

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 November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14533, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. 9727, effective June 17, 1991; amended in R91-13 at 16 Ill. Reg. 9858, effective June 9, 1992; amended in R92-10 at 17 Ill. Reg. 5865, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20904, effective November 22, 1993; amended in R94-7 at 18 Ill. Reg. 12500, effective July 29, 1994; amended in R95-4/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 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. 12741, effective July 14, 2008; amended in R11-2/R11-16 at 35 Ill. Reg. 18117, effective October 14, 2011; amended in R13-5 at 37 Ill. Reg. 3249, effective March 4, 2013; amended in R13-15 at 37 Ill. Reg. 17888, effective October 24, 2013; amended in R16-7 at 40 Ill. Reg. 11955, effective August 9, 2016; amended in R17-14/R17-15/R18-12/R18-31 at 42 Ill. Reg. 23023, effective November 19, 2018.

SUBPART A: GENERAL

Section 726.102 Electronic Reporting

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

BOARD NOTE: Derived from 40 CFR 3, as added, and 40 CFR 271.10(b), 271.11(b), and 271.12(h) (2005), as amended at 70 Fed. Reg. 59848 (Oct. 13, 2005).

(Source: Added at 31 Ill. Reg. 1096, effective December 20, 2006)

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER
CONSTITUTING DISPOSAL

Section 726.120 Applicability

- a) The regulations of this Subpart C apply to recyclable materials that are applied to or placed on the land in either of the following ways:
 - 1) Without mixing with any other substances; or

- 2) After mixing or combination with any other substances. These materials will be referred to throughout this Subpart C as “materials used in a manner that constitutes disposal”.
- b) A product produced for the general public’s use that is used in a manner that constitutes disposal and which contains recyclable material is not presently subject to regulation under this Subpart C if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in Subpart D of 35 Ill. Adm. Code 728 (or applicable prohibition levels in 35 Ill. Adm. Code 728.132 or 728.139, where no treatment standards have been established) for each recyclable material (i.e., hazardous waste) that it contains, and the recycler complies with 35 Ill. Adm. Code 728.107(b)(6).
 - c) Anti-skid and deicing uses of slags that are generated from high temperature metals recovery (HTMR) processing of hazardous wastes K061, K062, and F006 in a manner constituting disposal are not covered by the exemption in subsection (b), and such uses of these materials remain subject to regulation.
 - d) Fertilizers that contain recyclable materials are not subject to regulation provided that the following conditions are fulfilled:
 - 1) They are zinc fertilizers excluded from the definition of solid waste according to 35 Ill. Adm. Code 721.104(a)(21); or
 - 2) They meet the applicable treatment standards in Subpart D of 35 Ill. Adm. Code 728 for each hazardous waste that they contain.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.121 Standards Applicable to Generators and Transporters of Materials Used in a Manner that Constitutes Disposal

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

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.122 Standards Applicable to Storers, Who Are Not the Ultimate Users, of Materials that Are To Be Used in a manner that Constitutes Disposal

An owner or operator of a facility that stores a recyclable material that is to be used in a manner that constitutes disposal, but which is not the ultimate user of the material, is regulated under all applicable provisions of Subparts A through L of 35 Ill. Adm. Code 724, 725; and 727 and 35 Ill. Adm. Code 702, 703, and 705; and the notification requirement under section 3010 of the Resource Conservation and Recovery Act.

(Source: Amended at 35 Ill. Reg. 18117, effective October 14, 2011)

Section 726.123 Standards Applicable to Users of Materials that Are Used in a Manner that Constitutes Disposal

- a) An owner or operator of a facility that uses a recyclable material in a manner that constitutes disposal is regulated under all applicable provisions of 35 Ill. Adm. Code 702, 703, and 705; Subparts A through N of 35 Ill. Adm. Code 724; Subparts A through N of 35 Ill. Adm. Code 725; 35 Ill. Adm. Code 728; and the notification requirement under Section 3010 of the Resource Conservation and Recovery Act. (These requirements do not apply to a product that contains this recyclable material under the provisions of Section 726.120(b)).
- b) The use of waste or used oil or other material that is contaminated with dioxin or any other hazardous waste (other than a waste identified solely on the basis of ignitability) for dust suppression or road treatment is prohibited.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

SUBPART D: HAZARDOUS WASTE BURNED FOR ENERGY RECOVERY

Section 726.130 Applicability (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.131 Prohibitions (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.132 Standards ~~applicable~~ Applicable to ~~generators~~ Generators of ~~hazardous waste fuel~~ Hazardous Waste Fuel (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.133 Standards ~~applicable~~ Applicable to ~~transporters~~ Transporters of ~~hazardous waste fuel~~ Hazardous Waste Fuel (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.134 Standards ~~applicable-Applicable~~ to ~~marketers-Marketers~~ of ~~hazardous waste fuel-Hazardous Waste Fuel~~ (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.135 Standards ~~applicable-Applicable~~ to ~~burners-Burners~~ of ~~waste fuel-Waste Fuel~~ (Repealed)

(Source: Repealed at 16 Ill. Reg. 9858, effective June 9, 1992)

Section 726.136 Conditional ~~exemption-Exemption~~ for ~~spent materials-Spent Materials~~ and ~~by-products exhibiting-By-Products Exhibiting~~ a ~~characteristic-Characteristic~~ of ~~hazardous waste-Hazardous Waste~~ (Repealed)

(Source: Repealed at 15 Ill. Reg. 9727, effective June 17, 1991)

SUBPART E: USED OIL BURNED FOR ENERGY RECOVERY (Repealed)

Section 726.140 Applicability (Repealed)

(Source: Repealed at 17 Ill. Reg. 20904, effective November 22, 1993)

Section 726.141 Prohibitions (Repealed)

(Source: Repealed at 17 Ill. Reg. 20904, effective November 22, 1993)

Section 726.142 Standards ~~applicable-Applicable~~ to ~~generators-Generators~~ of ~~used oil burned Used Oil Burned~~ for ~~energy recovery-Energy Recovery~~ (Repealed)

(Source: Repealed at 17 Ill. Reg. 20904, effective November 22, 1993)

Section 726.143 Standards ~~applicable-Applicable~~ to ~~marketers-Marketers~~ of ~~used oil burned Used Oil Burned~~ for ~~energy recovery-Energy Recovery~~ (Repealed)

(Source: Repealed at 17 Ill. Reg. 20904, effective November 22, 1993)

Section 726.144 Standards ~~applicable-Applicable~~ to ~~burners-Burners~~ of ~~used-oil-burned-Used~~ Oil Burned for ~~energy recovery-Energy Recovery~~ (Repealed)

(Source: Repealed at 17 Ill. Reg. 20904, effective November 22, 1993)

SUBPART F: RECYCLABLE MATERIALS UTILIZED FOR PRECIOUS METAL RECOVERY

Section 726.170 Applicability and Requirements

- a) The regulations of this Subpart F apply to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these metals.
- b) A person that generates, transports, or stores recyclable materials that are regulated under this Subpart F is subject to the following requirements:
 - 1) Notification requirements under Section 3010 of RCRA (42 USC 6930);
 - 2) Subpart B of 35 Ill. Adm. Code 722 (for a generator), 35 Ill. Adm. Code 723.120 and 723.121 (for a transporter), and 35 Ill. Adm. Code 725.171 and 725.172 (for a person that stores); and
 - 3) For precious metals exported to or imported from other countries for recovery, Subpart H of 35 Ill. Adm. Code 722 and 725.112.
- c) A person that stores recycled materials that are regulated under this Subpart F must keep the following records to document that it is not accumulating these materials speculatively (as defined in 35 Ill. Adm. Code 721.101(c));
 - 1) Records showing the volume of these materials stored at the beginning of the calendar year;
 - 2) The amount of these materials generated or received during the calendar year; and
 - 3) The amount of materials remaining at the end of the calendar year.
- d) Recyclable materials that are regulated under this Subpart F that are accumulated speculatively (as defined in 35 Ill. Adm. Code 721.101(c)) are subject to all applicable provisions of 35 Ill. Adm. Code 702, 703, and 722 through 727.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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) 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 spent lead-acid batteries will be reclaimed through regeneration (such as by electrolyte replacement), the owner or operator is exempt from the requirements of 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 (42 USC 6930), but the owner or operator is subject to the requirements of 35 Ill. Adm. Code 721 and 722.111.
 - 2) If the spent lead-acid 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 the requirements of 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 (42 USC 6930), but the owner or operator is subject to the requirements of 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
 - 3) If the spent lead-acid 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 the requirements of 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 (42 USC 6930), but the owner or operator is subject to the requirements of 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
 - 4) If the spent lead-acid 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 the requirements of Section 726.180(b) and other requirements described in that subsection, and the owner or operator is subject to the requirements of 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.
 - 5) If the spent lead-acid 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 the requirements of 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 (42 USC 6930), and the owner or operator is subject to the requirements of 35 Ill. Adm. Code 721 and 722.111 and applicable provisions of 35 Ill. Adm. Code 728.

- 6) If the spent lead-acid batteries will be reclaimed through regeneration or any other means, and the batteries are exported for reclamation in a foreign country, the owner or operator is exempt from 35 Ill. Adm. Code 702, 703, 722 (except for 35 Ill. Adm. Code 722.111, 722.112 and Subpart H of 35 Ill. Adm. Code 722), 723 through 726, and 728, and the notification requirements at section 3010 of RCRA (42 USC 6930). The owner or operator is subject to the requirements of 35 Ill. Adm. Code 721, 722.111, and 722.112 and Subpart H of 35 Ill. Adm. Code 722.
- 7) If the spent lead-acid batteries will be reclaimed through regeneration or any other means, the person that transports the batteries in the United States to export them for reclamation in a foreign country (the transporter) is exempt from 35 Ill. Adm. Code 702, 703, 723 through 726, and 728, and the notification requirements at section 3010 of RCRA (42 USC 6930). The transporter must comply with the applicable requirements in Subpart H of 35 Ill. Adm. Code 722.
- 8) If the spent lead-acid batteries will be reclaimed other than through regeneration, and the person that imports the batteries from a foreign country and stores them but is not the reclaimer, the person is exempt from 35 Ill. Adm. Code 722 (except for 35 Ill. Adm. Code 722.111 and 722.112 and Subpart H of 35 Ill. Adm. Code 722), 702, 703, 723, 724, 725, and 726, and the notification requirements at section 3010 of RCRA (42 USC 6930). The person is subject to 35 Ill. Adm. Code 721, 722.111, 722.112, Subpart H of 35 Ill. Adm. Code 722, and applicable provisions of 35 Ill. Adm. Code 728.
- 9) If the spent lead-acid batteries will be reclaimed other than through regeneration, and the person that imports the batteries from a foreign country and stores them before reclaiming them, the person must comply with 35 Ill. Adm. Code 726.180(b) and as appropriate other regulatory provisions described in 35 Ill. Adm. Code 726.180(b). The person is subject to 35 Ill. Adm. Code 721, 722.111, 722.112, Subpart H of 35 Ill. Adm. Code 722, and applicable provisions of 35 Ill. Adm. Code 728.
- 10) If the spent lead-acid batteries will be reclaimed other than through regeneration, and the person that imports the batteries from a foreign country does not store them before reclaiming them, the person is exempt from 35 Ill. Adm. Code 702, 703, 722 (except for 35 Ill. Adm. Code 722.111 and 722.112 and Subpart H of 35 Ill. Adm. Code 722), 723,

724, 725, and 726 and the notification requirements at section 3010 of RCRA (42 USC 6930). The person is subject to 35 Ill. Adm. Code 721, 722.111, 722.112, Subpart H of 35 Ill. Adm. Code 722, 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 RCRA (42 USC 6930);
 - 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;
 - G) All applicable provisions in 35 Ill. Adm. Code 702 and 703; and
 - H) All applicable provisions in 35 Ill. Adm. Code 727.
 - 2) For a permitted facility, the following requirements:
 - A) The notification requirements under section 3010 of RCRA (42 USC 6930);
 - 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;
- G) All applicable provisions in 35 Ill. Adm. Code 702 and 703; and
- H) All applicable provisions in 35 Ill. Adm. Code 727.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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

- 2) The following standards continue to apply:
 - A) If an owner or operator elects to comply with 35 Ill. Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events, Section 726.202(e)(1), requiring operations in accordance with the operating requirements specified in the permit at all times that hazardous waste is in the unit, and Section 726.202(e)(2)(C), requiring compliance with the emission standards and operating requirements, during startup and shutdown if hazardous waste is in the combustion chamber, except for particular hazardous wastes. These provisions apply only during startup, shutdown, and malfunction events;
 - B) The closure requirements of Sections 726.202(e)(11) and 726.203(l);
 - C) The standards for direct transfer of Section 726.211;
 - D) The standards for regulation of residues of Section 726.212; 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) and 63.1217(e), each 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 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 (November 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 VSQGs pursuant to 35 Ill. Adm. Code 722.114; 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), 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):

- 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);
 - 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); 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).

- 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). The owner or operator must comply with the requirements of subsection (d)(1) 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 and baghouse bags used to capture metallic dusts emitted by steel manufacturing are exempt from the requirements of subsection (d)(1), provided the following are true:
 - i) A waste listed in Appendix K must contain recoverable levels of lead, a waste listed in Appendix L must contain recoverable levels of nickel or chromium, a waste listed in Appendix M 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) 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), and records to document compliance with subsection (d)(3) 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 that contains a total concentration of more than 500 ppm toxic organic compounds listed in Appendix H of 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 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 of 35 Ill. Adm. Code 721 of less than 500 ppm by weight, as fired and as provided in subsection (d)(2)(A), or is listed in Appendix K.
- 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.

