

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

PART 726

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

SOURCE: Adopted in R85-22 at 10 Ill. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 Ill. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 Ill. Reg. 18606, effective ~~Nov-~~November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14533, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9727, effective June 17, 1991; amended in R91-13 at 16 Ill. Reg. 9858, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20904, effective ~~Nov-~~November 22, 1993; amended in R94-7 at 18 Ill. Reg. 12500, effective July 29, 1994; amended in R95-6 at 19 Ill. Reg. 10006, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11263, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 754, effective December 16, 1997; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 18042, effective ~~Sept-~~September 28, 1998; amended in R99-15 at 23 Ill. Reg. 9482, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9853, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6667, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 4200, effective February 14,

2003; amended in R03-18 at 27 Ill. Reg. 12916, effective July 17, 2003; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 3700, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 1096, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. _____, effective _____.

SUBPART G: SPENT LEAD-ACID BATTERIES BEING RECLAIMED

Section 726.180 Applicability and Requirements

a) Extent of exemption for spent lead-acid batteries from hazardous waste management requirements. If an owner or operator generates, collects, transports, stores, or regenerates lead-acid batteries for reclamation purposes, the owner or operator may be exempt from certain hazardous waste management requirements. Subsections (a)(1) through (a)(5) of this Section indicate which requirements apply to the owner or operator. Alternatively, the owner or operator may choose to manage its spent lead-acid batteries under the "Universal Waste" rule in 35 Ill. Adm. Code 733.

1) If the batteries will be reclaimed through regeneration (such as by electrolyte replacement), the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, 722 through 726 (except for 35 Ill. Adm. Code 722.111), and 728 and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111.

2) If the batteries will be reclaimed other than through regeneration, and the owner or operator generates, collects, or transports the batteries, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.

3) If the batteries will be reclaimed other than through regeneration, and the owner or operator stores the batteries, but the owner or operator is not the reclaimer, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, but the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.

4) If the batteries will be reclaimed other than through regeneration, and the owner or operator stores the batteries before the owner or operator reclaims them, the owner or operator must comply with Section 726.180(b) and other requirements described in that subsection, and the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.

5) If the batteries will be reclaimed other than through regeneration, and the owner or operator does not store the batteries before the owner or operator reclaims them, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, and 722 through 726 (except for 35 Ill. Adm. Code 722.111), and the notification requirements of section 3010 of RCRA, and the owner or operator is subject to 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.

b) Exemption for spent lead-acid batteries stored before reclamation other than through regeneration. The requirements of this subsection (b) apply to an

owner or operator that stores spent lead-acid batteries before it reclaims them, where the owner or operator does not reclaim them through regeneration. The requirements are slightly different depending on the owner's or operator's RCRA permit status.

1) For an interim status facility, the owner or operator must comply with the following requirements:

- A) The notification requirements under Section 3010 of the Resource Conservation and Recovery Act (RCRA);
- B) All applicable provisions in Subpart A of 35 Ill. Adm. Code 725;
- C) All applicable provisions in Subpart B of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.113 (waste analysis);
- D) All applicable provisions in Subparts C and D of 35 Ill. Adm. Code 725;
- E) All applicable provisions in Subpart E of 35 Ill. Adm. Code 725, except 35 Ill. Adm. Code 725.171 and 725.172 (dealing with the use of the manifest and manifest discrepancies);
- F) All applicable provisions in Subparts F through L of 35 Ill. Adm. Code 725; and
- G) All applicable provisions in 35 Ill. Adm. Code 702 and 703.

2) For a permitted facility, the following requirements:

- A) The notification requirements under section 3010 of RCRA;
- B) All applicable provisions in Subpart A of 35 Ill. Adm. Code 724;
- C) All applicable provisions in Subpart B of 35 Ill. Adm. Code 724, except 35 Ill. Adm. Code 724.113 (waste analysis);
- D) All applicable provisions in Subparts C and D of 35 Ill. Adm. Code 724;
- E) All applicable provisions in Subpart E of 35 Ill. Adm. Code 724, except 35 Ill. Adm. Code 724.171 or 724.172 (dealing with the use of the manifest and manifest discrepancies);
- F) All applicable provisions in Subparts F through L of 35 Ill. Adm. Code 724; and
- G) All applicable provisions in 35 Ill. Adm. Code 702 and 703.

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

SUBPART H: HAZARDOUS WASTE BURNED IN BOILERS
AND INDUSTRIAL FURNACES

Section 726.200 Applicability

a) The regulations of this Subpart H apply to hazardous waste burned or processed in a boiler or industrial furnace (BIF) (as defined in 35 Ill. Adm. Code 720.110) irrespective of the purpose of burning or processing, except as

provided by subsections (b), (c), (d), (g), and (h) of this Section. In this Subpart H, the term "burn" means burning for energy recovery or destruction or processing for materials recovery or as an ingredient. The emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 apply to facilities operating under interim status or under a RCRA permit, as specified in Sections 726.202 and 726.203.

b) Integration of the MACT standards.

1) Except as provided by subsections (b) (2), (b) (3), and (b) (4) of this Section, the standards of this Part do not apply to a new hazardous waste boiler or industrial furnace unit that becomes subject to RCRA permit requirements after October 12, 2005; or no longer apply when an owner or operator of an existing hazardous waste boiler or industrial furnace unit demonstrates compliance with the maximum achievable control technology (MACT) requirements of federal subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors), incorporated by reference in 35 Ill. Adm. Code 720.111(b), by conducting a comprehensive performance test and submitting to the Agency a Notification of Compliance, pursuant to 40 CFR 63.1207(j) (What are the performance testing requirements?) and 63.1210(d) (What are the notification requirements?), documenting compliance with the requirements of federal subpart EEE of 40 CFR 63. Nevertheless, even after this demonstration of compliance with the MACT standards, RCRA permit conditions that were based on the standards of this Part will continue to be in effect until they are removed from the permit or the permit is terminated or revoked, unless the permit expressly provides otherwise.

2) The following standards continue to apply:

A) If an owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Section 726.202(e)(1), requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Section 726.202(e)(2)(C), requiring compliance with the emission standards and operating requirements, during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;

B) The closure requirements of Sections 726.202(e)(11) and 726.203(1);

C) The standards for direct transfer of Section 726.211;

D) The standards for regulation of residues of Section ~~726.312~~ 726.212; and

E) The applicable requirements of Subparts A through H, BB, and CC of 35 Ill. Adm. Code 724 and 725.

3) The owner or operator of a boiler or hydrochloric acid production furnace that is an area source under 40 CFR 63.2, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as 40 CFR 63), that has not elected to comply with the emission standards of 40 CFR 63.1216, 63.1217, and 63.1218, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as subpart EEE of 40 CFR 63), for particulate matter, semivolatile and low volatile metals, and total chlorine, also remains subject to the following requirements of this Part:

A) Section 726.205 (Standards to Control PM);

- B) Section 726.206 (Standards to Control Metals Emissions); and
- C) Section 726.207 (Standards to Control HCl and Chlorine Gas Emissions).

4) The particulate matter standard of Section 726.205 remains in effect for a boiler that elects to comply with the alternative to the particulate matter standard under 40 CFR 63.1216(e), incorporated by reference in 35 Ill. Adm. Code 720.111(b) (as subpart EEE of 40 CFR 63).

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

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

c) The following hazardous wastes and facilities are not subject to regulation pursuant to this Subpart H:

1) Used oil burned for energy recovery that is also a hazardous waste solely because it exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721. Such used oil is subject to regulation pursuant to 35 Ill. Adm. Code 739, rather than this Subpart H;

2) Gas recovered from hazardous or solid waste landfills, when such gas is burned for energy recovery;

3) Hazardous wastes that are exempt from regulation pursuant to 35 Ill. Adm. Code 721.104 and 721.106(a)(3)(C) and (a)(3)(D) and hazardous wastes that are subject to the special requirements for conditionally exempt small quantity generators pursuant to 35 Ill. Adm. Code 721.105; and

4) Coke ovens, if the only hazardous waste burned is USEPA hazardous waste no. K087 decanter tank tar sludge from coking operations.

d) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices, such as cupolas, sintering machines, roasters, and foundry furnaces, but not including cement kilns, aggregate kilns, or halogen acid furnaces burning hazardous waste) that process hazardous waste solely for metal recovery are conditionally exempt from regulation pursuant to this Subpart H, except for Sections 726.201 and 726.212.

1) To be exempt from Sections 726.202 through 726.211, an owner or operator of a metal recovery furnace or mercury recovery furnace must comply with the following requirements, except that an owner or operator of a lead or a nickel-chromium recovery furnace or a metal recovery furnace that burns baghouse bags used to capture metallic dust emitted by steel manufacturing must comply with the requirements of subsection (d)(3) of this Section, and an owner or operator of a lead recovery furnace that is subject to regulation under the Secondary

Lead Smelting NESHAP of federal subpart X of 40 CFR 63 (National Emission Standards for Hazardous Air Pollutants from Secondary Lead Smelting) must comply with the requirements of subsection (h) of this Section:

A) Provide a one-time written notice to the Agency indicating the following:

i) The owner or operator claims exemption pursuant to this subsection (d);

ii) The hazardous waste is burned solely for metal recovery consistent with the provisions of subsection (d)(2) of this Section;

iii) The hazardous waste contains recoverable levels of metals; and

iv) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this subsection (d);

B) Sample and analyze the hazardous waste and other feedstocks as necessary to comply with the requirements of this subsection (d) by using appropriate methods; and

C) Maintain at the facility for at least three years records to document compliance with the provisions of this subsection (d), including limits on levels of toxic organic constituents and Btu value of the waste and levels of recoverable metals in the hazardous waste compared to normal non-hazardous waste feedstocks.

2) A hazardous waste meeting either of the following criteria is not processed solely for metal recovery:

A) The hazardous waste has a total concentration of organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 exceeding 500 ppm by weight, as fired, and so is considered to be burned for destruction. The concentration of organic compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 500 ppm limit is prohibited, and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section; or

B) The hazardous waste has a heating value of 5,000 Btu/lb or more, as-fired, and is so considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending for dilution to meet the 5,000 Btu/lb limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the records required by subsection (d)(1)(C) of this Section.

3) To be exempt from Sections 726.202 through 726.211, an owner or operator of a lead, nickel-chromium, or mercury recovery furnace, except for an owner or operator of a lead recovery furnace that is subject to regulation pursuant to the Secondary Lead Smelting NESHAP of subpart X of 40 CFR 63, or a metal recovery furnace that burns baghouse bags used to capture metallic dusts emitted by steel manufacturing must provide a one-time written notice to the Agency identifying each hazardous waste burned and specifying whether the owner or operator claims an exemption for each waste pursuant to this subsection (d)(3) or subsection (d)(1) of this Section. The owner or operator must comply with the requirements of subsection (d)(1) of this Section for those wastes claimed to be exempt pursuant to that subsection and must comply with the following

requirements for those wastes claimed to be exempt pursuant to this subsection (d)(3):

A) The hazardous wastes listed in Appendices K, L, and M of this Part and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (d)(1) of this Section, provided the following are true:

i) A waste listed in Appendix K of this Part must contain recoverable levels of lead, a waste listed in Appendix L of this Part must contain recoverable levels of nickel or chromium, a waste listed in Appendix M of this Part must contain recoverable levels of mercury and contain less than 500 ppm of Appendix H to 35 Ill. Adm. Code 721 organic constituents, and baghouse bags used to capture metallic dusts emitted by steel manufacturing must contain recoverable levels of metal;

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

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

iv) The owner or operator certifies in the one-time notice that hazardous waste is burned pursuant to the provisions of subsection (d)(3) of this Section and that sampling and analysis will be conducted or other information will be obtained as necessary to ensure continued compliance with these requirements. Sampling and analysis must be conducted according to subsection (d)(1)(B) of this Section, and records to document compliance with subsection (d)(3) of this Section must be kept for at least three years.

