of material management during recycling. This table supports the requirements of the recycling provision of the definition of solid waste rule, at Section 721.102(c).

Table

	1	2	3	4
	Use constituting disposal	Burning for energy recovery or use to produce a fuel	Reclamation (except as provided in Section ~~721.102(a)(2)(B) or~~ 721.104(a)(17), (a)(23), (a)(24), or (a)(27)~~(a)(25)~~)	Speculative accumulation
Applicable Subsection of Section 721.102:	(c)(1)	(c)(2)	(c)(3)	(c)(4)
Spent materials	Yes	Yes	Yes	Yes
Sludges (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes
Sludges exhibiting a characteristic of hazardous waste	Yes	Yes	No	Yes
By-products (listed in Section 721.131 or 721.132)	Yes	Yes	Yes	Yes
By-products exhibiting a characteristic of hazardous waste	Yes	Yes	No	Yes

Commercial chemical products listed in Section 721.133	Yes	Yes	No	–
Scrap metal that is not excluded pursuant to Section 721.104(a)(13)	Yes	Yes	Yes	Yes

Yes – Defined as a solid waste
No – Not defined as a solid waste

BOARD NOTE: Derived from Table 1 to 40 CFR 261.2 (2010). The terms "spent materials," "sludges," "by-products," "scrap metal," and "processed scrap metal" are defined in Section 721.101.

(Source: Amended at 40 Ill. Reg. _____, effective _____)