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

“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).

“µg” means microgram.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.201 Management Prior to Burning

- a) Generators. A generator of hazardous waste that is burned in a BIF is subject to 35 Ill. Adm. Code 722.
- b) Transporters. A transporter of hazardous waste that is burned in a BIF is subject to 35 Ill. Adm. Code 723.
- c) Storage and Treatment Facilities
 - 1) An owner or operator of a facility that stores or treats hazardous waste that is burned in a BIF is subject to the applicable provisions of 35 Ill. Adm. Code 702, 703, 724, 725, and 727, except as provided by subsection (c)(2). These

standards apply to storage and treatment by the burner, as well as to any storage or treatment facility operated by an intermediary (a processor, blender, distributor, etc.) between the generator and the burner.

- 2) An owner or operator of a facility that burns, in an on-site BIF exempt from regulation under the small quantity burner provisions of Section 726.208, hazardous waste that it generates is exempt from regulation under 35 Ill. Adm. Code 702, 703, 724, 725, and 727 that are applicable to storage units for those storage units that store mixtures of hazardous waste and the primary fuel to the BIF in tanks that feed the fuel mixture directly to the burner. Storage of hazardous waste prior to mixing with the primary fuel is subject to regulation, as prescribed in subsection (c)(1).

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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 (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), 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), 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);
 - ii) Minimum and maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6);
 - 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);
 - vi) An appropriate indicator of combustion gas velocity, measured and specified as prescribed in subsection (e)(6), 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), 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);

- ii) Maximum device production rate when producing normal product expressed in appropriate units, and measured and specified as prescribed in subsection (e)(6);
 - 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 726.205(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);
 - ii) Total feed rate of hazardous waste measured and specified as prescribed in subsection (e)(6); 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);
- iii) Feed rate of each metal in the following feedstreams, measured and specified as prescribed in subsections (e)(6): total feed streams; total hazardous waste feed; and total pumpable hazardous waste feed;

BOARD NOTE: The Board has combined the text of 40 CFR 266.102(e)(4)(ii)(C)(1) and (e)(4)(ii)(C)(2) into this subsection (e)(4)(B)(iii) to comport with Illinois Administrative Code codification requirements.

- iv) Total feed rate of chlorine and chloride in total feed streams measured and specified as prescribed in subsection (e)(6);
- v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6);
- vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6);
- vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6);
- 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);

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

BOARD NOTE: The Board has combined the text of 40 CFR 266.102(e)(4)(iii)(C)(1) and (e)(4)(iii)(C)(2) into this subsection (e)(4)(C)(iii) to comport with Illinois Administrative Code codification requirements.

- iv) Total feed rate of chlorine and chloride in total feed streams measured and specified prescribed in subsection (e)(6);
- v) Maximum combustion gas temperature measured at a location indicative of combustion chamber temperature, and measured and specified as prescribed in subsection (e)(6);
- vi) Maximum flue gas temperature at the inlet to the PM APCS measured and specified as prescribed in subsection (e)(6);
- vii) Maximum device production rate when producing normal product expressed in appropriate units and measured and specified as prescribed in subsection (e)(6);
- 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);
 - ii) Feed rate of total hazardous waste measured and specified as prescribed in subsection (e)(6); 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);
 - iii) Total feed rate of chlorine and chloride in total feed streams, measured and specified as prescribed in subsection (e)(6);
 - iv) Maximum device production rate when producing normal product expressed in appropriate units, measured and specified as prescribed in subsection (e)(6);
 - 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), 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 266.102(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 266.102(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), 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) 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 266.102(e)(6)(ii)(B)(1) and (e)(6)(ii)(B)(2) to appear as definitions in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.

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

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

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). CO, HC, and oxygen monitors must be installed, operated, and maintained in accordance with methods specified in Appendix I; 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, 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 maintain in the operating record of the facility all information and data required by this Section 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 42 Ill. Reg. 23023, effective November 19, 2018)

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 725.250, 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)) 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) apply upon certification of compliance under subsection (c), 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), 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 (b) 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) under the procedures prescribed by this subsection (c). Based on the compliance test, the owner or operator must submit to the Agency a complete and accurate “certification of compliance” (under subsection (c)(4)) with those emission standards establishing limits on the operating parameters specified in subsection (c)(1).
- 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)) 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) 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) 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 Section 726.206(b) or (e);
- 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 726.206(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) and the total chlorine and chloride feed rate screening limits under Section 726.207(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), 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)) and a brief description of the sample gas conditioning system;
- BOARD NOTE: The Board has combined the text of 40 CFR 266.103(c)(2)(ii)(D)(1) through (c)(2)(ii)(D)(3) into this subsection (c)(2)(B)(iv) to comport with Illinois Administrative Code codification requirements.
- 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).

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) and under conditions established in the notification of compliance testing required by subsection (c)(2). 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;
 - 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)) 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

BOARD NOTE: The Board has combined the text of 40 CFR 266.103(c)(3)(ii)(B)(1) through (c)(3)(ii)(B)(5) into this subsection (c)(3)(B)(ii) to comport with Illinois Administrative Code codification requirements.

- iii) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of subsection (c)(1) 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), 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).
- 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). 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) 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) 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.

BOARD NOTE: The Board has combined the text of 40 CFR 266.103(c)(4)(ii)(B)(1) through (c)(4)(ii)(B)(9) into this subsection (c)(4)(B)(ii) to comport with Illinois Administrative Code codification requirements.

- 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).
- D) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in subsection (c)(1) 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.

BOARD NOTE: The Board has combined the text of 40 CFR 266.103(c)(4)(iv)(B)(1) and (c)(4)(iv)(B)(2) into this subsection (c)(4)(D)(ii) and moved the text of 40 CFR 266.103(c)(4)(iv)(B)(1)(i) and (c)(4)(iv)(B)(1)(ii) to appear as definitions in Section 726.200(i) to comport with Illinois Administrative Code codification requirements.

- 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) 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 CFR 266.103(c)(4)(iv)(C)(1) through (c)(4)(iv)(C)(3) into subsection (c)(4)(D)(iii) and moved the text of 40 CFR 266.103(c)(4)(iv)(C)(2)(i) and (c)(4)(iv)(C)(2)(ii) to appear as definitions in Section 726.200(i) 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).

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), a conditioned gas monitoring system may be used in conformance with specifications provided in Appendix I provided that the owner or operator submits a certification of compliance without using extensions of time provided by subsection (c)(7).
- 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), comply with the operating requirements prescribed in “Alternative Method to Implement the Metals Controls” in Appendix I; and
 - B) When complying with the requirements of subsection (c)(3)(B)(ii), comply with the operating requirements prescribed by that subsection.
- 7) An owner or operator that did 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 must stop burning hazardous waste and begin closure activities under subsection (l) for the hazardous waste portion of the facility.
- 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); 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).
- 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) within 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).
 - 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), hazardous waste burning must terminate on the date that the deadline is missed, closure activities must begin under subsection (l), 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 (1) 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) and upon certification of compliance under subsection (c), 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) 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; 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 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 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.204 Standards to Control Organic Emissions

- a) DRE Standard
 - 1) General. Except as provided in subsection (a)(3), a BIF burning hazardous waste must achieve a DRE of 99.99 percent for all organic hazardous constituents in the waste feed. To demonstrate conformance with this requirement, 99.99 percent DRE must be demonstrated during a trial burn for each principal organic hazardous constituent (POHC) designated (under subsection (a)(2)) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

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

Where:

I = Mass feed rate of one POHC in the hazardous waste fired to the BIF

O = Mass emission rate of the same POHC present in stack gas prior to release to the atmosphere

- 2) Designation of POHCs. POHCs are those compounds for which compliance with the DRE requirements of this Section must be demonstrated in a trial burn in conformance with procedures prescribed in 35 Ill. Adm. Code 703.232. One or more POHCs must be designated by the Agency for each waste feed to be burned. POHCs must be designated based on the degree of difficulty of destruction of the organic constituents in the waste and on their concentrations or mass in the waste feed considering the results of waste analyses submitted with Part B of the permit application. POHCs are most likely to be selected from among those compounds listed in Appendix H to 35 Ill. Adm. Code 721 that are also present in the normal waste feed. However, if the applicant demonstrates to the Agency that a compound not listed in Appendix H of 35 Ill. Adm. Code

721 or not present in the normal waste feed is a suitable indicator of compliance with the DRE requirements of this Section, that compound must be designated as a POHC. Such POHCs need not be toxic or organic compounds.

- 3) Dioxin-Listed Waste. A BIF burning hazardous waste containing (or derived from) USEPA Hazardous Wastes Nos. F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999 percent for each POHC designated (under subsection (a)(2)) in its permit. This performance must be demonstrated on POHCs that are more difficult to burn than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1). In addition, the owner or operator of the BIF must notify the Agency of intent to burn USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027.
 - 4) Automatic Waiver of DRE Trial Burn. Owners and operators of boilers operated under the special operating requirements provided by Section 726.210 are considered to be in compliance with the DRE standard of subsection (a)(1) and are exempt from the DRE trial burn.
 - 5) Low risk waste. Owners and operators of BIFs that burn hazardous waste in compliance with the requirements of Section 726.209(a) are considered to be in compliance with the DRE standard of subsection (a)(1) and are exempt from the DRE trial burn.
- b) CO Standard
- 1) Except as provided in subsection (c), the stack gas concentration of CO from a BIF burning hazardous waste cannot exceed 100 ppmv on an hourly rolling average basis (i.e., over any 60 minute period), continuously corrected to seven percent oxygen, dry gas basis.
 - 2) CO and oxygen must be continuously monitored in conformance with “Performance Specifications for Continuous Emission Monitoring of Carbon Monoxide and Oxygen for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste” in Appendix I.
 - 3) Compliance with the 100 ppmv CO limit must be demonstrated during the trial burn (for new facilities or an interim status facility applying for a permit) or the compliance test (for interim status facilities). To demonstrate compliance, the highest hourly rolling average CO level during any valid run of the trial burn or compliance test must not exceed 100 ppmv.
- c) Alternative CO Standard
- 1) The stack gas concentration of CO from a BIF burning hazardous waste may exceed the 100 ppmv limit provided that stack gas concentrations of

HCs do not exceed 20 ppmv, except as provided by subsection (f) for certain industrial furnaces.

- 2) HC limits must be established under this Section on an hourly rolling average basis (i.e., over any 60 minute period), reported as propane, and continuously corrected to seven percent oxygen, dry gas basis.
 - 3) HC must be continuously monitored in conformance with “Performance Specifications for Continuous Emission Monitoring of Hydrocarbons for Incinerators, Boilers, and Industrial Furnaces Burning Hazardous Waste” in Appendix I. CO and oxygen must be continuously monitored in conformance with subsection (b)(2).
 - 4) The alternative CO standard is established based on CO data during the trial burn (for a new facility) and the compliance test (for an interim status facility). The alternative CO standard is the average over all valid runs of the highest hourly average CO level for each run. The CO limit is implemented on an hourly rolling average basis, and continuously corrected to seven percent oxygen, dry gas basis.
- d) Special Requirements for Furnaces. Owners and operators of industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient (see Section 726.203(a)(5)(B)) at any location other than the end where products are normally discharged and where fuels are normally fired must comply with the HC limits provided by subsection (c) or (f) irrespective of whether stack gas CO concentrations meet the 100 ppmv limit of subsection (b).
- e) Controls for Dioxins and Furans. Owners and operators of BIFs that are equipped with a dry PM control device that operates within the temperature range of 450 °F through 750 °F, and industrial furnaces operating under an alternative HC limit established under subsection (f) must conduct a site-specific risk assessment as follows to demonstrate that emissions of chlorinated dibenzo-p-dioxins and dibenzofurans do not result in an increased lifetime cancer risk to the hypothetical maximum exposed individual (MEI) exceeding 1×10^{-5} (1 in 100,000):
- 1) During the trial burn (for new facilities or an interim status facility applying for a permit) or compliance test (for interim status facilities), determine emission rates of the tetra-octa congeners of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs/CDFs) using Method 0023A (Sampling Method for Polychlorinated Dibenzop-Dioxins and Polychlorinated Dibenzofurans 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);
 - 2) Estimate the 2,3,7,8-TCDD toxicity equivalence of the tetra-octa CDDs/CDFs congeners 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). Multiply the emission rates of CDD/CDF congeners with a toxicity equivalence greater than zero (see the procedure) by the calculated toxicity equivalence factor to estimate the equivalent emission rate of 2,3,7,8-TCDD;