B) The Agency may decide, on a case-by-case basis, that the toxic organic constituents in a material listed in Appendix K, Appendix L, or Appendix M of this Part that contains a total concentration of more than 500 ppm toxic organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 may pose a hazard to human health and the environment when burned in a metal recovery furnace exempt from the requirements of this Subpart H. Under these circumstances, after adequate notice and opportunity for comment, the metal recovery furnace will become subject to the requirements of this Subpart H when burning that material. In making the hazard determination, the Agency must consider the following factors:

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

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

iii) Whether the acceptable ambient levels established in Appendix D or E of this Part will be exceeded for any toxic organic compound that may be emitted based on dispersion modeling to predict the maximum annual average off-site ground level concentration.

e) The standards for direct transfer operations pursuant to Section 726.211 apply only to facilities subject to the permit standards of Section 726.202 or the interim status standards of Section 726.203.

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

g) Owners and operators of smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, sintering machines, roasters, and foundry furnaces) that process hazardous waste for recovery of economically significant amounts of the precious metals gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals are conditionally exempt from regulation pursuant to this Subpart H, except for Section 726.212. To be exempt from Sections 726.202 through 726.211, an owner or operator must do the following:

1) Provide a one-time written notice to the Agency indicating the following:

A) The owner or operator claims exemption pursuant to this Section,

B) The hazardous waste is burned for legitimate recovery of precious metal, and

C) The owner or operator will comply with the sampling and analysis and recordkeeping requirements of this Section;

2) Sample and analyze the hazardous waste, as necessary, to document that the waste is burned for recovery of economically significant amounts of the metals and that the treatment recovers economically significant amounts of precious metal; and

3) Maintain, at the facility for at least three years, records to document that all hazardous wastes burned are burned for recovery of economically significant amounts of precious metal.

h) An owner or operator of a lead recovery furnace that processes hazardous waste for recovery of lead and which is subject to regulation pursuant to the Secondary Lead Smelting NESHAP of subpart X of 40 CFR 63, is conditionally exempt from regulation pursuant to this Subpart H, except for Section 726.201. To become exempt, an owner or operator must provide a one-time notice to the Agency identifying each hazardous waste burned and specifying that the owner or operator claims an exemption pursuant to this subsection (h). The notice also must state that the waste burned has a total concentration of non-metal compounds listed in Appendix H to 35 Ill. Adm. Code 721 of less than 500 ppm by weight, as fired and as provided in subsection (d)(2)(A) of this Section, or is listed in Appendix K to this Part.

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

"APCS" means air pollution control system.

"BIF" means boiler or industrial furnace.

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

"CO" means carbon monoxide.

"Continuous monitor" is a monitor that continuously samples the regulated parameter without interruption, that evaluates the detector response at least

once each 15 seconds, and that computes and records the average value at least every 60 seconds.

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(i)(B)(1)(i) and (e)(6)(ii)(B)(1).

"DRE" means destruction or removal efficiency.

"cu m" or "m3" means cubic meters.

"E" means "ten to the power." For example, "XE-Y" means "X times ten to the -Y power."

"Feed rates" are measured as specified in Section 726.202(e)(6).

"Good engineering practice stack height" is as defined by federal 40 CFR 51.100(ii) (Definitions), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

"HC" means hydrocarbon.

"HCl" means hydrogen chloride gas.

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

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(i)(B)(1)(ii).

"K" means Kelvin.

"kVA" means kilovolt amperes.

"MEI" means maximum exposed individual.

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

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

"One hour block average" means the arithmetic mean of the one minute averages recorded during the 60-minute period beginning at one minute after the beginning of the preceding clock hour.

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(ii)(B)(2).

"PIC" means product of incomplete combustion.

"PM" means particulate matter.

"POHC" means principal organic hazardous constituent.

"ppmv" means parts per million by volume.

"QA/QC" means quality assurance and quality control.

"Rolling average for the selected averaging period" means the arithmetic mean of one hour block averages for the averaging period.

BOARD NOTE: Derived from 40 CFR 266.100(e)(6)(ii)(B)(2).

"RAC" means reference air concentration, the acceptable ambient level for the noncarcinogenic metals for purposes of this Subpart. RACs are specified in Appendix D of this Part.

"RSD" means risk-specific dose, the acceptable ambient level for the carcinogenic metals for purposes of this Subpart. RSDs are specified in Appendix E of this Part.

"SSU" means "Saybolt Seconds Universal," a unit of viscosity measured by ASTM D 88-87 (Standard Test Method for Saybolt Viscosity) or D 2161-87 (Standard Practice for Conversion of Kinematic Viscosity to Saybolt Universal or to Saybolt Furol Viscosity), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).

"TCLP test" means Method 1311 (Toxicity Characteristic Leaching Procedure) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a), as used for the purposes of 35 Ill. Adm. Code 721.124.

"TESH" means terrain-adjusted effective stack height (in meters).

"Tier I." See Section 726.206(b).

"Tier II." See Section 726.206(c).

"Tier III." See Section 726.206(d).

"Toxicity equivalence" is estimated, pursuant to Section 726.204(e), using section 4.0 (Procedures for Estimating the Toxicity Equivalence of Chlorinated Dibenzo-p-Dioxin and Dibenzofuran Congeners) in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part).

"mg" means microgram.

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

Section 726.202 Permit Standards for Burners

a) Applicability.

1) General. An owner or operator of a BIF that burns hazardous waste and which does not operate under interim status must comply with the requirements of this Section and 35 Ill. Adm. Code 703.208 and 703.232, unless exempt pursuant to the small quantity burner exemption of Section 726.208.

2) Applicability of 35 Ill. Adm. Code 724 standards. An owner or operator of a BIF that burns hazardous waste is subject to the following provisions of 35 Ill. Adm. Code 724, except as provided otherwise by this Subpart H:

A) In Subpart A (General), 35 Ill. Adm. Code 724.104;

B) In Subpart B (General facility standards), 35 Ill. Adm. Code 724.111 through 724.118;

C) In Subpart C (Preparedness and prevention), 35 Ill. Adm. Code 724.131 through 724.137;

D) In Subpart D (Contingency plan and emergency procedures), 35 Ill. Adm. Code 724.151 through 724.156;

E) In Subpart E (Manifest system, recordkeeping and reporting), the applicable provisions of 35 Ill. Adm. Code 724.171 through 724.177;

F) In Subpart F—~~(Corrective Action)~~ (Releases from Solid Waste Management Units), 35 Ill. Adm. Code 724.190 and 724.201;

G) In Subpart G (Closure and post-closure), 35 Ill. Adm. Code 724.211 through 724.215;

H) In Subpart H (Financial requirements), 35 Ill. Adm. Code 724.241, 724.242, 724.243, and 724.247 through 724.251, except that the State of Illinois and the federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 724; and

I) Subpart BB (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 724.950(a).

b) Hazardous waste analysis.

1) The owner or operator must provide an analysis of the hazardous waste that quantifies the concentration of any constituent identified in Appendix H of 35 Ill. Adm. Code 721 that is reasonably expected to be in the waste. Such constituents must be identified and quantified if present, at levels detectable by using appropriate analytical methods. The constituents listed in Appendix H of 35 Ill. Adm. Code 721 that are excluded from this analysis must be identified and the basis for their exclusion explained. This analysis must provide all information required by this Subpart H and 35 Ill. Adm. Code 703.208 and 703.232 and must enable the Agency to prescribe such permit conditions as are necessary to adequately protect human health and the environment. Such analysis must be included as a portion of the Part B permit application, or, for facilities operating under the interim status standards of this Subpart H, as a portion of the trial burn plan that may be submitted before the Part B application pursuant to provisions of 35 Ill. Adm. Code 703.232(g), as well as any other analysis required by the Agency. The owner or operator of a BIF not operating under the interim status standards must provide the information required by 35 Ill. Adm. Code 703.208 and 703.232 in the Part B application to the greatest extent possible.

2) Throughout normal operation, the owner or operator must conduct sampling and analysis as necessary to ensure that the hazardous waste, other fuels, and industrial furnace feedstocks fired into the BIF are within the physical and chemical composition limits specified in the permit.

c) Emissions standards. An owner or operator must comply with emissions standards provided by Sections 726.204 through 726.207.

d) Permits.

1) The owner or operator must burn only hazardous wastes specified in the facility permit and only under the operating conditions specified pursuant to subsection (e) of this Section, except in approved trial burns under the conditions specified in 35 Ill. Adm. Code 703.232.

2) Hazardous wastes not specified in the permit must not be burned until operating conditions have been specified under a new permit or permit modification, as applicable. Operating requirements for new wastes must be based on either trial burn results or alternative data included with Part B of a permit application pursuant to 35 Ill. Adm. Code 703.208.

3) BIFs operating under the interim status standards of Section 726.203 are permitted pursuant to procedures provided by 35 Ill. Adm. Code 703.232(g).

4) A permit for a new BIF (those BIFs not operating under the interim status standards) must establish appropriate conditions for each of the applicable requirements of this Section, including but not limited to allowable hazardous waste firing rates and operating conditions necessary to meet the requirements of subsection (e) of this Section, in order to comply with the following standards:

A) For the period beginning with initial introduction of hazardous waste and ending with initiation of the trial burn, and only for the minimum time required to bring the device to a point of operational readiness to conduct a trial burn, not to exceed a duration of 720 hours operating time when burning hazardous waste, the operating requirements must be those most likely to ensure compliance with the emission standards of Sections 726.204 through 726.207, based on the Agency's engineering judgment. If the applicant is seeking a waiver from a trial burn to demonstrate conformance with a particular emission standard, the operating requirements during this initial period of operation must include those specified by the applicable provisions of Section 726.204, Section 726.205, Section 726.206, or Section 726.207. The Agency must extend the duration of this period for up to 720 additional hours when good cause for the extension is demonstrated by the applicant.

B) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the emissions standards of Sections 726.204 through 726.207 and must be in accordance with the approved trial burn plan;

C) For the period immediately following completion of the trial burn, and only for the minimum period sufficient to allow sample analysis, data computation, submission of the trial burn results by the applicant, review of the trial burn results, and modification of the facility permit by the Agency to reflect the trial burn results, the operating requirements must be those most likely to ensure compliance with the emission standards Sections 726.204 through 726.207 based on the Agency's engineering judgment.

D) For the remaining duration of the permit, the operating requirements must be those demonstrated in a trial burn or by alternative data specified in 35 Ill. Adm. Code 703.208, as sufficient to ensure compliance with the emissions standards of Sections 726.204 through 726.207.

e) Operating requirements.

1) General. A BIF burning hazardous waste must be operated in accordance with the operating requirements specified in the permit at all times when there is hazardous waste in the unit.

2) Requirements to ensure compliance with the organic emissions standards.

A) DRE (destruction or removal efficiency) standard. Operating conditions must be specified in either of the following ways: on a case-by-case basis for each hazardous waste burned, which conditions must be demonstrated (in a trial burn or by alternative data, as specified in 35 Ill. Adm. Code 703.208) to be sufficient to comply with the DRE performance standard of Section 726.204(a), or as special operating requirements provided by Section 726.204(a)(4) for the waiver of the DRE trial burn. When the DRE trial burn is not waived pursuant to Section 726.204(a)(4), each set of operating requirements must specify the composition of the hazardous waste (including acceptable variations in the physical and chemical properties of the hazardous waste that will not affect compliance with the DRE performance standard) to which the operating requirements apply. For each such hazardous waste, the permit must specify acceptable operating limits including, but not limited to, the following conditions, as appropriate:

i) Feed rate of hazardous waste and other fuels measured and specified as prescribed in subsection (e)(6) of this Section;

ii) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Appropriate controls of the hazardous waste firing system;

iv) Allowable variation in BIF system design or operating procedures;

v) Minimum combustion gas temperature measured at a location indicative of combustion chamber temperature, measured, and specified as prescribed in subsection (e)(6) of this Section;

vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6) of this Section, unless documentation is provided pursuant to 35 Ill. Adm. Code 703.232 demonstrating adequate combustion gas residence time; and

vii) Such other operating requirements as are necessary to ensure that the DRE performance standard of Section 726.204(a) is met.

B) CO and hydrocarbon (HC) standards. The permit must incorporate a CO limit and, as appropriate, a HC limit as provided by Section 726.204(b), (c), (d), (e), and (f). The permit limits must be specified as follows:

i) When complying with the CO standard of Section 726.204(b)(1), the permit limit is 100 ppmv;

ii) When complying with the alternative CO standard pursuant to Section 726.204(c), the permit limit for CO is based on the trial burn and is established as the average over all valid runs of the highest hourly rolling average CO level of each run; and, the permit limit for HC is 20 ppmv (as defined in Section 726.204(c)(1)), except as provided in Section 726.204(f); or

iii) When complying with the alternative HC limit for industrial furnaces pursuant to Section 726.204(f), the permit limit for HC and CO is the baseline level when hazardous waste is not burned as specified by that subsection.

C) Start-up and shut-down. During start-up and shut-down of the BIF, hazardous waste (except waste fed solely as an ingredient under the Tier I (or

adjusted Tier I) feed rate screening limits for metals and chloride/chlorine, and except low risk waste exempt from the trial burn requirements pursuant to Sections 726.204(a)(5), 726.205, 726.206, and 726.207) must not be fed into the device, unless the device is operating within the conditions of operation specified in the permit.

3) Requirements to ensure conformance with the particulate matter (PM) standard.

A) Except as provided in subsections (e)(3)(B) and (e)(3)(C) of this Section, the permit must specify the following operating requirements to ensure conformance with the PM standard specified in Section 726.205:

i) Total ash feed rate to the device from hazardous waste, other fuels, and industrial furnace feedstocks, measured and specified as prescribed in subsection (e)(6) of this Section;

ii) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any air pollution control system (APCS);

iv) Allowable variation in BIF system design including any APCS or operating procedures; and

v) Such other operating requirements as are necessary to ensure that the PM standard in Section ~~726.211(b)~~ 726.205(a) is met.

B) Permit conditions to ensure conformance with the PM standard must not be provided for facilities exempt from the PM standard pursuant to Section 726.205(b);

C) For cement kilns and light-weight aggregate kilns, permit conditions to ensure compliance with the PM standard must not limit the ash content of hazardous waste or other feed materials.

4) Requirements to ensure conformance with the metals emissions standard.

A) For conformance with the Tier I (or adjusted Tier I) metals feed rate screening limits of Section 726.206(b) or (e), the permit must specify the following operating requirements:

i) Total feed rate of each metal in hazardous waste, other fuels and industrial furnace feedstocks measured and specified pursuant to provisions of subsection (e)(6) of this Section;

ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and

iii) A sampling and metals analysis program for the hazardous waste, other fuels and industrial furnace feedstocks;

B) For conformance with the Tier II metals emission rate screening limits pursuant to Section 726.206(c) and the Tier III metals controls pursuant to

Section 726.206(d), the permit must specify the following operating requirements:

i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6) of this Section: total feed streams; total hazardous waste feed; and total pumpable hazardous waste feed;

iv) Total feed rate of chlorine and chloride in total feed streams measured and specified as prescribed in subsection (e)(6) of this Section;

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;

viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

ix) Allowable variation in BIF system design including any APCS or operating procedures; and

x) Such other operating requirements as are necessary to ensure that the metals standards pursuant to Section 726.206(c) or (d) are met.

C) For conformance with an alternative implementation approach approved by the Agency pursuant to Section 726.206(f), the permit must specify the following operating requirements:

i) Maximum emission rate for each metal specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste and pumpable hazardous waste, each measured and specified as prescribed in subsection (e)(6)(A) of this Section;

iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsection (e)(6) of this Section: total hazardous waste feed; and total pumpable hazardous waste feed;

iv) Total feed rate of chlorine and chloride in total feed streams measured and specified prescribed in subsection (e)(6) of this Section;

v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6) of this Section;

vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6) of this Section;

vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6) of this Section;

viii) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

ix) Allowable variation in BIF system design including any APCS or operating procedures; and

x) Such other operating requirements as are necessary to ensure that the metals standards pursuant to Section 726.206(c) or (d) are met.

5) Requirements to ensure conformance with the HCl and chlorine gas standards.

A) For conformance with the Tier I total chlorine and chloride feed rate screening limits of Section 726.207(b)(1), the permit must specify the following operating requirements:

i) Feed rate of total chlorine and chloride in hazardous waste, other fuels and industrial furnace feedstocks measured and specified as prescribed in subsection (e)(6) of this Section;

ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section; and

iii) A sampling and analysis program for total chlorine and chloride for the hazardous waste, other fuels and industrial furnace feedstocks;

B) For conformance with the Tier II HCl and chlorine gas emission rate screening limits pursuant to Section 726.207(b)(2) and the Tier III HCl and chlorine gas controls pursuant to Section 726.207(c), the permit must specify the following operating requirements:

i) Maximum emission rate for HCl and for chlorine gas specified as the average emission rate during the trial burn;

ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6) of this Section;

iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6) of this Section;

iv) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6) of this Section;

v) Appropriate controls on operation and maintenance of the hazardous waste firing system and any APCS;

vi) Allowable variation in BIF system design including any APCS or operating procedures; and

vii) Such other operating requirements as are necessary to ensure that the HCl and chlorine gas standards pursuant to Section 726.207(b)(2) or (c) are met.

6) Measuring parameters and establishing limits based on trial burn data.

A) General requirements. As specified in subsections (e)(2) through (e)(5) of this Section, each operating parameter must be measured, and permit limits on the parameter must be established, according to either of the following procedures:

i) Instantaneous limits. A parameter is measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the permit limit specified as the time-weighted average during all valid runs of the trial burn; or

ii) Hourly rolling average. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The permit limit for the parameter must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average value for each run.

BOARD NOTE: The Board has combined the text of 40 CFR 266.100(e)(6)(i)(B)(1) and (e)(6)(i)(B)(2) into this subsection (e)(6)(A)(ii) and moved the text of 40 CFR 266.100(e)(6)(i)(B)(1)(i) and (e)(6)(i)(B)(1)(ii) to appear as definitions of "continuous monitor" and "hourly rolling average," respectively, in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.

B) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (as defined in Section 726.200(i)) and lead must be established either on an hourly rolling average basis, as prescribed by subsection (e)(6)(A) of this Section, or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an average period from 2 to 24 hours, the following requirements apply:

i) The feed rate of each metal must be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis;

ii) ~~Terms are~~The continuous monitor must meet the specifications of "continuous monitor," "rolling average for the selected averaging period," and "one hour block average" as defined in Section 726.200(i); and

BOARD NOTE: The Board has moved the text of 40 CFR 266.100(e)(6)(ii)(B)(1) and (e)(6)(iii)(B)(2) to appear as definitions in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.

iii) The permit limit for the feed rate of each metal must be established based on trial burn data as the average over all valid test runs of the highest hourly rolling average feed rate for each run.

C) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored pursuant to the continuous monitoring requirements of subsections (e)(6)(A) and (e)(6)(B) of this Section.

D) Conduct of trial burn testing.

i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii) Prior to obtaining test data for purposes of demonstrating compliance with the emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters pursuant to this Section, the unit must operate under trial burn conditions for a sufficient period to reach steady-state operations. However, industrial furnaces that recycle collected PM back into the furnace and that comply with an alternative implementation approach for metals pursuant to Section 726.206(f) need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals emissions.

iii) Trial burn data on the level of an operating parameter for which a limit must be established in the permit must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by this subsection (e).

7) General requirements.

A) Fugitive emissions. Fugitive emissions must be controlled in one of the following ways:

i) By keeping the combustion zone totally sealed against fugitive emissions;

ii) By maintaining the combustion zone pressure lower than atmospheric pressure; or

iii) By an alternative means of control demonstrated (with Part B of the permit application) to provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure.

B) Automatic waste feed cutoff. A BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when operating conditions deviate from those established pursuant to this Section. In addition, the following requirements apply:

i) The permit limit for (the indicator of) minimum combustion chamber temperature must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber;

ii) Exhaust gases must be ducted to the APCS operated in accordance with the permit requirements while hazardous waste or hazardous waste residues remain in the combustion chamber; and

iii) Operating parameters for which permit limits are established must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the permit limits. For parameters that are monitored on an instantaneous basis, the Agency must establish a minimum period of time after a waste feed cutoff during which the

parameter must not exceed the permit limit before the hazardous waste feed is restarted.

C) Changes. A BIF must cease burning hazardous waste when combustion properties or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits as specified in the permit.

8) Monitoring and Inspections.

A) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

i) If specified by the permit, feed rates and composition of hazardous waste, other fuels, and industrial furnace feedstocks and feed rates of ash, metals, and total chlorine and chloride;

ii) If specified by the permit, CO, HCs, and oxygen on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases to the atmosphere in accordance with operating requirements specified in subsection (e)(2)(B) of this Section. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I of this Part; and

iii) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feedstocks as appropriate), residues, and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.

B) All monitors must record data in units corresponding to the permit limit unless otherwise specified in the permit.

C) The BIF and associated equipment (pumps, ~~values~~-valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when it contains hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

D) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Agency that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. At a minimum, operational testing must be conducted at least once every 30 days.

E) These monitoring and inspection data must be recorded and the records must be placed in the operating record required by 35 Ill. Adm. Code 724.173.

9) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner and operator must comply with Section 726.211.

10) Recordkeeping. The owner or operator must ~~keep~~-maintain in the operating record of the facility all information and data required by this Section ~~until-closure of the facility~~ for five years.

11) Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the BIF.

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

Section 726.203 Interim Status Standards for Burners

a) Purpose, scope, and applicability.

1) General.

A) The purpose of this Section is to establish minimum national standards for owners and operators of "existing" BIFs that burn hazardous waste where such standards define the acceptable management of hazardous waste during the period of interim status. The standards of this Section apply to owners and operators of existing facilities until either a permit is issued under Section 726.202(d) or until closure responsibilities identified in this Section are fulfilled.

B) "Existing" or "in existence" means a BIF for which the owner or operator filed a certification of precompliance with USEPA pursuant to federal 40 CFR 266.103(b); provided, however, that USEPA has not determined that the certification is invalid.

C) If a BIF is located at a facility that already has a RCRA permit or interim status, then the owner or operator must comply with the applicable regulations dealing with permit modifications in 35 Ill. Adm. Code 703.280 or changes in interim status in 35 Ill. Adm. Code 703.155.

2) Exemptions. The requirements of this Section do not apply to hazardous waste and facilities exempt under Section 726.200(b) or 726.208.

3) Prohibition on burning dioxin-listed wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes must not be burned in a BIF operating under interim status: USEPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.