- 3) Conduct dispersion modeling using methods recommended in 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 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, to predict the maximum annual average off-site ground level concentration of 2,3,7,8-TCDD equivalents determined under subsection (e)(2). The maximum annual average on-site concentration must be used when a person resides on-site; and
 - 4) The ratio of the predicted maximum annual average ground level concentration of 2,3,7,8-TCDD equivalents to the risk-specific dose (RSD) for 2,3,7,8-TCDD provided in Appendix E (2.2×10^{-7}) must not exceed 1.0.
- f) Monitoring CO and HC in the By-Pass Duct of a Cement Kiln. Cement kilns may comply with the CO and HC limits provided by subsections (b), (c), and (d) by monitoring in the by-pass duct provided that the following conditions are fulfilled:
- 1) Hazardous waste is fired only into the kiln and not at any location downstream from the kiln exit relative to the direction of gas flow; and
 - 2) The by-pass duct diverts a minimum of 10 percent of kiln off-gas into the duct.
- g) Use of Emissions Test Data to Demonstrate Compliance and Establish Operating Limits. Compliance with the requirements of this Section must be demonstrated simultaneously by emissions testing or during separate runs under identical operating conditions. Further, data to demonstrate compliance with the CO and HC limits of this Section or to establish alternative CO or HC limits under this Section must be obtained during the time that DRE testing, and where applicable, CDD/CDF testing under subsection (e) and comprehensive organic emissions testing under subsection (f) is conducted.
- h) Enforcement. For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements

of this Section is “information” justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 et seq.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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): 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:

$$P_c = \frac{P_m \times 14}{E - Y}$$

Where:

P_c = the corrected concentration of the pollutant in the stack gas

P_m = the measured concentration of the pollutant in the stack gas

E = the oxygen concentration on a dry basis in the combustion air fed to the device

Y = the measured oxygen concentration on a dry basis in the stack

- 2) For devices that feed normal combustion air, E will equal 21 percent. For devices that feed oxygen-enriched air for combustion (that is, air with an oxygen concentration exceeding 21 percent), the value of E will be the concentration of oxygen in the enriched air.
- 3) Compliance with all emission standards provided by this Subpart H must be based on correcting to seven percent oxygen using this procedure.
- d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 726.202) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the requirements of this Section is “information” justifying modification or revocation and re-issuance of a permit under 35 Ill. Adm. Code 703.270 through 703.273.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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) for each metal listed in subsection (b) 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):

[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 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).
 - 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.
 - 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. 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 must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^n \frac{A_i}{F_i} \leq 1.0$$

Where:

$\Sigma A_i/F_i$ = 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 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 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) is not listed in Appendices A through C, 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 J 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:

$$K = H \times V \times T$$

Where:

K = a parameter accounting for relative influence of stack height and plume rise

H = physical stack height (meters)

V = stack gas flow rate (m³/sec (cubic meters per second))

T = exhaust temperature (degrees K)

- 7) **Criteria for Facilities Not Eligible for Screening Limits.** If any criteria below are met, the Tier I (and Tier II) screening limits do not apply. Owners and operators of such facilities must comply with either

the Tier III standards provided by subsection (d) or with the adjusted Tier I feed rate screening limits provided by subsection (e).

- 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 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).
- 1) Noncarcinogenic metals. The emission rates of noncarcinogenic metals must not exceed the screening limits specified in Appendix A.
 - 2) Carcinogenic metals. The emission rates of carcinogenic metals must not exceed values derived from the screening limits specified in Appendix A. 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 must not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^n \frac{A_i}{E_i} \leq 1.0$$

Where:

$\sum A_i/E_i$ = the sum of the values of A/E for each metal “i”,
from i = 1 to n

n = number of carcinogenic metals

A_i = the actual emission rate to the device for metal “i”

E_i = the emission rate screening limit provided by Appendix A 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). 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) and Section 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).
 - 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. Appendices D and E 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).
- 3) Carcinogenic Metals. For the carcinogenic metals the sum of the ratios of the predicted maximum annual average off-site ground level concentrations (except that on-site concentrations must be considered if a person resides on site) to the RSD for all carcinogenic metals emitted must not exceed 1.0 as determined by the following equation:

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

Where:

$\sum P_i/R_i$ = the sum of the values of P/R for each metal “i”, from
i = 1 to n

n = number of carcinogenic metals

P_i = the predicted ambient concentration for metal i

R_i = the RSD for metal i

- 4) Noncarcinogenic Metals. For the noncarcinogenic metals, the predicted maximum annual average off-site ground level concentration for each metal must not exceed the RAC.
- 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 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). 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 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 Appendices D and E 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).
- f) Alternative Implementation Approaches
 - 1) Pursuant to subsection (f)(2) 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) alternative to monitoring the feed rate of metals in each feedstream.
 - 2) The emission limits provided by subsection (d) must be determined as follows:
 - A) For each noncarcinogenic metal, by back-calculating from the RAC provided in Appendix D 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); and
 - B) For each carcinogenic metal by the following methods:
 - i) By back-calculating from the RSD provided in Appendix E 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); 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), 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 Testing1) 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 42 Ill. Reg. 23023, effective November 19, 2018)

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).
- b) Screening Limits
 - 1) Tier I Feed Rate Screening Limits. Feed rate screening limits are specified for total chlorine in Appendix B 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 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 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 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 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 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 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.208 Small Quantity On-Site Burner Exemption

- a) Exempt Quantities. An owner or operator of a facility that burns hazardous waste in an on-site BIF is exempt from the requirements of this Subpart H provided that the following conditions are fulfilled:
- 1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in Table A based on the TESH, as defined in Sections 726.200(i) and 726.206(b)(3).

- 2) The maximum hazardous waste firing rate does not exceed at any time one percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste;
 - 3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and
 - 4) The hazardous waste fuel does not contain (and is not derived from) USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027.
- b) **Mixing with Non-Hazardous Fuels.** If hazardous waste fuel is mixed with a non-hazardous fuel, the quantity of hazardous waste before such mixing is used to comply with subsection (a).
- c) **Multiple Stacks.** If an owner or operator burns hazardous waste in more than one on-site BIF exempt pursuant to this Section, the quantity limits provided by subsection (a)(1), are implemented according to the following equation:

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

Where:

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

n = the number of stacks

C_i = Actual Quantity Burned means the waste quantity burned per month in device “i”

L_i = Allowable Quantity Burned means the maximum allowable exempt quantity for stack “i” from Table A

BOARD NOTE: Hazardous wastes that are subject to the special requirements for VSQGs pursuant to 35 Ill. Adm. Code 722.114 may be burned in an off-site device pursuant to the exemption provided by Section 726.208, but must be included in the quantity determination for the exemption.

- d) **Notification Requirements.** The owner or operator of facilities qualifying for the small quantity burner exemption pursuant to this Section must provide a one-time signed, written notice to the Agency indicating the following:
- 1) The combustion unit is operating as a small quantity burner of hazardous waste;

- 2) The owner and operator are in compliance with the requirements of this Section; and
 - 3) The maximum quantity of hazardous waste that the facility is allowed to burn per month, as provided by Section 726.208(a)(1).
- e) **Recordkeeping Requirements.** The owner or operator must maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate and heating value limits of this Section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month and the heating value of the hazardous waste.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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), and the owner or operator demonstrates by procedures prescribed in subsection (a)(2), 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 of 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), 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), 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), must not exceed the following levels:
- i) For the noncarcinogenic compounds listed in Appendix D, the levels established in Appendix D.
- ii) For the carcinogenic compounds listed in Appendix E:

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

Where:

$\Sigma (A_i/L_i)$ = the sum of the values of X for each carcinogen i, from i = 1 to n

n means the number of carcinogenic compounds

A_i = Actual ground level concentration of carcinogen "i"

L_i = Level established in Appendix E for carcinogen "i"

- iii) For constituents not listed in Appendix D or E, $0.1 \mu\text{g}/\text{m}^3$.
- b) Waiver of 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); 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 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.210 Waiver of DRE Trial Burn for Boilers

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

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

- 1) Viscosity. The viscosity of the hazardous waste fuel as fired must not exceed 300 SSU;
- 2) Particle size. When a high pressure air or steam atomizer, low pressure atomizer or mechanical atomizer is used, 70 percent of the hazardous waste fuel must pass through a 200 mesh (74 micron) screen, and when a rotary cup atomizer is used, 70 percent of the hazardous waste must pass through a 100 mesh (150 micron) screen;
- 3) Mechanical atomization systems. Fuel pressure within a mechanical atomization system and fuel flow rate must be maintained within the design range taking into account the viscosity and volatility of the fuel;
- 4) Rotary cup atomization systems. Fuel flow rate through a rotary cup atomization system must be maintained within the design range taking into account the viscosity and volatility of the fuel.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.211 Standards for Direct Transfer

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

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

“Container” means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars) and containers placed on or in a transport vehicle.
 - 2) This Section references several requirements provided in Subparts I and J of 35 Ill. Adm. Code 724 and Subparts I and J of 35 Ill. Adm. Code 725. For purposes of this Section, the term “tank systems” in those referenced requirements means direct transfer equipment, as defined in subsection (b)(1).
- c) General Operating Requirements

- 1) No direct transfer of a pumpable hazardous waste must be conducted from an open-top container to a BIF.
 - 2) Direct transfer equipment used for pumpable hazardous waste must always be closed, except when necessary to add or remove the waste, and must not be opened, handled, or stored in a manner that could cause any rupture or leak.
 - 3) The direct transfer of hazardous waste to a BIF must be conducted so that it does not do any of the following:
 - A) Generate extreme heat or pressure, fire, explosion, or violent reaction;
 - B) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health;
 - C) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
 - D) Damage the structural integrity of the container or direct transfer equipment containing the waste;
 - E) Adversely affect the capability of the BIF to meet the standards provided by Sections 726.204 through 726.207; or
 - F) Threaten human health or the environment.
 - 4) Hazardous waste must not be placed in direct transfer equipment, if it could cause the equipment or its secondary containment system to rupture, leak, corrode, or otherwise fail.
 - 5) The owner or operator of the facility must use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or its secondary containment systems. These include the following at a minimum:
 - A) Spill prevention controls (e.g., check valves, dry discount couplings, etc.); and
 - B) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.
- d) Areas Where Direct Transfer Vehicles (Containers) Are Located. Applying the definition of container pursuant to this Section, owners and operators must comply with the following requirements:
- 1) The containment requirements of 35 Ill. Adm. Code 724.275;

- 2) The use and management requirements of Subpart I of 35 Ill. Adm. Code 725, except for Sections 725.270 and 725.274, and except that in lieu of the special requirements of 35 Ill. Adm. Code 725.276 for ignitable or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon, as required in Tables 2-1 through 2-6 of “Flammable and Combustible Liquids Code,” NFPA 30, incorporated by reference in 35 Ill. Adm. Code 720.111(a). The owner or operator must obtain and keep on file at the facility a written certification by the local Fire Marshal that the installation meets the subject NFPA Codes; and
 - 3) The closure requirements of 35 Ill. Adm. Code 724.278.
- e) Direct Transfer Equipment. Direct transfer equipment must meet the following requirements:
- 1) Secondary Containment. For existing direct transfer equipment, an owner or operator must comply with the secondary containment requirements of 35 Ill. Adm. Code 725.293, except for Sections 725.293(a), (d), (e), and (i). For all new and direct transfer equipment, an owner or operator must comply with these secondary containment requirements prior to their being put into service;
 - 2) Requirements Prior to Meeting Secondary Containment Requirements
 - A) For existing direct transfer equipment that does not have secondary containment, the owner or operator must determine whether the equipment is leaking or is unfit for use. The owner or operator must obtain and keep on file at the facility a written assessment reviewed and certified by a qualified, registered professional engineer in accordance with 35 Ill. Adm. Code 703.126(d) that attests to the equipment’s integrity.
 - B) This assessment must determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the wastes to be transferred to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:
 - i) Design standards, if available, according to which the direct transfer equipment was constructed;
 - ii) Hazardous characteristics of the wastes that have been or will be handled;
 - iii) Existing corrosion protection measures;

- iv) Documented age of the equipment, if available, (otherwise, an estimate of the age); and
 - v) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion and erosion are accounted for.
 - C) If, as a result of the assessment specified above, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator must comply with the requirements of 35 Ill. Adm. Code 725.296(a) and (b).
- 3) Inspections and Recordkeeping
 - A) The owner or operator must inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the BIF:
 - i) Overfill/spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that it is in good working order;
 - ii) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation, etc.); and
 - iii) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to its design.
 - B) The owner or operator must inspect cathodic protection systems, if used, to ensure that they are functioning properly according to the schedule provided by 35 Ill. Adm. Code 725.295(b).
 - C) Records of inspections made pursuant to this subsection (e)(3) must be maintained in the operating record at the facility, and available for inspection for at least three years from the date of the inspection.
- 4) Design and Installation of New Ancillary Equipment. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.292.
- 5) Response to Leaks or Spills. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.296.
- 6) Closure. Owners and operators must comply with the requirements of 35 Ill. Adm. Code 725.297, except for 35 Ill. Adm. Code 725.297(c)(2) through (c)(4).