4) Applicability of 35 Ill. Adm. Code 725 standards. An owner or operator of a BIF that burns hazardous waste and which is operating under interim status is subject to the following provisions of 35 Ill. Adm. Code 725, except as provided otherwise by this Section:

A) In Subpart A of 35 Ill. Adm. Code 725 (General), 35 Ill. Adm. Code 725.104;

B) In Subpart B of 35 Ill. Adm. Code 725 (General facility standards), 35 Ill. Adm. Code 725.111 through 725.117;

C) In Subpart C of 35 Ill. Adm. Code 725 (Preparedness and prevention), 35 Ill. Adm. Code 725.131 through 725.137;

D) In Subpart D of 35 Ill. Adm. Code 725 (Contingency plan and emergency procedures), 35 Ill. Adm. Code 725.151 through 725.156;

E) In Subpart E of 35 Ill. Adm. Code 725 (Manifest system, recordkeeping and reporting), 35 Ill. Adm. Code 725.171 through 725.177, except that 35 Ill. Adm.

Code 725.171, 725.172 and 725.176 do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources;

F) In Subpart G of 35 Ill. Adm. Code 725 (Closure and post-closure), 35 Ill. Adm. Code 725.211 through 725.215;

G) In Subpart H of 35 Ill. Adm. Code 725 (Financial requirements), 35 Ill. Adm. Code 725.241, 725.242, 725.243, and 725.247 through ~~725.251~~725.250, except that the State of Illinois and the federal government are exempt from the requirements of Subpart H of 35 Ill. Adm. Code 725; and

H) In Subpart BB of 35 Ill. Adm. Code 725 (Air emission standards for equipment leaks), except 35 Ill. Adm. Code 725.950(a).

5) Special requirements for furnaces. The following controls apply during interim status to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see subsection (a)(5)(B) of this Section) at any location other than the hot end where products are normally discharged or where fuels are normally fired:

A) Controls.

i) The hazardous waste must be fed at a location where combustion gas temperature is at least 1800° F;

ii) The owner or operator must determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and retain documentation of such determination in the facility record;

iii) For cement kiln systems, the hazardous waste must be fed into the kiln; and

iv) The HC controls of Section 726.204(f) or subsection (c)(5) of this Section apply upon certification of compliance under subsection (c) of this Section, irrespective of the CO level achieved during the compliance test.

B) Burning hazardous waste solely as an ingredient. A hazardous waste is burned for a purpose other than "solely as an ingredient" if it meets either of the following criteria:

i) The hazardous waste has a total concentration of nonmetal compounds listed in Appendix H of 35 Ill. Adm. Code 721, exceeding 500 ppm by weight, as fired and so is considered to be burned for destruction. The concentration of nonmetal compounds in a waste as-generated may be reduced to the 500 ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the 500 ppm limit is prohibited and documentation that the waste has not been impermissibly diluted must be retained in the facility record; or

ii) The hazardous waste has a heating value of 5,000 Btu/lb or more, as fired, and so is considered to be burned as fuel. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. The heating value of a waste as-generated may be reduced to below the 5,000 Btu/lb limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and documentation that the

waste has not been impermissibly blended must be retained in the facility record.

6) Restrictions on burning hazardous waste that is not a fuel. Prior to certification of compliance under subsection (c) of this Section, an owner or operator must not feed hazardous waste that has a heating value less than 5000 Btu/lb, as generated, (except that the heating value of a waste as-generated may be increased to above the 5,000 Btu/lb limit by bona fide treatment; however blending to augment the heating value to meet the 5,000 Btu/lb limit is prohibited and records must be kept to document that impermissible blending has not occurred) in a BIF, except that the following may occur:

A) Hazardous waste may be burned solely as an ingredient;

B) Hazardous waste may be burned for purposes of compliance testing (or testing prior to compliance testing) for a total period of time not to exceed 720 hours;

C) Such waste may be burned if the Agency has documentation to show that the following was true prior to August 21, 1991:

i) The BIF was operating under the interim status standards for incinerators or thermal treatment units, Subparts O or P of 35 Ill. Adm. Code 725;

ii) The BIF met the interim status eligibility requirements under 35 Ill. Adm. Code 703.153 for Subparts O or P of 35 Ill. Adm. Code 725; and

iii) Hazardous waste with a heating value less than 5,000 Btu/lb was burned prior to that date; or

D) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under 35 Ill. Adm. Code 721.102(e) prior to February 21, 1991, and documentation is kept on file supporting this claim.

7) Direct transfer to the burner. If hazardous waste is directly transferred from a transport vehicle to a BIF without the use of a storage unit, the owner or operator must comply with Section 726.211.

b) Certification of precompliance. This subsection corresponds with 40 CFR 266.103(b), under which USEPA required certain owners and operators to file a certification of precompliance by August 21, 1991. No similar filing with the Agency was required, so the Board did not incorporate the federal filing requirement into the Illinois regulations. This statement maintains structural parity with the federal regulations.

c) Certification of compliance. The owner or operator must conduct emissions testing to document compliance with the emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section under the procedures prescribed by this subsection (c), except under extensions of time provided by subsection (c)(7) of this Section. Based on the compliance test, the owner or operator must submit to the Agency, on or before August 21, 1992, a complete and accurate "certification of compliance" (under subsection (c)(4) of this Section) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1) of this Section.

1) Limits on operating conditions. The owner or operator must establish limits on the following parameters based on operations during the compliance test (under procedures prescribed in subsection (c)(4)(D) of this Section) or as otherwise specified and include these limits with the certification of compliance. The BIF must be operated in accordance with these operating limits and the applicable emissions standards of Sections 726.204(b) through (e), 726.205, 726.206, and 726.207 and subsection (a)(5)(A)(iv) of this Section at all times when there is hazardous waste in the unit.

A) Feed rate of total hazardous waste and (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)), pumpable hazardous waste;

B) Feed rate of each metal in the following feedstreams:

i) Total feedstreams, except that industrial furnaces which must comply with the alternative metals implementation approach under subsection (c)(3)(B) of this Section must specify limits on the concentration of each metal in collected PM in lieu of feed rate limits for total feedstreams; and facilities that comply with Tier I or Adjusted Tier I metals feed rate screening limits may set their operating limits at the metal feed rate screening limits determined under subsection 726.206(b) or (e) of this Section;

BOARD NOTE: Federal subsections 266.103(c)(1)(ii)(A)(1) and (c)(1)(ii)(A)(2) are condensed into subsection (c)(1)(B)(i).

ii) Total hazardous waste feed (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e)); and

iii) Total pumpable hazardous waste feed (unless complying with Tier I or Adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

C) Total feed rate of total chlorine and chloride in total feed streams, except that facilities that comply with Tier I or Adjusted Tier I feed rate screening limits may set their operating limits at the total chlorine and chloride feed rate screening limits determined under Section 726.207(b)(1) or (e);

D) Total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited;

E) CO concentration, and where required, HC concentration in stack gas. When complying with the CO controls of Section 726.204(b), the CO limit is 100 ppmv, and when complying with the HC controls of Section 726.204(c), the HC limit is 20 ppmv. When complying with the CO controls of Section 726.204(c), the CO limit is established based on the compliance test;

F) Maximum production rate of the device in appropriate units when producing normal product unless complying with Tier I or Adjusted Tier I feed rate screening limits for chlorine under Section 726.207(b)(1) or (e) and for all metals under Section 726.207(b) or (e), and the uncontrolled particulate emissions do not exceed the standard under Section 726.205;

G) Maximum combustion chamber temperature where the temperature measurement is as close to the combustion zone as possible and is upstream of any quench

water injection, (unless complying with the Tier I adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

H) Maximum flue gas temperature entering a PM control device (unless complying with Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e));

I) For systems using wet scrubbers, including wet ionizing scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum liquid to flue gas ratio;

ii) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water; and

iii) Minimum pH level of the scrubber water;

J) For systems using venturi scrubbers, the minimum differential gas pressure across the venturi (unless complying the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e));

K) For systems using dry scrubbers (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum caustic feed rate; and

ii) Maximum flue gas flow rate;

L) For systems using wet ionizing scrubbers or electrostatic precipitators (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)):

i) Minimum electrical power in kVA to the precipitator plates; and

ii) Maximum flue gas flow rate;

M) For systems using fabric filters (baghouses), the minimum pressure drop (unless complying with the Tier I or adjusted Tier I metals feed rate screening limits under Section 726.206(b) or (e) and the total chlorine and chloride feed rate screening limits under Section 726.207(b)(1) or (e)).

2) Prior notice of compliance testing. At least 30 days prior to the compliance testing required by subsection (c)(3) of this Section, the owner or operator must notify the Agency and submit the following information:

A) General facility information including:

i) USEPA facility ID number;

ii) Facility name, contact person, telephone number, and address;

iii) Person responsible for conducting compliance test, including company name, address, and telephone number, and a statement of qualifications;

iv) Planned date of the compliance test;

B) Specific information on each device to be tested, including the following:

i) A Description of BIF;

ii) A scaled plot plan showing the entire facility and location of the BIF;

iii) A description of the APCS;

iv) Identification of the continuous emission monitors that are installed, including the following: CO monitor; Oxygen monitor; HC monitor, specifying the minimum temperature of the system, and, if the temperature is less than 150°C , an explanation of why a heated system is not used (see subsection (c)(5) of this Section) and a brief description of the sample gas conditioning system;

v) Indication of whether the stack is shared with another device that will be in operation during the compliance test; and

vi) Other information useful to an understanding of the system design or operation; and

C) Information on the testing planned, including a complete copy of the test protocol and QA/QC plan, and a summary description for each test providing the following information at a minimum:

i) Purpose of the test (e.g., demonstrate compliance with emissions of PM); and

ii) Planned operating conditions, including levels for each pertinent parameter specified in subsection (c)(1) of this Section.

3) Compliance testing.

A) General. Compliance testing must be conducted under conditions for which the owner or operator has submitted a certification of precompliance under subsection (b) of this Section and under conditions established in the notification of compliance testing required by subsection (c)(2) of this Section. The owner or operator may seek approval on a case-by-case basis to use compliance test data from one unit in lieu of testing a similar on-site unit. To support the request, the owner or operator must provide a comparison of the hazardous waste burned and other feedstreams, and the design, operation, and maintenance of both the tested unit and the similar unit. The Agency must provide a written approval to use compliance test data in lieu of testing a similar unit if the Agency finds that the hazardous wastes, devices and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of this subsection (c).

B) Special requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must comply with one of the following procedures for testing to determine compliance with the metals standards of Section 726.206(c) or (d):

i) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in Appendix I to this Part;

ii) Stack emissions testing for a minimum of six hours each day while hazardous waste is burned during interim status. The testing must be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the APCS is operated under normal conditions. During interim status, hazardous waste analysis for metals content must be sufficient for the owner or operator to determine if changes in metals content affect the ability of the unit to meet the metals emissions standards established under Section 726.206(c) or (d). Under this option, operating limits (under subsection (c)(1) of this Section) must be established during compliance testing under this subsection (c)(3) only on the following parameters: feed rate of total hazardous waste; total feed rate of total chlorine and chloride in total feed streams; total feed rate of ash in total feed streams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited; CO concentration, and where required, HC concentration in stack gas; and maximum production rate of the device in appropriate units when producing normal product; or

iii) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of subsection (c)(1) of this Section only after the kiln system has been conditioned to enable it to reach equilibrium with respect to metals fed into the system and metals emissions. During conditioning, hazardous waste and raw materials having the same metals content as will be fed during the compliance test must be fed at the feed rates that will be fed during the compliance test.