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.212 Regulation of Residues

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

- a) The device meets the following criteria:
 - 1) Boilers. Boilers must burn at least 50 percent coal on a total heat input or mass basis, whichever results in the greater mass feed rate of coal;
 - 2) Ore or Mineral Furnaces. Industrial furnaces subject to 35 Ill. Adm. Code 721.104(b)(7) must process at least 50 percent by weight of normal, nonhazardous raw materials;
 - 3) Cement Kilns. Cement kilns must process at least 50 percent by weight of normal cement-production raw materials;
- b) The owner or operator demonstrates that the hazardous waste does not significantly affect the residue by demonstrating conformance with either of the following criteria:
 - 1) Comparison of Waste-Derived Residue with Normal Residue. The waste-derived residue must not contain constituents listed in Appendix H of 35 Ill. Adm. Code 721 (toxic constituents) that could reasonably be attributable to the hazardous waste at concentrations significantly higher than in residue generated without burning or processing of hazardous waste, using the following procedure. Toxic compounds that could reasonably be attributable to burning or processing the hazardous waste (constituents of concern) include toxic constituents in the hazardous waste, and the organic compounds listed in Appendix H to 35 Ill. Adm. Code 721 that may be PICs. For polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans, analyses must be performed to determine specific congeners and homologues, and the results converted to 2,3,7,8-TCDD equivalent values using the procedure specified in section 4.0 of the documents referenced in Appendix I.
 - A) Normal Residue. Concentrations of toxic constituents of concern in normal residue must be determined based on analyses of a minimum of 10 samples representing a minimum of 10 days of operation. Composite samples may be used to develop a sample for analysis provided that the compositing period does not exceed 24 hours. The upper tolerance limit (at 95 percent confidence with a 95 percent proportion of the sample distribution) of the concentration in the normal residue must be considered the statistically-derived concentration in the normal residue. If changes in raw materials or

fuels reduce the statistically-derived concentrations of the toxic constituents of concern in the normal residue, the statistically-derived concentrations must be revised or statistically-derived concentrations of toxic constituents in normal residue must be established for a new mode of operation with the new raw material or fuel. To determine the upper tolerance limit in the normal residue, the owner or operator must use statistical procedures prescribed in section 7.0 (Statistical Methodology for Bevill Residue Determinations) in federal appendix IX to 40 CFR 266 (Methods Manual for Compliance with the BIF Regulations), USEPA publication number EPA-454/R-92-019, incorporated by reference in 35 Ill. Adm. Code 720.111(b) (see Appendix I).

B) Waste-Derived Residue. Waste derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the concentrations established for the normal residue under subsection (b)(1)(A). If so, hazardous waste burning has significantly affected the residue and the residue is not excluded from the definition of “hazardous waste”. Concentrations of toxic constituents in waste-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite sample for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent must be the arithmetic mean of the concentrations in the samples. No results can be disregarded; or

2) Comparison of Waste-Derived Residue Concentrations with Health-Based Limits

A) Nonmetal Constituents. The concentration of each nonmetal toxic constituent of concern (specified in subsection (b)(1)) in the waste-derived residue must not exceed the health-based level specified in Appendix G, or the level of detection, whichever is higher. If a health-based limit for a constituent of concern is not listed in Appendix G, then a limit of 0.002 µg/kg or the level of detection (using appropriate analytical methods), whichever is higher, must be used. The levels specified in Appendix G (and the default level of 0.002 µg/kg or the level of detection for constituents, as identified in Note 1 of Appendix G) are administratively stayed under the condition, for those constituents specified in subsection (b)(1), that the owner or operator complies with alternative levels defined as the land disposal restriction limits specified in 35 Ill. Adm. Code 728.143 and Table T of 35 Ill. Adm. Code 728 for F039

nonwastewaters. In complying with those alternative levels, if an owner or operator is unable to detect a constituent despite documenting use of the best good-faith efforts, as defined by applicable USEPA guidance and standards, the owner or operator is deemed to be in compliance for that constituent. Until USEPA develops new guidance or standards, the owner or operator may demonstrate such good-faith efforts by achieving a detection limit for the constituent that does not exceed an order of magnitude above (ten times) the level provided by 35 Ill. Adm. Code 728.143 and Table T of 35 Ill. Adm. Code 728 for F039 nonwastewater levels for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans, analyses must be performed for total hexachlorodibenzo-p-dioxins, total hexachlorodibenzofurans, total pentachlorodibenzo-p-dioxins, total pentachlorodibenzofurans, total tetrachlorodibenzo-p-dioxins, and total tetrachlorodibenzofurans;

BOARD NOTE: In a note to corresponding 40 CFR 266.112(b)(2)(i), USEPA stated as follows:

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

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

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):

[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) Metal Constituents. The concentration of metals in an extract obtained using the TCLP test must not exceed the levels specified in Appendix G;
 - C) Sampling and Analysis. Wastewater-derived residue must be sampled and analyzed as often as necessary to determine whether the residue generated during each 24-hour period has concentrations of toxic constituents that are higher than the health-based levels. Concentrations of concern in the wastewater-derived residue must be determined based on analysis of one or more samples obtained over a 24-hour period. Multiple samples may be analyzed, and multiple samples may be taken to form a composite for analysis provided that the sampling period does not exceed 24 hours. If more than one sample is analyzed to characterize waste-derived residues generated over a 24-hour period, the concentration of each toxic constituent is the arithmetic mean of the concentrations of the samples. No results can be disregarded; and
- c) Records sufficient to document compliance with the provisions of this Section must be retained until closure of the BIF unit. At a minimum, the following must be recorded:
- 1) Levels of constituents in Appendix H of 35 Ill. Adm. Code 721 that are present in waste-derived residues;
 - 2) If the waste-derived residue is compared with normal residue under subsection (b)(1):
 - A) The levels of constituents in Appendix H to 35 Ill. Adm. Code 721 that are present in normal residues; and
 - B) Data and information, including analyses of samples as necessary, obtained to determine if changes in raw materials or fuels would reduce the concentration of toxic constituents of concern in the normal residue.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.219 Extensions of Time

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

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

BOARD NOTE: Derived from 40 CFR 266.103(c)(7)(ii) (2017).

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

SUBPART M: MILITARY MUNITIONS

Section 726.300 Applicability

- a) The regulations in this Subpart M identify when military munitions become a solid waste, and, if these wastes are also hazardous under this Subpart M or 35 Ill. Adm. Code 721, the management standards that apply to these wastes.

- b) Unless otherwise specified in this Subpart M, all applicable requirements in 35 Ill. Adm. Code 702, 703, 705, 720 through 728, and 738 apply to waste military munitions.

(Source: Amended at 31 Ill. Reg. 1096, effective December 20, 2006)

Section 726.301 Definitions

In addition to the definitions in 35 Ill. Adm. Code 720.110, the following definitions apply to this Subpart M:

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

“Chemical agents” and “chemical munitions” are defined as in the Department of Defense Authorization Act of 1986, 50 USC 1521(j)(1), incorporated by reference in 35 Ill. Adm. Code 720.111.

“Director” is as defined in 35 Ill. Adm. Code 702.110.

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

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

“Explosives or munitions emergency response” is as defined in 35 Ill. Adm. Code 720.110.

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

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

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

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

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

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.302 Definition of Solid Waste

- a) A military munition is not a solid waste when any of the following situations describes the munition:
 - 1) It is used for its intended purpose, including any of the following uses:
 - A) Use in training military personnel or explosives and munitions emergency response specialists (including training in proper destruction of unused propellant or other munitions);
 - B) Use in research, development, testing, and evaluation of military munitions, weapons, or weapon systems; or
 - C) Recovery, collection, and on-range destruction of unexploded ordnance and munitions fragments during range clearance activities at active or inactive ranges. However, “use for intended purpose” does not include the on-range disposal or burial of unexploded ordnance and contaminants when the burial is not a result of product use.
 - 2) It is an unused munition, or component thereof, it is being repaired, reused, recycled, reclaimed, disassembled, reconfigured, or otherwise subjected to materials recovery activities, unless such activities involve use constituting disposal, as defined in 35 Ill. Adm. Code 721.102(c)(1), or it is burned for energy recovery, as defined in 35 Ill. Adm. Code 721.102(c)(2).
- b) An unused military munition is a solid waste when any of the following occurs:
 - 1) The munition is abandoned by being disposed of, burned, detonated (except during intended use as specified in subsection (a)), incinerated, or treated prior to disposal;
 - 2) The munition is removed from storage in a military magazine or other storage area for the purpose of being disposed of, burned, incinerated, or treated prior to disposal;
 - 3) The munition is deteriorated or damaged (e.g., the integrity of the munition is compromised by cracks, leaks, or other damage) to the point

that it cannot be put into serviceable condition, and cannot reasonably be recycled or used for other purposes; or

- 4) The munition has been declared a solid waste by an authorized military official.
- c) A used or fired military munition is a solid waste when either of the following occurs with regard to the munition:
- 1) The munition is transported off-range or from the site of use (where the site of use is not a range) for the purpose of storage, reclamation, treatment, disposal, or treatment prior to disposal; or
 - 2) The munition is recovered, collected, and then disposed of by burial or landfilling either on or off a range.
- d) For purposes of RCRA section 1004(27) (42 USC 6903(27)), a used or fired military munition is a solid waste, and, therefore, is potentially subject to RCRA corrective action authorities under sections 3004(u) and (v) (42 USC 6924(u) and (v)), and 3008(h) (42 USC 6928(h)) or to imminent and substantial endangerment authorities under section 7003 (42 USC 6963) if the munition lands off-range and is not promptly rendered safe or retrieved. Any imminent and substantial threats associated with any remaining material must be addressed. If remedial action is infeasible, the operator of the range must maintain a record of the event for as long as any threat remains. The record must include the type of munition and its location (to the extent the location is known).

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.303 Standards Applicable to the Transportation of Solid Waste Military Munitions

- a) Criteria for Hazardous Waste Regulation of Waste Non-Chemical Military Munitions in Transportation
- 1) Waste military munitions that are being transported and which exhibit a hazardous waste characteristic or which are listed as hazardous waste pursuant to 35 Ill. Adm. Code 721 are subject to regulation pursuant to 35 Ill. Adm. Code 702, 703, 705, 720 through 728, and 738, unless the munitions meet all the following conditions:
 - A) The waste military munitions are not chemical agents or chemical munitions;
 - B) The waste military munitions are transported in accordance with the Department of Defense shipping controls applicable to the transport of military munitions;

- C) The waste military munitions are transported from a military-owned or -operated installation to a military-owned or -operated treatment, storage, or disposal facility; and
 - D) The transporter of the waste must provide oral notice to the Agency within 24 hours from the time when either the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) occurs that may endanger human health or the environment. In addition, a written submission describing the circumstances must be provided within five days from the time when the transporter becomes aware of any loss or theft of the waste military munitions or when any failure to meet a condition of subsection (a)(1) occurs.
- 2) If any waste military munitions shipped pursuant to subsection (a)(1) are not received by the receiving facility within 45 days after the day the waste was shipped, the owner or operator of the receiving facility must report this non-receipt to the Agency within five days.
 - 3) The conditional exemption from regulation as hazardous waste in subsection (a)(1) must apply only to the transportation of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to storage, treatment, or disposal.
 - 4) The conditional exemption in subsection (a)(1) applies only so long as all of the conditions in subsection (a)(1) are met.
- b) Reinstatement of Conditional Exemption
- 1) If any waste military munition loses its conditional exemption pursuant to subsection (a)(1), the transporter may file with the Agency an application for reinstatement of the conditional exemption from hazardous waste transportation regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of subsection (a)(1).
 - 2) If the Agency finds that reinstatement of the conditional exemption is appropriate, it must reinstate the conditional exemption of subsection (a)(1) in writing. The Agency's decision to reinstate or not to reinstate the conditional exemption must be based on the nature of the risks to human health and the environment posed by the waste and either the transporter's provision of a satisfactory explanation of the circumstances of the violation or any demonstration that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. In reinstating the conditional exemption pursuant to

subsection (a)(1), the Agency may specify additional conditions as are necessary to ensure and document proper transportation to adequately protect human health and the environment. If the Agency does not take action on the reinstatement application within 60 days after receipt of the application, then reinstatement must be deemed granted, retroactive to the date of the application.

- 3) The Agency may terminate a conditional exemption reinstated by default pursuant to subsection (b)(2) in writing if it finds that reinstatement is inappropriate based on its consideration of the factors set forth in subsection (b)(2). If the Agency terminates a reinstated exemption, it must transmit to the applicant specific, detailed statements in writing as to the reasons it terminated the reinstated exemption.
 - 4) The applicant pursuant to this subsection (b) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act.
- c) Amendments to DOD Shipping Controls. The Department of Defense shipping controls applicable to the transport of military munitions referenced in subsection (a)(1)(B) are Government Bill of Lading (GBL) (GSA Standard Form 1103, supplemented as necessary with GSA Standard Form 1109), Requisition Tracking Form (DD Form 1348), the Signature and Talley Record (DD Form 1907), DOD Multimodal Dangerous Goods Declaration (DD Form 2890), and the Motor Vehicle Inspection Report (DD Form 626), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).

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

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.304 Standards Applicable to Emergency Responses

Explosives and munitions emergencies involving military munitions or explosives are subject to 35 Ill. Adm. Code 722.110(i), 723.110(e), 724.101(g)(8), 725.101(c)(11), and 703.121(c)(3) or, alternatively, to 35 Ill. Adm. Code 703.221.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

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

- a) Criteria for Hazardous Waste Regulation of Waste Non-Chemical Military Munitions in Storage
 - 1) Waste military munitions in storage that exhibit a hazardous waste characteristic or are listed as hazardous waste pursuant to 35 Ill. Adm. Code 721 are listed or identified as a hazardous waste (and thus are subject to regulation pursuant to 35 Ill. Adm. Code 702, 703, 705, 720 through 728, 733, 738, and 739), unless all the following conditions are met:
 - A) The waste military munitions are not chemical agents or chemical munitions;
 - B) The waste military munitions must be subject to the jurisdiction of the Department of Defense Explosives Safety Board (DDESB);
 - C) The waste military munitions must be stored in accordance with the DDESB storage standards applicable to waste military munitions;
 - D) Within 90 days of when a storage unit is first used to store waste military munitions, the owner or operator must notify the Agency of the location of any waste storage unit used to store waste military munitions for which the conditional exemption in subsection (a)(1) is claimed;
 - E) The owner or operator must provide oral notice to the Agency within 24 hours from the time the owner or operator becomes aware of any loss or theft of the waste military munitions, or any failure to meet a condition of subsection (a)(1) that may endanger health or the environment. In addition, a written submission describing the circumstances must be provided within five days from the time the owner or operator becomes aware of any loss or theft of the waste military munitions or any failure to meet a condition of subsection (a)(1);
 - F) The owner or operator must inventory the waste military munitions at least annually, must inspect the waste military munitions at least quarterly for compliance with the conditions of subsection (a)(1), and must maintain records of the findings of these inventories and inspections for at least three years; and
 - G) Access to the stored waste military munitions must be limited to appropriately trained and authorized personnel.