C) Conduct of compliance testing.

i) If compliance with all applicable emissions standards of Sections 726.204 through 726.207 is not demonstrated simultaneously during a set of test runs, the operating conditions of additional test runs required to demonstrate compliance with remaining emissions standards must be as close as possible to the original operating conditions.

ii) Prior to obtaining test data for purposes of demonstrating compliance with the applicable emissions standards of Sections 726.204 through 726.207 or establishing limits on operating parameters under this Section, the facility must operate under compliance test conditions for a sufficient period to reach steady-state operations. Industrial furnaces that recycle collected PM back into the furnace and that comply with subsection (c)(3)(B)(i) or (c)(3)(B)(ii) of this Section, however, need not reach steady state conditions with respect to the flow of metals in the system prior to beginning compliance testing for metals.

iii) Compliance test data on the level of an operating parameter for which a limit must be established in the certification of compliance must be obtained during emissions sampling for the pollutants (i.e., metals, PM, HCl/chlorine gas, organic compounds) for which the parameter must be established as specified by subsection (c)(1) of this Section.

4) Certification of compliance. Within 90 days of completing compliance testing, the owner or operator must certify to the Agency compliance with the emissions standards of Sections 726.204(b), (c) and (e); 726.205; 726.206; 726.207; and subsection (a)(5)(A)(iv) of this Section. The certification of compliance must include the following information:

A) General facility and testing information, including the following:

i) USEPA facility ID number;

ii) Facility name, contact person, telephone number, and address;

iii) Person responsible for conducting compliance testing, including company name, address, and telephone number, and a statement of qualifications;

iv) Dates of each compliance test;

v) Description of BIF tested;

vi) Person responsible for QA/QC, title and telephone number, and statement that procedures prescribed in the QA/QC plan submitted under Section 726.203(c)(2)(C) have been followed, or a description of any changes and an explanation of why changes were necessary;

vii) Description of any changes in the unit configuration prior to or during testing that would alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why the changes were necessary;

viii) Description of any changes in the planned test conditions prior to or during the testing that alter any of the information submitted in the prior notice of compliance testing under subsection (c)(2) of this Section and an explanation of why the changes were necessary; and

ix) The complete report on results of emissions testing.

B) Specific information on each test, including the following:

i) Purposes of test (e.g., demonstrate conformance with the emissions limits for PM, metals, HCl, chlorine gas, and CO);

ii) Summary of test results for each run and for each test including the following information: date of run; duration of run; time-weighted average and highest hourly rolling average CO level for each run and for the test; highest hourly rolling average HC level, if HC monitoring is required for each run and for the test; if dioxin and furan testing is required under Section 726.204(e), time-weighted average emissions for each run and for the test of chlorinated dioxin and furan emissions, and the predicted maximum annual average ground level concentration of the toxicity equivalency factor (defined in Section 726.200(i)); time-weighted average PM emissions for each run and for the test; time-weighted average HCl and chlorine gas emissions for each run and for the test; time-weighted average emissions for the metals subject to regulation under Section 726.206 for each run and for the test; and QA/QC results.

C) Comparison of the actual emissions during each test with the emissions limits prescribed by Sections 726.204(b), (c), and (e); 726.205; 726.206; and 726.207 and established for the facility in the certification of precompliance under subsection (b) of this Section.

D) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in subsection (c)(1) of this Section using one of the following procedures:

i) Instantaneous limits. A parameter must be measured and recorded on an instantaneous basis (i.e., the value that occurs at any time) and the operating limit specified as the time-weighted average during all runs of the compliance test.

ii) Hourly rolling average basis. The limit for a parameter must be established and continuously monitored on an hourly rolling average basis, as defined in Section 726.200(i). The operating limit for the parameter must be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.

iii) Rolling average limits for carcinogenic metals (as defined in Section 726.200(i)) and lead. Feed rate limits for the carcinogenic metals and lead must be established either on an hourly rolling average basis as prescribed by subsection (c)(4)(D)(ii) of this Section or on (up to) a 24 hour rolling average basis. If the owner or operator elects to use an averaging period from two to 24 hours the following must occur: the feed rate of each metal must be limited at any time to ten times the feed rate that would be allowed on a hourly rolling average basis; the operating limit for the feed rate of each metal must be established based on compliance test data as the average over all test runs of the highest hourly rolling average feed rate for each run; and the continuous monitor and the rolling average for the selected averaging period are as defined in Section 726.200(i).

BOARD NOTE: The Board has combined the text of 40 C.F.R. 266.103(c)(4)(iv)(C)(1) and (c)(4)(iv)(C)(3) are condensed into subsection (c)(b)(C)(iii) to comport with Illinois Administrative Code codification requirements.

iv) Feed rate limits for metals, total chlorine and chloride, and ash. Feed rate limits for metals, total chlorine and chloride, and ash are established and monitored by knowing the concentration of the substance (i.e., metals, chloride/chlorine, and ash) in each feedstream and the flow rate of the feedstream. To monitor the feed rate of these substances, the flow rate of each feedstream must be monitored under the continuous monitoring requirements of subsections (c)(4)(D)(i) through (c)(4)(D)(iii) of this Section.

E) Certification of compliance statement. The following statement must accompany the certification of compliance:

"I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information and supporting documentation. Copies of all emissions tests, dispersion modeling results, and other information used to determine conformance with the requirements of 35 Ill. Adm. Code 726.203(c) are available at the facility and can be obtained from the facility contact person listed above. Based on my inquiry of the person or persons who manage the facility, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also acknowledge that the operating limits established pursuant to 35 Ill. Adm. Code 726.203(c)(4)(D) are enforceable limits at which the facility can

legally operate during interim status until a revised certification of compliance is submitted."

5) Special requirements for HC monitoring systems. When an owner or operator is required to comply with the HC controls provided by Section 726.204(c) or subsection (a)(5)(A)(iv) of this Section, a conditioned gas monitoring system may be used in conformance with specifications provided in Appendix I to this Part provided that the owner or operator submits a certification of compliance without using extensions of time provided by subsection (c)(7) of this Section.

6) Special operating requirements for industrial furnaces that recycle collected PM. Owners and operators of industrial furnaces that recycle back into the furnace PM from the APCS must do the following:

A) When complying with the requirements of subsection (c)(3)(B)(i) of this Section, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in Appendix I to this Part; and

B) When complying with the requirements of subsection (c)(3)(B)(ii) of this Section, comply with the operating requirements prescribed by that subsection.

7) Extensions of time.

A) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 by August 21, 1992, the owner or operator must do the following:

i) Stop burning hazardous waste and begin closure activities under subsection (1) of this Section for the hazardous waste portion of the facility;

ii) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) a total period of 720 hours for the period of time beginning August 21, 1992, submit a notification to the Agency by August 21, 1992 stating that the facility is operating under restricted interim status and intends to resume burning hazardous waste, and submit a complete certification of compliance by August 23, 1993; or

iii) Obtain a case-by-case extension of time under subsection (c)(7)(B) of this Section.

B) Case-by-case extensions of time. See Section 726.219.

8) Revised certification of compliance. The owner or operator may submit at any time a revised certification of compliance (recertification of compliance) under the following procedures:

A) Prior to submittal of a revised certification of compliance, hazardous waste must not be burned for more than a total of 720 hours under operating conditions that exceed those established under a current certification of compliance, and such burning must be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207;

B) At least 30 days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of

compliance, the owner or operator must notify the Agency and submit the following information:

i) USEPA facility ID number, and facility name, contact person, telephone number, and address;

ii) Operating conditions that the owner or operator is seeking to revise and description of the changes in facility design or operation that prompted the need to seek to revise the operating conditions;

iii) A determination that, when operating under the revised operating conditions, the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 are not likely to be exceeded. To document this determination, the owner or operator must submit the applicable information required under subsection (b)(2) of this Section; and

iv) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207 when operating under revised operating conditions. The protocol must include a schedule of pre-testing and compliance testing. If the owner or operator revises the scheduled date for the compliance test, the owner or operator must notify the Agency in writing at least 30 days prior to the revised date of the compliance test;

C) Conduct a compliance test under the revised operating conditions and the protocol submitted to the Agency to determine compliance with the applicable emissions standards of Sections 726.204, 726.205, 726.206, and 726.207; and

D) Submit a revised certification of compliance under subsection (c)(4) of this Section.

d) Periodic Recertifications. The owner or operator must conduct compliance testing and submit to the Agency a recertification of compliance under provisions of subsection (c) of this Section within ~~three~~ five years from submitting the previous certification or recertification. If the owner or operator seeks to recertify compliance under new operating conditions, the owner or operator must comply with the requirements of subsection (c)(8) of this Section.

e) Noncompliance with certification schedule. If the owner or operator does not comply with the interim status compliance schedule provided by subsections (b), (c), and (d) of this Section, hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l) of this Section, and hazardous waste burning must not resume except under an operating permit issued under 35 Ill. Adm. Code 703.232. For purposes of compliance with the closure provisions of subsection (l) of this Section and 35 Ill. Adm. Code 725.212(d)(2) and 725.213, the BIF has received "the known final volume of hazardous waste" on the date the deadline is missed.

f) Start-up and shut-down. Hazardous waste (except waste fed solely as an ingredient under the Tier I (or adjusted Tier I) feed rate screening limits for metals and chloride/chlorine) must not be fed into the device during start-up and shut-down of the BIF, unless the device is operating within the conditions of operation specified in the certification of compliance.

g) Automatic waste feed cutoff. During the compliance test required by subsection (c)(3) of this Section and upon certification of compliance under

subsection (c) of this Section, a BIF must be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in subsections (c)(1)(A) and (c)(1)(E) through (c)(1)(M) of this Section deviate from those established in the certification of compliance. In addition, the following must occur:

1) To minimize emissions of organic compounds, the minimum combustion chamber temperature (or the indicator of combustion chamber temperature) that occurred during the compliance test must be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined as either of the following:

A) If compliance with the combustion chamber temperature limit is based on an hourly rolling average, the minimum temperature during the compliance test is considered to be the average over all runs of the lowest hourly rolling average for each run; or

B) If compliance with the combustion chamber temperature limit is based on an instantaneous temperature measurement, the minimum temperature during the compliance test is considered to be the time-weighted average temperature during all runs of the test; and

2) Operating parameters limited by the certification of compliance must continue to be monitored during the cutoff, and the hazardous waste feed must not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.

h) Fugitive emissions. Fugitive emissions must be controlled as follows:

1) By keeping the combustion zone totally sealed against fugitive emissions; or

2) By maintaining the combustion zone pressure lower than atmospheric pressure; or

3) By an alternative means of control that the owner or operator demonstrates provides fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration must be included in the operating record.

i) Changes. A BIF must cease burning hazardous waste when combustion properties, or feed rates of the hazardous waste, other fuels or industrial furnace feedstocks, or the BIF design or operating conditions deviate from the limits specified in the certification of compliance.

j) Monitoring and Inspections.

1) The owner or operator must monitor and record the following, at a minimum, while burning hazardous waste:

A) Feed rates and composition of hazardous waste, other fuels, and industrial furnace feed stocks and feed rates of ash, metals, and total chlorine and chloride as necessary to ensure conformance with the certification of precompliance or certification of compliance;

B) CO, oxygen, and, if applicable, HC on a continuous basis at a common point in the BIF downstream of the combustion zone and prior to release of stack gases

to the atmosphere in accordance with the operating limits specified in the certification of compliance. CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I to this Part; and

C) Upon the request of the Agency, sampling and analysis of the hazardous waste (and other fuels and industrial furnace feed stocks as appropriate) and the stack gas emissions must be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of Sections 726.204, 726.205, 726.206, and 726.207.

2) The BIF and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) must be subjected to thorough visual inspection when they contain hazardous waste, at least daily for leaks, spills, fugitive emissions, and signs of tampering.

3) The automatic hazardous waste feed cutoff system and associated alarms must be tested at least once every seven days when hazardous waste is burned to verify operability, unless the owner or operator can demonstrate that weekly inspections will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration must be included in the operating record. At a minimum, operational testing must be conducted at least once every 30 days.