- 2) The conditional exemption in subsection (a)(1) from regulation as hazardous waste must apply only to the storage of non-chemical waste military munitions. It does not affect the regulatory status of waste military munitions as hazardous wastes with regard to transportation, treatment or disposal.
 - 3) The conditional exemption in subsection (a)(1) applies only so long as all of the conditions in subsection (a)(1) are met.
- b) Notice of Termination of Waste Storage. The owner or operator must notify the Agency when a storage unit identified in subsection (a)(1)(D) will no longer be used to store waste military munitions.
- c) Reinstatement of Conditional Exemption
- 1) If any waste military munition loses its conditional exemption pursuant to subsection (a)(1), an application may be filed with the Agency for reinstatement of the conditional exemption from hazardous waste storage regulation with respect to such munition as soon as the munition is returned to compliance with the conditions of subsection (a)(1).
 - 2) If the Agency finds that reinstatement of the conditional exemption is appropriate, it must reinstate the conditional exemption of subsection (a)(1) in writing. The Agency's decision to reinstate or not to reinstate the conditional exemption must be based on two considerations: first, the nature of the risks to human health and the environment posed by the waste; and second, either the owner's or operator's provision of a satisfactory explanation of the circumstances of the violation or any demonstration that the violations are not likely to recur. If the Agency denies an application, it must transmit to the applicant specific, detailed statements in writing as to the reasons it denied the application. In reinstating the conditional exemption pursuant to subsection (a)(1), the Agency may specify additional conditions as are necessary to ensure and document proper storage to adequately protect human health and the environment.
 - 3) The Agency may terminate a conditional exemption reinstated by default pursuant to subsection (c)(2) in writing if it finds that reinstatement is inappropriate based on its consideration of the factors set forth in subsection (c)(2). If the Agency terminates a reinstated exemption, it must transmit to the applicant specific, detailed statements in writing as to the reasons it terminated the reinstated exemption.
 - 4) The applicant pursuant to this subsection (c) may appeal the Agency's determination to deny the reinstatement, to grant the reinstatement with conditions, or to terminate a reinstatement before the Board pursuant to Section 40 of the Act.

- d) Waste Chemical Munitions
 - 1) Waste military munitions are subject to the applicable regulatory requirements of RCRA subtitle C if the munitions satisfy two conditions: first, they are chemical agents or chemical munitions; and second, they exhibit a hazardous waste characteristic or are listed as hazardous waste pursuant to 35 Ill. Adm. Code 721.
 - 2) Waste military munitions are not subject to the storage prohibition in RCRA section 3004(j), codified at 35 Ill. Adm. Code 728.150, if the munitions satisfy two conditions: first, they are chemical agents or chemical munitions; and second, they exhibit a hazardous waste characteristic or are listed as hazardous waste pursuant to 35 Ill. Adm. Code 721.
- e) Amendments to DDESB Storage Standards. The DDESB storage standards applicable to waste military munitions, referenced in subsection (a)(1)(C), are DOD 6055.9-STD (“DOD Ammunition and Explosive Safety Standards”), in effect on November 8, 1995, incorporated by reference in 35 Ill. Adm. Code 720.111.

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

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.306 Standards Applicable to the Treatment and Disposal of Waste Military Munitions

The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 35 Ill. Adm. Code 702, 703, 705, 720 through 728, and 738.

(Source: Amended at 31 Ill. Reg. 1096, effective December 20, 2006)

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

Section 726.310 Definitions

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

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

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

“Director” is as defined in 35 Ill. Adm. Code 702.110.

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

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

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

“Hazardous waste” means hazardous waste as defined in 35 Ill. Adm. Code 721.103.

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

BOARD NOTE: In addition to the materials regulated under this Part, IEMA regulates radioactive materials under the Radiation Protection Act of 1990 [420

ILCS 40] that are not licensed by the federal NRC. For the purposes of notices to IEMA required under this Subpart N, the address is as follows:

Illinois Emergency Management Agency
2200 South Dirksen Parkway
Springfield, Illinois 62703

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

“License” means a license issued by the federal NRC or IEMA to a user that manages radionuclides regulated by the federal NRC or IEMA under authority of the Atomic Energy Act of 1954, as amended (42 USC 2014 et seq.) or the Radiation Protection Act of 1990.

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

“Low-level radioactive waste” or “LLRW” is a radioactive waste that contains source, by-product, or special nuclear material and which is not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material, as defined in section 11(e)(2) of the Atomic Energy Act of 1954 (42 USC 2014(e)(2)), incorporated by reference in 35 Ill. Adm. Code 720.111(b). (See also the NRC definition of waste at federal 10 CFR 61.2.)

BOARD NOTE: This definition differs from the similar definitions of low-level radioactive waste in the Illinois Low-Level Radioactive Waste Management Act [420 ILCS 20/3(k)], the Central Midwest Interstate Low-Level Radioactive Waste Compact Act [45 ILCS 140/1, Article II(k)], and 32 Ill. Adm. Code 606.20(g) of the IEMA regulations. Those basically define low-level radioactive waste as radioactive waste that is not high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material, as such are defined in section 11 of the federal Atomic Energy Act of 1954 (42 USC 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

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

BOARD NOTE: This definition differs from the similar definitions of mixed waste in the Illinois Low-Level Radioactive Waste Management Act and 32 Ill. Adm. Code 606.20(h) of the IEMA regulations. Those basically define mixed waste as containing both RCRA hazardous waste and low-level radioactive waste, as such is defined under Section 3(k) of the Illinois Low-Level Radioactive Waste Management Act.

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

It is naturally occurring and it is not a source, by-product, or special nuclear material, as defined in section 11 of the federal Atomic Energy Act of 1954 (42 USC 2014), incorporated by reference in 35 Ill. Adm. Code 720.111(c); or

It is produced by an accelerator.

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

“NRC” means the United States Nuclear Regulatory Commission.

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

U.S. Nuclear Regulatory Commission, Region III
2443 Warrenville Road, Suite 210
Lisle, Illinois 60532-4352

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.320 Storage and Treatment Conditional Exemption

The storage and treatment conditional exemption exempts low-level mixed waste from the regulatory definition of hazardous waste in 35 Ill. Adm. Code 721.103 if the waste meets the eligibility criteria in Section 726.325 and the generator meets the conditions in Section 726.330.

(Source: Added at 26 Ill. Reg. 6667, effective April 22, 2002)

Section 726.325 Wastes Eligible for a Storage and Treatment Conditional Exemption for Low-Level Mixed Waste

Low-level mixed waste (LLMW), as defined in Section 726.310, is eligible for a storage and treatment conditional exemption if it is generated and managed by a person under a single federal NRC or IEMA license. (Mixed waste generated at a facility with a different license number and shipped to a different person’s facility for storage or treatment requires a permit, and such mixed waste is ineligible for this exemption. In addition, NARM waste is ineligible for this exemption.)

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.330 Conditions to Qualify for and Maintain a Storage and Treatment Conditional Exemption

- a) For LLMW to qualify for the exemption, the generator must notify the Agency and the IEMA in writing by certified delivery that it is claiming a storage and treatment conditional exemption for the LLMW stored on the generator's facility. The dated notification must include the generator's name, address, RCRA identification number, federal NRC or IEMA license number, the USEPA hazardous waste numbers and storage units for which the generator is seeking an exemption, and a statement that the generator meets the conditions of this Subpart N. The generator's notification must be signed by the generator's authorized representative who certifies that the information in the notification is true, accurate, and complete. The generator must notify the Agency of its claim within 90 days after a storage unit is first used to store conditionally exempt LLMW.
- b) To qualify for and maintain an exemption for LLMW, the generator must do each of the following:
 - 1) Store its LLMW waste in tanks or containers in compliance with the requirements of its license that apply to the proper storage of low-level radioactive waste (not including those license requirements that relate solely to recordkeeping);
 - 2) Store its LLMW in tanks or containers in compliance with chemical compatibility requirements of a tank or container in 35 Ill. Adm. Code 724.277 or 724.299 or 35 Ill. Adm. Code 725.277 or 725.299;
 - 3) Certify that facility personnel who manage stored conditionally exempt LLMW are trained in a manner that ensures that the conditionally exempt waste is safely managed and that the training includes training in chemical waste management and hazardous materials incidents response that meets the personnel training standards found in 35 Ill. Adm. Code 725.116(a)(3);
 - 4) Conduct an inventory of its stored conditionally exempt LLMW at least annually and inspect the waste at least quarterly for compliance with this Subpart N; and
 - 5) Maintain an accurate emergency plan and provide it to all local authorities who may have to respond to a fire, explosion, or release of hazardous waste or hazardous constituents. The generator's plan must describe emergency response arrangements with local authorities; describe evacuation plans; list the names, addresses, and telephone numbers of all facility personnel qualified to work with local authorities as emergency coordinators; and list emergency equipment.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.335 Treatment Allowed by a Storage and Treatment Conditional Exemption

The generator may treat its low-level mixed waste at its facility within a tank or container in accordance with the terms of its federal NRC or IEMA license. Treatment that cannot be done in a tank or container without a RCRA permit (such as incineration) is not allowed under this exemption.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.340 Loss of a Storage and Treatment Conditional Exemption and Required Action

- a) A generator's LLMW will automatically lose the storage and treatment conditional exemption if the generator fails to meet any of the conditions specified in Section 726.330. When a generator's LLMW loses the exemption, the generator must immediately manage that waste which failed the condition as RCRA hazardous waste, and the storage unit storing the LLMW immediately becomes subject to RCRA hazardous waste container or tank storage requirements.
 - 1) If a generator fails to meet any of the conditions specified in Section 726.330, the generator must report to the Agency, the Illinois DNS, and the NRC in writing by certified delivery within 30 days after learning of the failure. The generator's report must be signed by the generator's authorized representative certifying that the information provided is true, accurate, and complete. This report must include the following:
 - A) The specific conditions that the generator failed to meet;
 - B) A description of the LLMW (including the waste name, hazardous waste codes and quantity) and storage location at the facility; and
 - C) The dates on which the generator failed to meet the conditions.
 - 2) If the failure to meet any of the conditions may endanger human health or the environment, the generator must also immediately notify the Agency orally within 24 hours and follow up with a written notification within five days. A failure that may endanger human health or the environment may include, but is not limited to, discharge of a CERCLA reportable quantity or other leaking or exploding tanks or containers, or detection of radionuclides above background or hazardous constituents in the leachate collection system of a storage area. If the failure may endanger human health or the environment, the generator must follow the provisions of its emergency plan.
- b) The Board may, by an order issued in an enforcement proceeding against the generator, terminate the generator's conditional exemption for its LLMW, or require the generator to meet additional conditions to claim a conditional

exemption, for serious or repeated noncompliance with any requirements of this Subpart N.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.345 Reclaiming a Lost Storage and Treatment Conditional Exemption

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

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.350 Recordkeeping for a Storage and Treatment Conditional Exemption

- a) In addition to those records required by the generator's federal NRC or IEMA license, the generator must keep records as follows:
 - 1) The generator's initial notification records, return receipts, reports to the Agency of failures to meet the exemption conditions, and all records supporting any reclaim of an exemption;
 - 2) Records of the generator's LLMW annual inventories and quarterly inspections;
 - 3) The generator's certification that facility personnel who manage stored mixed waste are trained in safe management of LLMW including training in chemical waste management and hazardous materials incidents response; and
 - 4) The generator's emergency plan, as specified in Section 726.330(b).
- b) The generator must maintain records concerning notification, personnel trained, and its emergency plan for as long as the generator claims this exemption and for three years thereafter, or in accordance with federal NRC regulations (10 CFR 20) or under IEMA regulations (32 Ill. Adm. Code: Chapter II, Subchapter b), whichever is longer. A generator must maintain records concerning its annual inventory and quarterly inspections for three years after the waste is sent for disposal, or in accordance with federal NRC regulations (10 CFR 20) or under IEMA regulations (32 Ill. Adm. Code: Chapter II, Subchapter b), whichever is longer.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.355 Waste No Longer Eligible for a Storage and Treatment Conditional Exemption

- a) When a generator's LLMW has met the requirements of its federal NRC or IEMA license for decay-in-storage and can be disposed of as non-radioactive waste, then the conditional exemption for storage no longer applies. On that date the generator's waste is subject to hazardous waste regulation under the relevant provisions of 35 Ill. Adm. Code 702, 703, 720 through 728, and 738, and the time period for accumulation of a hazardous waste, as specified in 35 Ill. Adm. Code 722.116 or 722.117 begins.
- b) When a generator's conditionally exempt LLMW, which has been generated and stored under a single federal NRC or IEMA license number, is removed from storage, it is no longer eligible for the storage and treatment exemption. However, a generator's waste may be eligible for the transportation and disposal conditional exemption at Section 726.405.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.360 Applicability of Closure Requirements to Storage Units

An interim status or permitted storage unit that was used to store only LLMW prior to April 22, 2002 and which, after that date, stores only LLMW that becomes exempt under this Subpart N, is not subject to the closure requirements of 35 Ill. Adm. Code 724 and 725. A storage unit (or portions of units) that has been used to store both LLMW and non-mixed hazardous waste remains subject to closure requirements with respect to the non-mixed hazardous waste.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.405 Transportation and Disposal Conditional Exemption

A transportation and disposal conditional exemption exempts a generator's waste from the regulatory definition of hazardous waste in 35 Ill. Adm. Code 721.103 if the generator's waste meets the eligibility criteria under Section 726.410, and the generator meets the conditions in Section 726.415.