4) These monitoring and inspection data must be recorded and the records must be placed in the operating log.

k) Recordkeeping. The owner or operator must keep in the operating record of the facility all information and data required by this Section ~~until closure of the BIF unit~~ for five years.

l) Closure. At closure, the owner or operator must remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters and scrubber sludges) from the BIF and must comply with 35 Ill. Adm. Code 725.211 through 725.215.

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

Section 726.205 Standards to Control PM

a) A BIF burning hazardous waste must not emit PM in excess of 180 mg/dry standard m³ (0.08 grains/dry standard cubic foot) after correction to a stack gas concentration of seven percent oxygen, using procedures prescribed in the following methods in appendix A to 40 CFR 60 (Test Methods), each incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I of this Part): Method 1 (Sample and Velocity Traverses for Stationary Sources), Method 2 (Determination of Volatile Organic Compound Leaks), Method 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), Method 2B (Determination of Exhaust Gas Volume Flow Rate from Gasoline Vapor Incinerators), Method 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), Method 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts), Method 2E (Determination of Landfill Gas Production Flow Rate), Method 2F (Determination of Stack Gas Velocity and Volumetric Flow Rate with Three-Dimensional Probes), Method 2G (Determination of Stack Gas Velocity and Volumetric Flow Rate with Two-Dimensional Probes), Method 2H (Determination of Stack Gas Velocity Taking into

Account Velocity Decay Near the Stack Wall), Method 3 (Gas Analysis for the Determination of Dry Molecular Weight), Method 3A (Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources (Instrumental Analyzer Procedure)), Method 3B (Gas Analysis for the Determination of Emission Rate Correction Factor or Excess Air), Method 3C (Determination of Carbon Dioxide, Methane, Nitrogen, and Oxygen from Stationary Sources), Method 4 (Determination of Moisture Content in Stack Gases), Method 5 (Determination of Particulate Matter Emissions from Stationary Sources), Method 5A (Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry), Method 5B (Determination of Nonsulfuric Acid Particulate Matter Emissions from Stationary Sources), Method 5D (Determination of Particulate Matter Emissions from Positive Pressure Fabric Filters), Method 5E (Determination of Particulate Matter Emissions from the Wool Fiberglass Insulation Manufacturing Industry), Method 5F (Determination of Nonsulfate Particulate Matter Emissions from Stationary Sources), Method 5G (Determination of Particulate Matter Emissions from Wood Heaters (Dilution Tunnel Sampling Location)), Method 5H (Determination of Particulate Emissions from Wood Heaters from a Stack Location), and Method 5I (Determination of Low Level Particulate Matter Emissions from Stationary Sources).

b) An owner or operator meeting the requirements of Section 726.209(b) for the low risk waste exemption is exempt from the PM standard.

c) Oxygen correction.

1) Measured pollutant levels must be corrected for the amount of oxygen in the stack gas according to the following formula:

Where:

$P_c = \frac{gasPm - gasPm}{gasE - gasE} \times \frac{deviceY - deviceY}{deviceY}$
P_c = the corrected concentration of the pollutant in the stack ~~gasPm~~ ~~gasPm~~ = the measured concentration of the pollutant in the stack ~~gasE~~ ~~gasE~~ = the oxygen concentration on a dry basis in the combustion air fed to the ~~deviceY~~ ~~deviceY~~ = the measured oxygen concentration on a dry basis in the stack-

2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion (that is, air with an oxygen concentration exceeding 21 percent), the value of E will be the concentration of oxygen in the enriched air.

3) Compliance with all emission standards provided by this Subpart H must be based on correcting to seven percent oxygen using this procedure.

d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

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

Section 726.206 Standards to Control Metals Emissions

a) General. The owner or operator must comply with the metals standards provided by subsections (b), (c), (d), (e), or (f) of this Section for each

metal listed in subsection (b) of this Section that is present in the hazardous waste at detectable levels using appropriate analytical methods.

BOARD NOTE: The federal regulations do not themselves define the phrase "appropriate analytical methods," but USEPA did include a definition in its preamble discussion accompanying the rule. The Board directs attention to the following segment (at 70 Fed. Reg. 34538, 34541 (June 14, 2005)) for the purposes of subsections (b)(1)(C) and (b)(1)(D) of this Section:

[T]wo primary considerations in selecting an appropriate method, which together serve as our general definition of an appropriate method [are the following] . . . :

1. Appropriate methods are reliable and accepted as such in the scientific community.
2. Appropriate methods generate effective data.

USEPA went on to further elaborate these two concepts and to specify other documents that might provide guidance.

b) Tier I feed rate screening limits. Feed rate screening limits for metals are specified in Appendix A to this Part as a function of terrain-adjusted effective stack height (TESH) and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b)(7) of this Section.

1) Noncarcinogenic metals. The feed rates of the noncarcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the screening limits specified in Appendix A to this Part.

A) The feed rate screening limits for antimony, barium, mercury, thallium, and silver are based on either of the following:

i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii); or

ii) An instantaneous limit not to be exceeded at any time.

B) The feed rate screening limit for lead is based on one of the following:

i) An hourly rolling average, as defined in Sections 726.200(g) and 726.202(e)(6)(A)(ii);

ii) An averaging period of 2 to 24 hours, as defined in Section 726.202(e)(6)(B) with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis; or

iii) An instantaneous limit not to be exceeded at any time.

2) Carcinogenic metals.

A) The feed rates of carcinogenic metals in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed values derived from the screening limits specified in Appendix A to this Part. The feed rate of each of these metals is limited to a level such that the sum of

the ratios of the actual feed rate to the feed rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

Where:

$\sum_{i=1}^n A_i/F_i$ = the sum of the values of A/F for each metal "i," from i = 1 to n
n = number of carcinogenic metals
 A_i = the actual feed rate to the device for metal "i"
 F_i = the feed rate screening limit provided by Appendix A to this Part for metal "i."

B) The feed rate screening limits for the carcinogenic metals are based on either:

i) An hourly rolling average; or

ii) An averaging period of two to 24 hours, as defined in Section 726.202(e)(6)(B), with an instantaneous feed rate limit not to exceed 10 times the feed rate that would be allowed on an hourly rolling average basis.

3) TESH (terrain adjusted effective stack height).

A) The TESH is determined according to the following equation:

$$TESH = H + P - T$$

Where:

H = Actual physical stack height (m)
P = Plume rise (in m) as determined from Appendix F to this Part as a function of stack flow rate and stack gas exhaust temperature.
T = Terrain rise (in m) within five kilometers of the stack.

B) The stack height (H) must not exceed good engineering practice stack height, as defined in Section 726.200(i).

C) If the TESH calculated pursuant to subsection (b)(3)(A) of this Section is not listed in Appendix A through Appendix C to this Part, the values for the nearest lower TESH listed in the table must be used. If the TESH is four meters or less, a value based on four meters must be used.

4) Terrain type. The screening limits are a function of whether the facility is located in noncomplex or complex terrain. A device located where any part of the surrounding terrain within five kilometers of the stack equals or exceeds the elevation of the physical stack height (H) is considered to be in complex terrain and the screening limits for complex terrain apply. Terrain measurements are to be made from U.S. Geological Survey 7.5-minute topographic maps of the area surrounding the facility.

5) Land use. The screening limits are a function of whether the facility is located in an area where the land use is urban or rural. To determine whether land use in the vicinity of the facility is urban or rural, procedures provided in Appendix I or Appendix J to this Part must be used.

6) Multiple stacks. An owner or operator of a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls of metals emissions under a RCRA permit or interim status controls

must comply with the screening limits for all such units assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics. The stack with the lowest value of K is the worst-case stack. K is determined from the following equation as applied to each stack:

$$K = H^{-1} V^{-1} T$$

Where:K

K = a parameter accounting for relative influence of stack height and plume rise
 H = physical stack height (meters)
 V = stack gas flow rate (m³/sec (cubic meters per second))
 T = exhaust temperature (degrees K)

7) Criteria for facilities not eligible for screening limits. If any criteria below are met, the Tier I (and Tier II) screening limits do not apply. Owners and operators of such facilities must comply with either the Tier III standards provided by subsection (d) of this Section or with the adjusted Tier I feed rate screening limits provided by subsection (e) of this Section.

A) The device is located in a narrow valley less than one kilometer wide;

B) The device has a stack taller than 20 meters and is located such that the terrain rises to the physical height within one kilometer of the facility;

C) The device has a stack taller than 20 meters and is located within five kilometers of a shoreline of a large body of water such as an ocean or large lake; or

D) The physical stack height of any stack is less than 2.5 times the height of any building within five building heights or five projected building widths of the stack and the distance from the stack to the closest boundary is within five building heights or five projected building widths of the associated building.

8) Implementation. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate screening limits are not exceeded.

c) Tier II emission rate screening limits. Emission rate screening limits are specified in Appendix A to this Part as a function of TESH and terrain and land use in the vicinity of the facility. Criteria for facilities that are not eligible to comply with the screening limits are provided in subsection (b) (7) of this Section.

1) Noncarcinogenic metals. The emission rates of noncarcinogenic metals must not exceed the screening limits specified in Appendix A to this Part.

2) Carcinogenic metals. The emission rates of carcinogenic metals must not exceed values derived from the screening limits specified in Appendix A to this Part. The emission rate of each of these metals is limited to a level such that the sum of the ratios of the actual emission rate to the emission rate screening limit specified in Appendix A to this Part must not exceed 1.0, as provided by the following equation:

Where:

$\sum A_i/E_i$ = the sum of the values of A/E for each metal "i," from i = 1 to ~~nn~~
~~nn~~ = number of carcinogenic metals ~~A_i~~ = the actual emission rate to the
device for metal "i" ~~E_i~~ = the emission rate screening limit provided by
Appendix A to this Part for metal "i."

3) Implementation. The emission rate limits must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.

4) Definitions and limitations. The definitions and limitations provided by subsection (b) of this Section and 726.200(g) for the following terms also apply to the Tier II emission rate screening limits provided by this subsection (c): TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

5) Multiple stacks.

A) An owner or operator of a facility with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must comply with the emissions screening limits for any such stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

B) The worst-case stack is determined by procedures provided in subsection (b)(6) of this Section.

C) For each metal, the total emissions of the metal from those stacks must not exceed the screening limit for the worst-case stack.

d) Tier III site-specific risk assessment. The requirements of this subsection (d) apply to facilities complying with either the Tier III or Adjusted Tier I except where specified otherwise.

1) General. Conformance with the Tier III metals controls must be demonstrated by emissions testing to determine the emission rate for each metal. In addition, conformance with either Tier III or Adjusted Tier I metals controls must be demonstrated by air dispersion modeling to predict the maximum annual average off-site ground level concentration for each metal and a demonstration that acceptable ambient levels are not exceeded.

2) Acceptable ambient levels. Appendix D and Appendix E to this Part list the acceptable ambient levels for purposes of this Subpart H. Reference air concentrations (RACs) are listed for the noncarcinogenic metals and 1×10^{-5} RSDs are listed for the carcinogenic metals. The RSD for a metal is the acceptable ambient level for that metal provided that only one of the four carcinogenic metals is emitted. If more than one carcinogenic metal is emitted, the acceptable ambient level for the carcinogenic metals is a fraction of the RSD, as described in subsection (d)(3) of this Section.

3) Carcinogenic metals. For the carcinogenic metals the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on

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

Where:

$\sum_{i=1}^{nn} P_i/R_i$ = the sum of the values of P/R for each metal "i," from i = 1 to ~~nn~~
~~nn~~ = number of carcinogenic metals ~~P_i~~ ~~R_i~~ = the predicted ambient concentration for metal ~~i~~
 ~~R_i~~ = the RSD for metal ~~i~~

4) Noncarcinogenic metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal must not exceed the RAC.

5) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on metals emissions under a RCRA permit or interim status controls must conduct emissions testing (except that facilities complying with Adjusted Tier I controls need not conduct emissions testing) and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an ~~exceedence~~-exceedance of the acceptable ambient levels.

6) Implementation. Under Tier III, the metals controls must be implemented by limiting feed rates of the individual metals to levels during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate averaging periods are the same as provided by subsections (b)(1)(A), (b)(1)(B), and (b)(2)(B) of this Section. The feed rate of metals in each feedstream must be monitored to ensure that the feed rate limits for the feedstreams specified under Sections 726.202 or 726.203 are not exceeded.

e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limits provided by Appendix A to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit for a metal is determined by back-calculating from the acceptable ambient levels provided by Appendix D and Appendix E to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit. The feed rate screening limits for carcinogenic metals are implemented as prescribed in subsection (b)(2) of this Section.

f) Alternative implementation approaches.

1) Pursuant to subsection (f)(2) of this Section the Agency must approve on a case-by-case basis approaches to implement the Tier II or Tier III metals emission limits provided by subsection (c) or (d) of this Section alternative to monitoring the feed rate of metals in each feedstream.

2) The emission limits provided by subsection (d) of this Section must be determined as follows:

A) For each noncarcinogenic metal, by back-calculating from the RAC provided in Appendix D to this Part to determine the allowable emission rate for each metal using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and

B) For each carcinogenic metal by the following methods:

i) By back-calculating from the RSD provided in Appendix E to this Part to determine the allowable emission rate for each metal if that metal were the only carcinogenic metal emitted using the dilution factor for the maximum annual average ground level concentration predicted by dispersion modeling in conformance with subsection (h) of this Section; and

ii) If more than one carcinogenic metal is emitted, by selecting an emission limit for each carcinogenic metal not to exceed the emission rate determined by subsection (f)(2)(B)(i) of this Section, such that the sum for all carcinogenic metals of the ratios of the selected emission limit to the emission rate determined by that subsection does not exceed 1.0.

g) Emission testing.

1) General. Emission testing for metals must be conducted using Method 0060 (Determinations of Metals in Stack Emissions) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

2) Hexavalent chromium. Emissions of chromium are assumed to be hexavalent chromium unless the owner or operator conducts emissions testing to determine hexavalent chromium emissions using procedures prescribed in Method 0061 (Determination of Hexavalent Chromium Emissions from Stationary Sources) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

h) Dispersion modeling. Dispersion modeling required under this Section must be conducted according to methods recommended in federal appendix W to 40 CFR 51 (Guideline on Air Quality Models), in section 5.0 (Hazardous Waste Combustion Air Quality Screening Procedure) in appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), or in "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," USEPA publication number EPA-454/R-92-019, each incorporated by reference in 35 Ill. Adm. Code 720.111(b), to predict the maximum annual average off-site ground level concentration. However, on-site concentrations must be considered when a person resides on-site.

i) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

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

Section 726.207 Standards to Control HCl and Chlorine Gas Emissions

a) General. The owner or operator must comply with the HCl and chlorine gas controls provided by subsection (b), (c), or (e) of this Section.

b) Screening limits.

1) Tier I feed rate screening limits. Feed rate screening limits are specified for total chlorine in Appendix B to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The feed rate of total chlorine and chloride, both organic and inorganic, in all feed streams, including hazardous waste, fuels, and industrial furnace feed stocks must not exceed the levels specified.

2) Tier II emission rate screening limits. Emission rate screening limits for HCl and chlorine gas are specified in Appendix C to this Part as a function of TESH and terrain and land use in the vicinity of the facility. The stack emission rates of HCl and chlorine gas must not exceed the levels specified.

3) Definitions and limitations. The definitions and limitations provided by Sections 726.200(i) and 726.206(b) for the following terms also apply to the screening limits provided by this subsection: TESH, good engineering practice stack height, terrain type, land use, and criteria for facilities not eligible to use the screening limits.

4) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must comply with the Tier I and Tier II screening limits for those stacks assuming all hazardous waste is fed into the device with the worst-case stack based on dispersion characteristics.

A) The worst-case stack is determined by procedures provided in Section 726.206(b) (6).

B) Under Tier I, the total feed rate of chlorine and chloride to all subject devices must not exceed the screening limit for the worst-case stack.

C) Under Tier II, the total emissions of HCl and chlorine gas from all subject stacks must not exceed the screening limit for the worst-case stack.

c) Tier III site-specific risk assessments.

1) General. Conformance with the Tier III controls must be demonstrated by emissions testing to determine the emission rate for HCl and chlorine gas, air dispersion modeling to predict the maximum annual average off-site ground level concentration for each compound, and a demonstration that acceptable ambient levels are not exceeded.

2) Acceptable ambient levels. Appendix D to this Part lists the RACs for HCl (7 $\mu\text{g}/\text{m}^3$) and chlorine gas (0.4 $\mu\text{g}/\text{m}^3$).

3) Multiple stacks. Owners and operators of facilities with more than one on-site stack from a BIF, incinerator, or other thermal treatment unit subject to controls on HCl or chlorine gas emissions under a RCRA permit or interim status controls must conduct emissions testing and dispersion modeling to demonstrate that the aggregate emissions from all such on-site stacks do not result in an ~~exceedence~~-exceedance of the acceptable ambient levels for HCl and chlorine gas.

d) Averaging periods. The HCl and chlorine gas controls are implemented by limiting the feed rate of total chlorine and chloride in all feedstreams, including hazardous waste, fuels, and industrial furnace feed stocks. Under Tier I, the feed rate of total chlorine and chloride is limited to the Tier I

Screening Limits. Under Tier II and Tier III, the feed rate of total chlorine and chloride is limited to the feed rates during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). The feed rate limits are based on either of the following:

1) An hourly rolling average, as defined in Sections 726.200(i) and 726.202(e)(6); or

2) An instantaneous basis not to be exceeded at any time.

e) Adjusted Tier I feed rate screening limits. The owner or operator may adjust the feed rate screening limit provided by Appendix B to this Part to account for site-specific dispersion modeling. Under this approach, the adjusted feed rate screening limit is determined by back-calculating from the acceptable ambient level for chlorine gas provided by Appendix D to this Part using dispersion modeling to determine the maximum allowable emission rate. This emission rate becomes the adjusted Tier I feed rate screening limit.

f) Emissions testing. Emissions testing for HCl and chlorine gas (Cl₂) must be conducted using the procedures described in Method 0050 or 0051, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).

g) Dispersion modeling. Dispersion modeling must be conducted according to the provisions of Section 726.206(h).

h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is "information" justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

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

Section 726.209 Low Risk Waste Exemption

a) Waiver of DRE standard. The DRE standard of Section 726.204(a) does not apply if the BIF is operated in conformance with subsection (a)(1) of this Section, and the owner or operator demonstrates by procedures prescribed in subsection (a)(2) of this Section, that the burning will not result in unacceptable adverse health effects.

1) The device must be operated as follows:

A) A minimum of 50 percent of fuel fired to the device must be fossil fuel, fuels derived from fossil fuel, tall oil, or, if approved by the Agency on a case-by-case basis, other nonhazardous fuel with combustion characteristics comparable to fossil fuel. Such fuels are termed "primary fuel" for purposes of this Section. (Tall oil is a fuel derived from vegetable and rosin fatty acids.) The 50 percent primary fuel firing rate must be determined on a total heat or mass input basis, whichever results in the greater mass feed rate of primary fuel fired;

B) Primary fuels and hazardous waste fuels must have a minimum as-fired heating value of 8,000 Btu/lb;

C) The hazardous waste is fired directly into the primary fuel flame zone of the combustion chamber; and

D) The device operates in conformance with the CO controls provided by Section 726.204(b)(1). Devices subject to the exemption provided by this Section are not eligible for the alternative CO controls provided by Section 726.204(c).

2) Procedures to demonstrate that the hazardous waste burning will not pose unacceptable adverse public health effects are as follows:

A) Identify and quantify those nonmetal compounds listed in Appendix H to 35 Ill. Adm. Code 721, that could reasonably be expected to be present in the hazardous waste. The constituents excluded from analysis must be identified and the basis for their exclusion explained;

B) Calculate reasonable, worst case emission rates for each constituent identified in subsection (a)(2)(A) of this Section, by assuming the device achieves 99.9 percent destruction and removal efficiency. That is, assume that 0.1 percent of the mass weight of each constituent fed to the device is emitted.

C) For each constituent identified in subsection (a)(2)(A) of this Section, use emissions dispersion modeling to predict the maximum annual average ground level concentration of the constituent.

i) Dispersion modeling must be conducted using methods specified in Section 726.206(h).

ii) An owner or operator of a facility with more than one on-site stack from a BIF that is exempt under this Section must conduct dispersion modeling of emissions from all stacks exempt under this Section to predict ambient levels prescribed by this subsection (a)(2).

D) Ground level concentrations of constituents predicted under subsection (a)(2)(C) of this Section, must not exceed the following levels:

i) For the noncarcinogenic compounds listed in Appendix D, the levels established in Appendix D;

ii) For the carcinogenic compounds listed in Appendix E:

Where:

$S (A_i/L_i)$ ~~means~~ is the sum of the values of X for each carcinogen i, from $i = 1$ to n . ~~n means nn~~ n = the number of carcinogenic ~~compounds~~ Actual compounds; ~~A_i~~ A_i = actual ground level concentration of carcinogen "i"; ~~L_i~~ L_i = Level established in Appendix E for carcinogen "i"; ~~and~~ and

iii) For constituents not listed in Appendix D or E, $0.1 \mu\text{g}/\text{m}^3$ ~~3~~ 3.

b) Waiver of ~~particular~~ particulate matter standard. The PM standard of Section 726.205 does not apply if the following occur:

- 1) The DRE standard is waived under subsection (a) of this Section; and
- 2) The owner or operator complies with the Tier I, or adjusted Tier I, metals feed rate screening limits provided by Section 726.206(b) or (e).

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

~~Section 726. Appendix C Tier II Emission Rate Screening Limits for Free Chlorine and Hydrogen Chloride~~

~~Noncomplex Terrain~~

~~Urban areas Noncomplex Terrain~~

~~Rural areas Complex Terrain~~

~~Urban and rural areas TESH (m) Chlorine Gas (g/hr) HCl (g/hr) Chlorine Gas (g/hr) HCl (g/hr) Chlorine gas (g/hr) HCl (g/hr)~~

482.1400.42.730.19.330.691.1600.48.830.28.490.8100.1800.53.	.1.710.1.12.2
.62.1100.58.1000.12130.2300.77.1300.72.1300.14150.2600.91.1600.91.1600.16170.290	
0.120.2000.110.1800.18190.3300.140.2500.120.2000.20210.3700.180.3100.130.2300.22	
24.4200.23.3.140.2.2427.29.160.2.26310.54.37.17.	
3000.28350.6000.470.8100.190.3400.30390.6900.580.10000.210.3700.35530.9200.960.1	
7000.260.4600.40620.11000.1400.25000.330.5700.45820.14000.2000.35000.400.7000.50	
11.1.2.5513.23.3.20.11.2.6	
.770.13.652.3.11.10.1.7.23.3.72.130000.1	
100.18000.752500.45000.8600.150000.1200.20000.802900.50000.10000.180000.1300.230	
00.853300.58000.12000.220000.1400.25000.903700.66000.14000.250000.1600.29000.954	
200.74000.17000.300000.1800.32000.1004800.84000.21000.360000.2000.35000.1055300.	
92000.24000.430000.2300.39000.1106200.110000.29000.510000.2500.45.11572.13.	
000.35000.610000.2800.50000.1208200.140000.41000.720000.3200.56000.	

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

~~Section 726. Appendix D APPENDIX D Reference Air Concentrations~~

BOARD NOTE: The RAC for other Appendix H to 35 Ill. Adm. Code 721 constituents not listed below or in Appendix E is 0.1 ug/m3.

Constituent	CAS No.	RAC (<u>ug</u> /m3)	Acetaldehyde	75-07-010	Acetonitrile	75-05-	
810	Acetophenone	98-86-2100	Acrolein	107-02-820	Aldicarb	116-06-31	
Aluminum	Phosphide	20859-73-80.3	Allyl Alcohol	107-18-65	Antimony	7440-36-00.3	
Barium	Barium Cyanide	542-62-150	Bromomethane	74-83-90.8	Calcium Cyanide	592-01-830	
Carbon Disulfide	75-15-0200	Chloral	75-87-62	Chlorine (free)	0.42	Chloro-1,3-butadiene	126-99-83
Chromium III	16065-83-11000	Copper Cyanide	544-92-35	Cresols	1319-77-	350	
Cumene	98-82-81	Cyanide (free)	57-12-1520	Cyanogen	460-19-530	Cyanogen Bromide	506-68-380
Di-n-butyl Phthalate	84-74-2100	o-Dichlorobenzene	95-50-110	p-Dichlorobenzene	106-46-710	Dichlorodifluoromethane	75-71-82002,4-Dichlorophenol
120-83-23	Diethyl Phthalate	84-66-2800	Dimethoate	60-51-50.82,4-Dinitrophenol	51-28-52	Dinoseb	88-85-70.9
Diphenylamine	122-39-420	Endosulfan	115-29-10.05	Endrin	72-20-80.3	Fluorine	7782-41-450
Formic Acid	64-18-62000	Glycidylaldehyde	765-34-40.3	Hexachlorocyclopentadiene	77-47-45	Hexachlorophene	70-30-40.3
Hydrocyanic Acid	74-90-820	Hydrogen Chloride	7647-01-17	Hydrogen Sulfide	7783-06-43	Isobutyl Alcohol	78-83-1300
Lead	7439-92-10.09	Maleic Anhydride	108-31-6100	Mercury	7439-97-60.3	Methacrylonitrile	126-98-70.1
Methomyl	16752-77-520	Methoxychlor	72-43-550	Methyl Chlorocarbonate	79-22-11000	Methyl Ethyl Ketone	78-93-380
Methyl Parathion	298-00-00.3	Nickel Cyanide	557-19-720	Nitric Oxide	10102-43-9100	Nitrobenzene	98-95-30.8
Pentachlorobenzene	608-93-50.8	Pentachlorophenol	87-86-530	Phenol	108-95-230	M-Phenylenediamine	108-45-25
Phenylmercuric Acetate	62-38-40.075	Phosphine	7803-51-20.3	Phthalic Anhydride	85-44-92000	Potassium Cyanide	151-50-850
Potassium Silver Cyanide	506-61-6200	Pyridine	110-86-11	Selenious Acid	7783-60-83	Selenourea	630-10-

45Silver7440-22-43Silver Cyanide506-64-9100Sodium Cyanide143-33-930Strychnine57-24-90.31,2,4,5-Tetrachlorobenzene95-94-30.32,3,4,6-Tetrachlorophenol58-90-230Tetraethyl Lead78-00-20.0001Tetrahydrofuran109-99-910Thallic Oxide1314-32-50.3Thallium7440-28-00.5Thallium (I) Acetate563-68-80.5Thallium (I) Carbonate6533-73-90.3Thallium (I) Chloride7791-12-00.3Thallium (I) Nitrate10102-45-10.5Thallium Selenite12039-52-00.5Thallium (I) Sulfate7446-18-60.075Thiram137-26-85Toluene108-88-33001,2,4-Trichlorobenzene120-82-120Trichloromonofluoromethane75-69-~~43002.4.5-Trichlorophenol~~~~12,4,5~~~~43002.4.5-~~Trichlorophenol95-95-4100Vanadium Pentoxide1314-62-120Warfarin81-81-20.3Xylenes1330-20-780Zinc Cyanide557-21-150Zinc Phosphide1314-84-70.3
(Source: Amended at 32 Ill. Reg. _____, effective _____)

Section 726. ~~Appendix A~~ E Risk-Specific Doses

BOARD NOTE: These are risk specific doses (RSDs) based on a risk of 1 in 10,000-~~(1⁻¹⁰-5)~~
(1⁻¹⁰-5) .

Constituent	CAS No.	Unit risk (cu_m3/mgug)	RSD (mgug/m3)	Acrylamide	79-06-10
Acrylonitrile	107-13-10	0.0077	0.0077	0.15	0.00068
Aldrin	309-00-20	0.0049	0.0049	0.30	0.0000741
Arsenic	7440-38-20	0.0043	0.0043	0.43	0.000074
Benz(a)anthracene	56-55-30	0.00089	0.011	0.22	0.000083
Benzene	71-43-20	0.000083	1.2	0.000083	1.2
Benzidine	92-87-50	0.0015	0.067	0.0033	0.0033
Benzo(a)pyrene	50-32-80	0.0024	0.0042	0.0033	0.0033
Beryllium	7440-41-70	0.0024	0.0042	0.0042	0.0042
Bis(2-chloroethyl) ether	111-44-40	0.00033	0.03	0.062	0.062
Bis(chloromethyl) ether	542-88-10	0.0016	1.3	0.0016	1.3
Bis(2-ethylhexyl)-phthalate	117-81-70	0.000024	1.37	0.000024	1.3
Butadiene	106-99-00	0.0028	0.036	0.0028	0.036
Cadmium	7440-43-90	0.0018	0.0056	0.0018	0.018
Carbon Tetrachloride	56-23-50	0.00015	0.67	0.00015	0.67
Chlordane	57-74-90	0.0037	0.027	0.0037	0.43
Chloroform	67-66-30	0.00023	2.8	0.00023	2.8
Chloromethane	74-87-30	0.00036	0.00036	0.00036	2.8
Chromium VI	7440-47-30	0.0083	0.012	0.00097	0.00097
DDT	50-29-30	0.00097	1.0	0.00097	1.0
Dibenz(a,h)anthracene	53-70-30	0.014	0.0071	0.0071	2.3
Dibromoethane	106-93-22	0.451	0.0022	0.0451	1.2
Dichloroethane	75-34-30	0.0026	0.381	0.0026	0.381
Dichloroethane	107-06-20	0.00026	0.381	0.00026	0.381
Dichloroethylene	75-35-40	0.0005	0.201	0.0005	0.201
Dichloropropene	542-75-60	0.00029	0.35	0.00029	0.35
Dieldrin	60-57-10	0.0046	0.0022	0.0046	0.14
Diethylstilbestrol	156-53-10	0.00071	10.14	0.00071	10.14
Dimethylnitrosamine	62-75-90	0.014	0.0071	0.014	0.0071
Dinitrotoluene	121-14-20	0.00088	0.111	0.00088	0.111
Diphenylhydrazine	122-66-70	0.0022	0.0451	0.0022	0.0451
Dioxane	123-91-10	0.000014	1.1	0.000014	1.1
Epichlorohydrin	106-89-80	0.000012	8.3	0.000012	8.3
Ethylene Oxide	75-21-80	0.001	0.10	0.001	0.10
Ethylene Dibromide	106-93-40	0.0022	0.045	0.0022	0.045
Formaldehyde	50-00-00	0.00013	0.77	0.00013	0.77
Heptachlor	76-44-80	0.0077	0.0013	0.0077	0.0013
Heptachlor Epoxide	1024-57-30	0.026	0.0038	0.026	0.0038
Hexachlorobenzene	118-74-10	0.0049	0.02	0.0049	0.02
Hexachlorobutadiene	87-68-30	0.0002	0.5	0.0002	0.5
Alpha-hexachlorocyclohexane	319-84-60	0.0018	0.0056	0.0018	0.0056
Beta-hexachlorocyclohexane	319-85-70	0.0053	0.019	0.0053	0.019
Gamma-hexachlorocyclohexane	58-89-90	0.0038	0.026	0.0038	0.026
Hexachlorodibenzo-p-dioxin (1,2 Mixture)	10-000510	0.00051	0.02	0.00051	0.02
Hexachloroethane	67-72-10	0.000077	1.3	0.000077	1.3
Hydrazine	302-01-20	0.0029	0.0034	0.0029	0.0034
Hydrazine Sulfate	302-01-20	0.0029	0.0034	0.0029	0.0034
Methylcholanthrene	56-49-50	0.0027	0.0037	0.0027	0.0037
Methyl Hydrazine	60-34-40	0.0031	0.032	0.0031	0.032
Methylene Chloride	75-09-20	0.00041	2.44	0.00041	2.44
Methylene-bis-2-					

chloroaniline101-14-~~40.0000470.2140.000047~~ 0.21Nickel7440-02-
~~00.000240.04200.00024~~ 0.042Nickel Refinery Dust7440-02-~~00.000240.04200.00024~~
~~0.042~~Nickel Subsulfide12035-72-~~20.000480.021220.00048~~ 0.0212-Nitropropane79-46-
~~90.0270.0003790.027~~ 0.00037N-Nitroso-n-butylamine924-16-~~30.00160.006330.0016~~
~~0.0063~~N-Nitroso-n-methylurea684-93-~~50.0860.0001250.086~~ 0.00012N-
Nitrosodiethylamine55-18-~~50.0430.0002350.043~~ 0.00023N-Nitrosopyrrolidine930-55-
~~20.000610.01620.00061~~ 0.016Pentachloronitrobenzene82-68-~~80.0000730.1480.000073~~
~~0.14~~PCBs1336-36-~~30.00120.008330.0012~~ 0.0083Pronamide23950-58-
~~50.00000462.250.0000046~~ 2.2Reserpine50-55-~~50.332,3,7,8-~~
~~Tetrachlorodibenzo~~50.0030 0.00332,3,7,8-Tetrachloro-dibenzo-p-dioxin1746-01-
~~645.0.000000221,1,2,2645.~~ 0.000000221,1,2,2-Tetrachloroethane79-34-
~~50.0000580.1750.000058~~ 0.17Tetrachloroethylene127-18-~~40.0000004821.40.00000048,~~
~~21.~~Thiourea62-56-~~60.000550.0181,1,260.00055~~ 0.0181,1,2-Trichloroethane79-00-
~~50.0000160.6350.000016~~ 0.63Trichloroethylene79-01-~~60.00000137.72,4,650.0000013~~
~~7.72,4,6~~-Trichlorophenol88-06-~~20.00000571.820.0000057~~ 1.8Toxaphene8001-35-
~~20.000320.03120.00032~~ 0.031Vinyl Chloride75-01-~~40.00000711.440.0000071~~ 1.4
(Source: Amended at 32 Ill. Reg. _____, effective _____)

~~ILLINOIS REGISTER~~

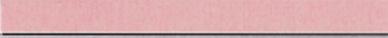
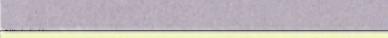
~~JCAR350726-0805605r01~~

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

Document comparison done by DeltaView on Thursday, April 03, 2008 2:15:52 PM

Input:	
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Document 2	file:///I:/Input/35-726-R01(issue15).doc
Rendering set	Standard

Legend:	
<u>Insertion</u>	
Deletion	
Moved from	
<u>Moved to</u>	
Style change	
Format change	
Moved-deletion	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics:	
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Insertions	127
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Moved from	0
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Style change	0
Format changed	0
Total changes	321