(Source: Added at 26 Ill. Reg. 6667, effective April 22, 2002)

Section 726.410 Wastes Eligible for a Transportation and Disposal Conditional Exemption

Eligible waste must be one or both of the following:

- a) A low-level mixed waste (LLMW), as defined in Section 726.310, that meets the waste acceptance criteria of a LLRWDF; or
- b) An eligible NARM waste, defined in Section 726.310.

(Source: Added at 26 Ill. Reg. 6667, effective April 22, 2002)

Section 726.415 Conditions to Qualify for and Maintain a Transportation and Disposal Conditional Exemption

A generator must meet the following conditions for its eligible waste to qualify for and maintain the exemption:

- a) The eligible waste must meet or be treated to meet LDR treatment standards, as described in Section 726.420;
- b) If the generator is not already subject to federal NRC or IEMA manifest and transportation regulations for the shipment of its waste, the generator must manifest and transport its waste according to federal NRC or IEMA regulations, as described in Section 726.425;
- c) The exempted waste must be in containers when it is disposed of in the LLRWDF, as described in Section 726.440; and

- d) The exempted waste must be disposed of at a designated LLRWDF, as described in Section 726.435.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.420 Treatment Standards for Eligible Waste

A generator's LLMW or eligible NARM waste must meet the applicable LDR treatment standards specified in Subpart D of 35 Ill. Adm. Code 728.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.425 Applicability of the Manifest and Transportation Condition

If a generator is not already subject to federal NRC or IEMA manifest and transportation regulations for the shipment of its waste, the generator must meet the federal NRC manifest requirements under 10 CFR 20.2006 (Transfer for Disposal and Manifests), incorporated by reference in 35 Ill. Adm. Code 720.111(b); IEMA manifest requirements under 32 Ill. Adm. Code 340; the federal NRC transportation requirements under 10 CFR 71.5 (Transportation of Licensed Material), incorporated by reference in 35 Ill. Adm. Code 720.111(b); and the IEMA transportation requirements under 32 Ill. Adm. Code 341 to ship the exempted waste.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.430 Effectiveness of a Transportation and Disposal Exemption

The exemption becomes effective once all of the following have occurred:

- a) The generator's eligible waste meets the applicable LDR treatment standards;
- b) The generator has received return receipts that it has notified the Agency and the LLRWDF, as described in Section 726.445;
- c) The generator has completed the packaging and preparation for shipment requirements for its waste according to federal NRC packaging and transportation regulations found under 10 CFR 71 (Packaging and Transportation of Radioactive Material), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and under IEMA regulations at 32 Ill. Adm. Code 341; and a generator has prepared a manifest for a generator's waste according to NRC manifest regulations found under 10 CFR 20 (Standards for Protection Against Radiation), incorporated by reference in 35 Ill. Adm. Code 720.111(b), or under IEMA regulations under 32 Ill. Adm. Code 340; and
- d) The generator has placed its waste on a transportation vehicle destined for a LLRWDF licensed by the federal NRC, the IEMA, or by a nuclear licensing agency in another state.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.435 Disposal of Exempted Waste

A generator's exempted waste must be disposed of in a LLRWDF that is regulated and licensed by the federal NRC under 10 CFR 61, by the IEMA under 32 Ill. Adm. Code: Chapter II, Subchapters b and d, or by a licensing agency in another state, including State NARM licensing regulations for eligible NARM.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.440 Containers Used for Disposal of Exempted Waste

A generator's exempted waste must be placed in containers before it is disposed of. The container must be one of the following:

- a) A carbon steel drum;
- b) An alternative container with equivalent containment performance in the disposal environment as a carbon steel drum; or
- c) A high-integrity container, as defined by NRC in appendix G to 10 CFR 20 (Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.445 Notification

- a) A generator must provide a one time notice to the Agency and the IEMA stating that it is claiming the transportation and disposal conditional exemption prior to the initial shipment of an exempted waste from the generator's facility to a LLRWDF. The generator's dated written notice must include its facility name, address, phone number, and RCRA ID number and be sent by certified delivery.
- b) A generator must notify the LLRWDF receiving its exempted waste by certified delivery before shipment of each exempted waste. The generator can only ship the exempted waste after it has received the return receipt of its notice to the LLRWDF. This notification must include the following information:
 - 1) A statement that the generator has claimed the exemption for the waste;
 - 2) A statement that the eligible waste meets applicable LDR treatment standards;
 - 3) The generator's facility's name, address, and RCRA ID number;
 - 4) The RCRA hazardous waste codes prior to the exemption of the waste streams;

- 5) A statement that the exempted waste must be placed in a container according to Section 726.440 prior to disposal in order for the waste to remain exempt under the transportation and disposal conditional exemption of this Subpart N;
- 6) The manifest number of the shipment that will contain the exempted waste; and
- 7) A certification that all the information provided is true, complete, and accurate. The statement must be signed by the generator's authorized representative.

(Source: Amended at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.450 Recordkeeping for a Transportation and Disposal Conditional Exemption

In addition to those records required by a generator's NRC or IEMA license, the generator must keep records as follows:

- a) The generator must follow the applicable existing recordkeeping requirements under 35 Ill. Adm. Code 724.173, 725.173, and 728.107 to demonstrate that its waste has met LDR treatment standards prior to the generator claiming the exemption.
- b) The generator must keep a copy of all notifications and return receipts required under Sections 726.455, and 726.460 for three years after the exempted waste is sent for disposal.
- c) The generator must keep a copy of all notifications and return receipts required under Section 726.445(a) for three years after the last exempted waste is sent for disposal.
- d) The generator must keep a copy of the notification and return receipt required under Section 726.445(b) for three years after the exempted waste is sent for disposal.
- e) If the generator is not already subject to federal NRC and IEMA manifest and transportation regulations for the shipment of its waste, the generator must also keep all other documents related to tracking the exempted waste as required under federal 10 CFR 20.2006 (Transfer for Disposal and Manifests), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and IEMA requirements under 32 Ill. Adm. Code 340, including applicable NARM requirements, in addition to the records specified in subsections (a) through (d).

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.455 Loss of a Transportation and Disposal Conditional Exemption and Required Action

- a) Any waste will automatically lose the transportation and disposal exemption if the generator fails to manage it in accordance with all of the conditions specified in Section 726.415.
 - 1) When the generator fails to meet any of the conditions specified in Section 726.415 for any of its wastes, the generator must report to the Agency and the Illinois DNS, in writing by certified delivery, within 30 days after learning of the failure. The generator's report must be signed by its authorized representative certifying that the information provided is true, accurate, and complete. This report must include the following:
 - A) The specific conditions that the generator failed to meet for the waste;
 - B) A description of the waste (including the waste name, hazardous waste codes and quantity) that lost the exemption; and
 - C) The dates on which the generator failed to meet the conditions for the waste.
 - 2) If the failure to meet any of the conditions may endanger human health or the environment, the generator must also immediately notify the Agency orally within 24 hours and follow up with a written notification within five days.
- b) The Board may, by an order issued in an enforcement proceeding against the generator, terminate the generator's ability to claim a conditional exemption for its waste, or require the generator to meet additional conditions to claim a conditional exemption, for serious or repeated noncompliance with any requirements of this Subpart N.

(Source: Amended at 27 Ill. Reg. 12916, effective July 17, 2003)

Section 726.460 Reclaiming a Lost Transportation and Disposal Conditional Exemption

- a) A generator may reclaim a lost transportation and disposal conditional exemption for a waste after the generator has received a return receipt confirming that the Agency and IEMA have received the generator's notification of the loss of the exemption specified in Section 726.455(a) and if the following conditions are fulfilled:
 - 1) The generator again meets the conditions specified in Section 726.415 for the waste; and

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

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

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

I-A

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

Values for Urban Areas

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

I-B
Tier I and Tier II Feed Rate and Emissions Screening Limits for Noncarcinogenic
Metals for Facilities in Noncomplex Terrain

Values for Rural Areas

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

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

Values for Urban and Rural Areas

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

I-D

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

| TESH (m) | Values for use in urban areas | | | | Values for use in rural areas | | | |
|-------------|-------------------------------|-------------------|--------------------|---------------------|-------------------------------|-------------------|--------------------|---------------------|
| | Arsenic (g/hr) | Cadmium (g/hr) | Chromium (g/hr) | Beryllium (g/hr) | Arsenic (g/hr) | Cadmium (g/hr) | Chromium (g/hr) | Beryllium (g/hr) |
| 4 | 0.46 | 1.1 | 0.17 | 0.82 | 0.24 | 0.58 | 0.086 | 0.43 |
| 6 | 0.54 | 1.3 | 0.19 | 0.94 | 0.28 | 0.66 | 0.10 | 0.50 |
| 8 | 0.60 | 1.4 | 0.22 | 1.1 | 0.32 | 0.76 | 0.11 | 0.56 |
| 10 | 0.68 | 1.6 | 0.24 | 1.2 | 0.36 | 0.86 | 0.13 | 0.64 |
| 12 | 0.76 | 1.8 | 0.27 | 1.4 | 0.43 | 1.1 | 0.16 | 0.78 |
| 14 | 0.86 | 2.1 | 0.31 | 1.5 | 0.54 | 1.3 | 0.20 | 0.96 |
| 16 | 0.96 | 2.3 | 0.35 | 1.7 | 0.68 | 1.6 | 0.24 | 1.2 |
| 18 | 1.1 | 2.6 | 0.40 | 2.0 | 0.82 | 2.0 | 0.30 | 1.5 |
| 20 | 1.2 | 3.0 | 0.44 | 2.2 | 1.0 | 2.5 | 0.37 | 1.9 |
| 22 | 1.4 | 3.4 | 0.50 | 2.5 | 1.3 | 3.2 | 0.48 | 2.4 |
| 24 | 1.6 | 3.9 | 0.58 | 2.8 | 1.7 | 4.0 | 0.60 | 3.0 |
| 26 | 1.8 | 4.3 | 0.64 | 3.2 | 2.1 | 5.0 | 0.76 | 3.9 |
| 28 | 2.0 | 4.8 | 0.72 | 3.6 | 2.7 | 6.4 | 0.98 | 5.0 |
| 30 | 2.3 | 5.4 | 0.82 | 4.0 | 3.5 | 8.2 | 1.2 | 6.2 |
| 35 | 3.0 | 6.8 | 1.0 | 5.4 | 5.4 | 13. | 1.9 | 9.6 |
| 40 | 3.6 | 9.0 | 1.3 | 6.8 | 8.2 | 20. | 3.0 | 15. |
| 45 | 4.6 | 11. | 1.7 | 8.6 | 11. | 28. | 4.2 | 21. |
| 50 | 6.0 | 14. | 2.2 | 11. | 15. | 37. | 5.4 | 28. |
| 55 | 7.6 | 18. | 2.7 | 14. | 20. | 50. | 7.2 | 36. |
| 60 | 9.4 | 22. | 3.4 | 17. | 27. | 64. | 9.6 | 48. |
| 65 | 11. | 28. | 4.2 | 21. | 36. | 86. | 13. | 64. |
| 70 | 13. | 31. | 4.6 | 24. | 43. | 100. | 15. | 76. |
| 75 | 15. | 36. | 5.4 | 27. | 50. | 120. | 18. | 90. |
| 80 | 17. | 40. | 6.0 | 30. | 60. | 140. | 22. | 110. |
| 85 | 19. | 46. | 6.8 | 34. | 72. | 170. | 26. | 130. |
| 90 | 22. | 50. | 7.8 | 39. | 86. | 200. | 30. | 150. |
| 95 | 25. | 58. | 9.0 | 44. | 100. | 240. | 36. | 180. |
| 100 | 28. | 68. | 10. | 50. | 120. | 290. | 43. | 220. |
| 105 | 32. | 76. | 11. | 56. | 140. | 340. | 50. | 260. |
| 110 | 36. | 86. | 13. | 64. | 170. | 400. | 60. | 300. |
| 115 | 40. | 96. | 15. | 72. | 200. | 480. | 72. | 360. |
| 120 | 46. | 110. | 17. | 82. | 240. | 580. | 86. | 430. |

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

Values for Use in Urban and Rural Areas

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

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

Section 726.APPENDIX B Tier I Feed Rate Screening Limits for Total Chlorine

Tier I Feed Rate Screening Limits for Total Chlorine

| TESH (m) | Noncomplex Terrain Urban (g/hr) | Noncomplex Terrain Rural (g/hr) | Complex Terrain (g/hr) |
|----------|------------------------------------|------------------------------------|---------------------------|
| 4 | 82. | 42. | 19. |
| 6 | 91. | 48. | 28. |
| 8 | 100. | 53. | 41. |
| 10 | 120. | 62. | 58. |
| 12 | 130. | 77. | 72. |
| 14 | 150. | 91. | 91. |
| 16 | 170. | 120. | 110. |
| 18 | 190. | 140. | 120. |
| 20 | 210. | 180. | 130. |
| 22 | 240. | 230. | 140. |
| 24 | 270. | 290. | 160. |
| 26 | 310. | 370. | 170. |
| 28 | 350. | 470. | 190. |
| 30 | 390. | 580. | 210. |
| 35 | 530. | 960. | 260. |
| 40 | 620. | 1400. | 330. |
| 45 | 820. | 2000. | 400. |
| 50 | 1100. | 2600. | 480. |
| 55 | 1300. | 3500. | 620. |
| 60 | 1600. | 4600. | 770. |
| 65 | 2000. | 6200. | 910. |
| 70 | 2300. | 7200. | 1100. |
| 75 | 2500. | 8600. | 1200. |
| 80 | 2900. | 10000. | 1300. |
| 85 | 3300. | 12000. | 1400. |
| 90 | 3700. | 14000. | 1600. |
| 95 | 4200. | 17000. | 1800. |
| 100 | 4800. | 21000. | 2000. |
| 105 | 5300. | 24000. | 2300. |
| 110 | 6200. | 29000. | 2500. |
| 115 | 7200. | 35000. | 2800. |
| 120 | 8200. | 41000. | 3200. |

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

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

| TESH (m) | Noncomplex Terrain Urban areas | | Noncomplex Terrain Rural areas | | Complex Terrain Urban and rural areas | |
|----------|-----------------------------------|------------|-----------------------------------|------------|--|------------|
| | Chlorine Gas (g/hr) | HCl (g/hr) | Chlorine Gas (g/hr) | HCl (g/hr) | Chlorine gas (g/hr) | HCl (g/hr) |
| 4 | 82. | 1400. | 42. | 730. | 19. | 330. |

| | | | | | | |
|-----|-------|---------|--------|---------|-------|--------|
| 6 | 91. | 1600. | 48. | 830. | 28. | 490. |
| 8 | 100. | 1800. | 53. | 920. | 41. | 710. |
| 10 | 120. | 2000. | 62. | 1100. | 58. | 1000. |
| 12 | 130. | 2300. | 77. | 1300. | 72. | 1300. |
| 14 | 150. | 2600. | 91. | 1600. | 91. | 1600. |
| 16 | 170. | 2900. | 120. | 2000. | 110. | 1800. |
| 18 | 190. | 3300. | 140. | 2500. | 120. | 2000. |
| 20 | 210. | 3700. | 180. | 3100. | 130. | 2300. |
| 22 | 240. | 4200. | 230. | 3900. | 140. | 2400. |
| 24 | 270. | 4800. | 290. | 5000. | 160. | 2800. |
| 26 | 310. | 5400. | 370. | 6500. | 170. | 3000. |
| 28 | 350. | 6000. | 470. | 8100. | 190. | 3400. |
| 30 | 390. | 6900. | 580. | 10000. | 210. | 3700. |
| 35 | 530. | 9200. | 960. | 17000. | 260. | 4600. |
| 40 | 620. | 11000. | 1400. | 25000. | 330. | 5700. |
| 45 | 820. | 14000. | 2000. | 35000. | 400. | 7000. |
| 50 | 1100. | 18000. | 2600. | 46000. | 480. | 8400. |
| 55 | 1300. | 23000. | 3500. | 61000. | 620. | 11000. |
| 60 | 1600. | 29000. | 4600. | 81000. | 770. | 13000. |
| 65 | 2000. | 34000. | 6200. | 110000. | 910. | 16000. |
| 70 | 2300. | 39000. | 7200. | 130000. | 1100. | 18000. |
| 75 | 2500. | 45000. | 8600. | 150000. | 1200. | 20000. |
| 80 | 2900. | 50000. | 10000. | 180000. | 1300. | 23000. |
| 85 | 3300. | 58000. | 12000. | 220000. | 1400. | 25000. |
| 90 | 3700. | 66000. | 14000. | 250000. | 1600. | 29000. |
| 95 | 4200. | 74000. | 17000. | 300000. | 1800. | 32000. |
| 100 | 4800. | 84000. | 21000. | 360000. | 2000. | 35000. |
| 105 | 5300. | 92000. | 24000. | 430000. | 2300. | 39000. |
| 110 | 6200. | 110000. | 29000. | 510000. | 2500. | 45000. |
| 115 | 7200. | 130000. | 35000. | 610000. | 2800. | 50000. |
| 120 | 8200. | 140000. | 41000. | 720000. | 3200. | 56000. |

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

Section 726.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 µg/m³.

| Constituent | CAS No. | RAC (µg/m ³) |
|--------------------|------------|--------------------------|
| Acetaldehyde | 75-07-0 | 10 |
| Acetonitrile | 75-05-8 | 10 |
| Acetophenone | 98-86-2 | 100 |
| Acrolein | 107-02-8 | 20 |
| Aldicarb | 116-06-3 | 1 |
| Aluminum Phosphide | 20859-73-8 | 0.3 |

| | | |
|---------------------------|------------|------|
| Allyl Alcohol | 107-18-6 | 5 |
| Antimony | 7440-36-0 | 0.3 |
| Barium | 7440-39-3 | 50 |
| Barium Cyanide | 542-62-1 | 50 |
| Bromomethane | 74-83-9 | 0.8 |
| Calcium Cyanide | 592-01-8 | 30 |
| Carbon Disulfide | 75-15-0 | 200 |
| Chloral | 75-87-6 | 2 |
| Chlorine (free) | | 0.4 |
| 2-Chloro-1,3-butadiene | 126-99-8 | 3 |
| Chromium III | 16065-83-1 | 1000 |
| Copper Cyanide | 544-92-3 | 5 |
| Cresols | 1319-77-3 | 50 |
| Cumene | 98-82-8 | 1 |
| Cyanide (free) | 57-12-15 | 20 |
| Cyanogen | 460-19-5 | 30 |
| Cyanogen Bromide | 506-68-3 | 80 |
| Di-n-butyl Phthalate | 84-74-2 | 100 |
| o-Dichlorobenzene | 95-50-1 | 10 |
| p-Dichlorobenzene | 106-46-7 | 10 |
| Dichlorodifluoromethane | 75-71-8 | 200 |
| 2,4-Dichlorophenol | 120-83-2 | 3 |
| Diethyl Phthalate | 84-66-2 | 800 |
| Dimethoate | 60-51-5 | 0.8 |
| 2,4-Dinitrophenol | 51-28-5 | 2 |
| Dinoseb | 88-85-7 | 0.9 |
| Diphenylamine | 122-39-4 | 20 |
| Endosulfan | 115-29-1 | 0.05 |
| Endrin | 72-20-8 | 0.3 |
| Fluorine | 7782-41-4 | 50 |
| Formic Acid | 64-18-6 | 2000 |
| Glycidylaldehyde | 765-34-4 | 0.3 |
| Hexachlorocyclopentadiene | 77-47-4 | 5 |
| Hexachlorophene | 70-30-4 | 0.3 |
| Hydrocyanic Acid | 74-90-8 | 20 |
| Hydrogen Chloride | 7647-01-1 | 7 |
| Hydrogen Sulfide | 7783-06-4 | 3 |
| Isobutyl Alcohol | 78-83-1 | 300 |
| Lead | 7439-92-1 | 0.09 |
| Maleic Anhydride | 108-31-6 | 100 |
| Mercury | 7439-97-6 | 0.3 |
| Methacrylonitrile | 126-98-7 | 0.1 |
| Methomyl | 16752-77-5 | 20 |
| Methoxychlor | 72-43-5 | 50 |
| Methyl Chlorocarbonate | 79-22-1 | 1000 |
| Methyl Ethyl Ketone | 78-93-3 | 80 |

| | | |
|----------------------------|------------|--------|
| Methyl Parathion | 298-00-0 | 0.3 |
| Nickel Cyanide | 557-19-7 | 20 |
| Nitric Oxide | 10102-43-9 | 100 |
| Nitrobenzene | 98-95-3 | 0.8 |
| Pentachlorobenzene | 608-93-5 | 0.8 |
| Pentachlorophenol | 87-86-5 | 30 |
| Phenol | 108-95-2 | 30 |
| M-Phenylenediamine | 108-45-2 | 5 |
| Phenylmercuric Acetate | 62-38-4 | 0.075 |
| Phosphine | 7803-51-2 | 0.3 |
| Phthalic Anhydride | 85-44-9 | 2000 |
| Potassium Cyanide | 151-50-8 | 50 |
| Potassium Silver Cyanide | 506-61-6 | 200 |
| Pyridine | 110-86-1 | 1 |
| Selenious Acid | 7783-60-8 | 3 |
| Selenourea | 630-10-4 | 5 |
| Silver | 7440-22-4 | 3 |
| Silver Cyanide | 506-64-9 | 100 |
| Sodium Cyanide | 143-33-9 | 30 |
| Strychnine | 57-24-9 | 0.3 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.3 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 30 |
| Tetraethyl Lead | 78-00-2 | 0.0001 |
| Tetrahydrofuran | 109-99-9 | 10 |
| Thallic Oxide | 1314-32-5 | 0.3 |
| Thallium | 7440-28-0 | 0.5 |
| Thallium (I) Acetate | 563-68-8 | 0.5 |
| Thallium (I) Carbonate | 6533-73-9 | 0.3 |
| Thallium (I) Chloride | 7791-12-0 | 0.3 |
| Thallium (I) Nitrate | 10102-45-1 | 0.5 |
| Thallium Selenite | 12039-52-0 | 0.5 |
| Thallium (I) Sulfate | 7446-18-6 | 0.075 |
| Thiram | 137-26-8 | 5 |
| Toluene | 108-88-3 | 300 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 20 |
| Trichloromonofluoromethane | 75-69-4 | 300 |
| 2,4,5-Trichlorophenol | 95-95-4 | 100 |
| Vanadium Pentoxide | 1314-62-1 | 20 |
| Warfarin | 81-81-2 | 0.3 |
| Xylenes | 1330-20-7 | 80 |
| Zinc Cyanide | 557-21-1 | 50 |
| Zinc Phosphide | 1314-84-7 | 0.3 |

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

Section 726.APPENDIX E Risk-Specific Doses

BOARD NOTE: These are risk specific doses (RSDs) based on a risk of 1 in 10,000 (1×10^{-5}).

| Constituent | CAS No. | Unit risk ($\text{m}^3/\mu\text{g}$) | RSD ($\mu\text{g}/\text{m}^3$) |
|-----------------------------|-----------|--|----------------------------------|
| Acrylamide | 79-06-1 | 0.0013 | 0.0077 |
| Acrylonitrile | 107-13-1 | 0.000068 | 0.15 |
| Aldrin | 309-00-2 | 0.0049 | 0.0020 |
| Aniline | 62-53-3 | 0.0000074 | 1.4 |
| Arsenic | 7440-38-2 | 0.0043 | 0.0023 |
| Benz(a)anthracene | 56-55-3 | 0.00089 | 0.011 |
| Benzene | 71-43-2 | 0.0000083 | 1.2 |
| Benzidine | 92-87-5 | 0.067 | 0.00015 |
| Benzo(a)pyrene | 50-32-8 | 0.0033 | 0.0030 |
| Beryllium | 7440-41-7 | 0.0024 | 0.0042 |
| Bis(2-chloroethyl)ether | 111-44-4 | 0.00033 | 0.030 |
| Bis(chloromethyl)ether | 542-88-1 | 0.062 | 0.00016 |
| Bis(2-ethylhexyl)-phthalate | 117-81-7 | 0.00000024 | 42. |
| 1,3-Butadiene | 106-99-0 | 0.00028 | 0.036 |
| Cadmium | 7440-43-9 | 0.0018 | 0.0056 |
| Carbon Tetrachloride | 56-23-5 | 0.000015 | 0.67 |
| Chlordane | 57-74-9 | 0.00037 | 0.027 |
| Chloroform | 67-66-3 | 0.000023 | 0.43 |
| Chloromethane | 74-87-3 | 0.0000036 | 2.8 |
| Chromium VI | 7440-47-3 | 0.012 | 0.00083 |
| DDT | 50-29-3 | 0.000097 | 0.10 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.014 | 0.00071 |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.0063 | 0.0016 |
| 1,2-Dibromoethane | 106-93-4 | 0.00022 | 0.045 |
| 1,1-Dichloroethane | 75-34-3 | 0.000026 | 0.38 |
| 1,2-Dichloroethane | 107-06-2 | 0.000026 | 0.38 |
| 1,1-Dichloroethylene | 75-35-4 | 0.000050 | 0.20 |
| 1,3-Dichloropropene | 542-75-6 | 0.35 | 0.000029 |
| Dieldrin | 60-57-1 | 0.0046 | 0.0022 |
| Diethylstilbestrol | 56-53-1 | 0.14 | 0.000071 |
| Dimethylnitrosamine | 62-75-9 | 0.014 | 0.00071 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.000088 | 0.11 |
| 1,2-Diphenylhydrazine | 122-66-7 | 0.00022 | 0.045 |
| 1,4-Dioxane | 123-91-1 | 0.0000014 | 7.1 |
| Epichlorohydrin | 106-89-8 | 0.0000012 | 8.3 |
| Ethylene Oxide | 75-21-8 | 0.00010 | 0.10 |
| Ethylene Dibromide | 106-93-4 | 0.00022 | 0.045 |
| Formaldehyde | 50-00-0 | 0.000013 | 0.77 |
| Heptachlor | 76-44-8 | 0.0013 | 0.0077 |
| Heptachlor Epoxide | 1024-57-3 | 0.0026 | 0.0038 |
| Hexachlorobenzene | 118-74-1 | 0.00049 | 0.020 |

(m³/sec)

| | | | | | | | | | | | |
|-------------|----|----|----|----|----|----|----|----|----|----|----|
| <0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.5-0.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 |
| 1.0-1.9 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 3 | 3 | 3 | 4 |
| 2.0-2.9 | 0 | 0 | 1 | 3 | 4 | 4 | 6 | 6 | 7 | 8 | 9 |
| 3.0-3.9 | 0 | 1 | 2 | 5 | 6 | 7 | 9 | 10 | 11 | 12 | 13 |
| 4.0-4.9 | 1 | 2 | 4 | 6 | 8 | 10 | 12 | 13 | 14 | 15 | 17 |
| 5.0-7.4 | 2 | 3 | 5 | 8 | 10 | 12 | 14 | 16 | 17 | 19 | 21 |
| 7.5-9.9 | 3 | 5 | 8 | 12 | 15 | 17 | 20 | 22 | 22 | 23 | 24 |
| 10.0-12.4 | 4 | 6 | 10 | 15 | 19 | 21 | 23 | 24 | 25 | 26 | 27 |
| 12.5-14.9 | 4 | 7 | 12 | 18 | 22 | 23 | 25 | 26 | 27 | 28 | 29 |
| 15.0-19.9 | 5 | 8 | 13 | 20 | 23 | 24 | 26 | 27 | 28 | 29 | 31 |
| 20.0-24.9 | 6 | 10 | 17 | 23 | 25 | 27 | 29 | 30 | 31 | 32 | 34 |
| 25.0-29.9 | 7 | 12 | 20 | 25 | 27 | 29 | 31 | 32 | 33 | 35 | 36 |
| 30.0-34.9 | 8 | 14 | 22 | 26 | 29 | 31 | 33 | 35 | 36 | 37 | 39 |
| 35.0-39.9 | 9 | 16 | 23 | 28 | 30 | 32 | 35 | 36 | 37 | 39 | 41 |
| 40.0-49.9 | 10 | 17 | 24 | 29 | 32 | 34 | 36 | 38 | 39 | 41 | 42 |
| 50.0-59.9 | 12 | 21 | 26 | 31 | 34 | 36 | 39 | 41 | 42 | 44 | 46 |
| 60.0-69.9 | 14 | 22 | 27 | 33 | 36 | 39 | 42 | 43 | 45 | 47 | 49 |
| 70.0-79.9 | 16 | 23 | 29 | 35 | 38 | 41 | 44 | 46 | 47 | 49 | 51 |
| 80.0-89.9 | 17 | 25 | 30 | 36 | 40 | 42 | 46 | 48 | 49 | 51 | 54 |
| 90.0-99.9 | 19 | 26 | 31 | 38 | 42 | 44 | 48 | 50 | 51 | 53 | 56 |
| 100.0-119.9 | 21 | 26 | 32 | 39 | 43 | 46 | 49 | 52 | 53 | 55 | 58 |
| 120.0-139.9 | 22 | 28 | 35 | 42 | 46 | 49 | 52 | 55 | 56 | 59 | 61 |
| 140.0-159.9 | 23 | 30 | 36 | 44 | 48 | 51 | 55 | 58 | 59 | 62 | 65 |
| 160.0-179.9 | 25 | 31 | 38 | 46 | 50 | 54 | 58 | 60 | 62 | 65 | 67 |
| 180.0-199.9 | 26 | 32 | 40 | 48 | 52 | 56 | 60 | 63 | 65 | 67 | 70 |
| >199.9 | 26 | 33 | 41 | 49 | 54 | 58 | 62 | 65 | 67 | 69 | 73 |

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

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

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

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

Metals-TCLP Extract Concentration Limits

| Constituent | CAS No. | Concentration limits (mg/ℓ) |
|-------------|-----------|-----------------------------|
| Antimony | 7440-36-0 | 1. |
| Arsenic | 7440-38-2 | 5. |
| Barium | 7440-39-3 | 100. |
| Beryllium | 7440-41-7 | 0.007 |
| Cadmium | 7440-43-9 | 1. |
| Chromium | 7440-47-3 | 5. |
| Lead | 7439-92-1 | 5. |
| Mercury | 7439-97-6 | 0.2 |
| Nickel | 7440-02-0 | 70. |
| Selenium | 7782-49-2 | 1. |
| Silver | 7440-22-4 | 5. |
| Thallium | 7440-28-0 | 7. |

Nonmetals-Residue Concentration Limits

| Constituent | CAS No. | Concentration limits for residues (mg/kg) |
|-----------------------------|------------|---|
| Acetonitrile | 75-05-8 | 0.2 |
| Acetophenone | 98-86-2 | 4. |
| Acrolein | 107-02-8 | 0.5 |
| Acrylamide | 79-06-1 | 0.0002 |
| Acrylonitrile | 107-13-1 | 0.0007 |
| Aldrin | 309-00-2 | 0.00002 |
| Allyl alcohol | 107-18-6 | 0.2 |
| Aluminum phosphide | 20859-73-8 | 0.01 |
| Aniline | 62-53-3 | 0.06 |
| Barium cyanide | 542-62-1 | 1. |
| Benz(a)anthracene | 56-55-3 | 0.0001 |
| Benzene | 71-43-2 | 0.005 |
| Benzidine | 92-87-5 | 0.000001 |
| Bis(2-chloroethyl) ether | 111-44-4 | 0.0003 |
| Bis(chloromethyl) ether | 542-88-1 | 0.000002 |
| Bis(2-ethylhexyl) phthalate | 117-81-7 | 30. |
| Bromoform | 75-25-2 | 0.7 |
| Calcium cyanide | 592-01-8 | 0.000001 |
| Carbon disulfide | 75-15-0 | 4. |
| Carbon tetrachloride | 56-23-5 | 0.005 |
| Chlordane | 57-74-9 | 0.0003 |
| Chlorobenzene | 108-90-7 | 1. |

| | | |
|------------------------------------|------------|------------|
| Chloroform | 67-66-3 | 0.06 |
| Copper cyanide | 544-92-3 | 0.2 |
| Cresols (Cresylic acid) | 1319-77-3 | 2. |
| Cyanogen | 460-19-5 | 1. |
| DDT | 50-29-3 | 0.001 |
| Dibenz(a,h)anthracene | 53-70-3 | 0.000007 |
| 1,2-Dibromo-3-chloropropane | 96-12-8 | 0.00002 |
| p-Dichlorobenzene | 106-46-7 | 0.075 |
| Dichlorodifluoromethane | 75-71-8 | 7. |
| 1,1-Dichloroethylene | 75-35-4 | 0.005 |
| 2,4-Dichlorophenol | 120-83-2 | 0.1 |
| 1,3-Dichloropropene | 542-75-6 | 0.001 |
| Dieldrin | 60-57-1 | 0.00002 |
| Diethyl phthalate | 84-66-2 | 30. |
| Diethylstilbestrol | 56-53-1 | 0.0000007 |
| Dimethoate | 60-51-5 | 0.03 |
| 2,4-Dinitrotoluene | 121-14-2 | 0.0005 |
| Diphenylamine | 122-39-4 | 0.9 |
| 1,2-Diphenylhydrazine | 122-66-7 | 0.0005 |
| Endosulfan | 115-29-7 | 0.002 |
| Endrin | 72-20-8 | 0.0002 |
| Epichlorohydrin | 106-89-8 | 0.04 |
| Ethylene dibromide | 106-93-4 | 0.0000004 |
| Ethylene oxide | 75-21-8 | 0.0003 |
| Fluorine | 7782-41-4 | 4. |
| Formic acid | 64-18-6 | 70. |
| Heptachlor | 76-44-8 | 0.00008 |
| Heptachlor epoxide | 1024-57-3 | 0.00004 |
| Hexachlorobenzene | 118-74-1 | 0.0002 |
| Hexachlorobutadiene | 87-68-3 | 0.005 |
| Hexachlorocyclopentadiene | 77-47-4 | 0.2 |
| Hexachlorodibenzo-p-dioxins | 19408-74-3 | 0.00000006 |
| Hexachloroethane | 67-72-1 | 0.03 |
| Hydrazine | 302-01-1 | 0.0001 |
| Hydrogen cyanide | 74-90-8 | 0.00007 |
| Hydrogen sulfide | 7783-06-4 | 0.000001 |
| Isobutyl alcohol | 78-83-1 | 10. |
| Methomyl | 16752-77-5 | 1. |
| Methoxychlor | 72-43-5 | 0.1 |
| 3-Methylcholanthrene | 56-49-5 | 0.00004 |
| 4,4'-Methylenebis(2-chloroaniline) | 101-14-4 | 0.002 |
| Methylene chloride | 75-09-2 | 0.05 |
| Methyl ethyl ketone (MEK) | 78-93-3 | 2. |
| Methyl hydrazine | 60-34-4 | 0.0003 |
| Methyl parathion | 298-00-0 | 0.02 |
| Naphthalene | 91-20-3 | 10. |

| | | |
|----------------------------------|------------|-----------|
| Nickel cyanide | 557-19-7 | 0.7 |
| Nitric oxide | 10102-43-9 | 4. |
| Nitrobenzene | 98-95-3 | 0.02 |
| N-Nitrosodi-n-butylamine | 924-16-3 | 0.00006 |
| N-Nitrosodiethylamine | 55-18-5 | 0.000002 |
| N-Nitroso-N-methylurea | 684-93-5 | 0.0000001 |
| N-Nitrosopyrrolidine | 930-55-2 | 0.0002 |
| Pentachlorobenzene | 608-93-5 | 0.03 |
| Pentachloronitrobenzene (PCNB) | 82-68-8 | 0.1 |
| Pentachlorophenol | 87-86-5 | 1. |
| Phenol | 108-95-2 | 1. |
| Phenylmercury acetate | 62-38-4 | 0.003 |
| Phosphine | 7803-51-2 | 0.01 |
| Polychlorinated biphenyls, N.O.S | 1336-36-3 | 0.00005 |
| Potassium cyanide | 151-50-8 | 2. |
| Potassium silver cyanide | 506-61-6 | 7. |
| Pronamide | 23950-58-5 | 3. |
| Pyridine | 110-86-1 | 0.04 |
| Reserpine | 50-55-5 | 0.00003 |
| Selenourea | 630-10-4 | 0.2 |
| Silver cyanide | 506-64-9 | 4. |
| Sodium cyanide | 143-33-9 | 1. |
| Strychnine | 57-24-9 | 0.01 |
| 1,2,4,5-Tetrachlorobenzene | 95-94-3 | 0.01 |
| 1,1,2,2-tetrachloroethane | 79-34-5 | 0.002 |
| Tetrachloroethylene | 127-18-4 | 0.7 |
| 2,3,4,6-Tetrachlorophenol | 58-90-2 | 0.01 |
| Tetraethyl lead | 78-00-2 | 0.000004 |
| Thiourea | 62-56-6 | 0.0002 |
| Toluene | 108-88-3 | 10. |
| Toxaphene | 8001-35-2 | 0.005 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.006 |
| Trichloroethylene | 79-01-6 | 0.005 |
| Trichloromonofluoromethane | 75-69-4 | 10. |
| 2,4,5-Trichlorophenol | 95-95-4 | 4. |
| 2,4,6-Trichlorophenol | 88-06-2 | 4. |
| Vanadium pentoxide | 1314-62-1 | 0.7 |
| Vinyl chloride | 75-01-4 | 0.002 |

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section 726.APPENDIX H Potential PICs for Determination of Exclusion of Waste-Derived Residues

PICs Found in Stack Effluents

Volatiles

Benzene
Toluene
Carbon tetrachloride
Chloroform
Methylene chloride
Trichloroethylene
Tetrachloroethylene
1,1,1-Trichloroethane
Chlorobenzene
cis-1,4-Dichloro-2-butene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Methylene bromide
Methyl ethyl ketone

Semivolatiles

Bis(2-ethylhexyl)phthalate
Naphthalene
Phenol
Diethyl phthalate
Butyl benzyl phthalate
2,4-Dimethylphenol
o-Dichlorobenzene
m-Dichlorobenzene
p-Dichlorobenzene
Hexachlorobenzene
2,4,6-Trichlorophenol
Fluoranthene
o-Nitrophenol
1,2,4-Trichlorobenzene
o-Chlorophenol
Pentachlorophenol
Pyrene
Dimethyl phthalate
Mononitrobenzene
2,6-Toluene diisocyanate
Polychlorinated dibenzo-p-dioxins¹
Polychlorinated dibenzo-furans¹

¹ Analyses for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans are required only for residues collected from areas downstream of the combustion chamber (e.g., ductwork, boiler tubes, heat exchange surfaces, air pollution control devices, etc.).

BOARD NOTE: Analysis is not required for those compounds that do not have an established F039 nonwastewater concentration limit.

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

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

The document entitled, “Methods Manual for Compliance with BIF Regulations: Burning Hazardous Waste in Boilers and Industrial Furnaces”, December 1990, is available as 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). It is also available through NTIS, as described in the incorporation by reference.

(Source: Amended at 42 Ill. Reg. 23023, effective November 19, 2018)

Section ~~726.Appendix~~ 726.APPENDIX J Guideline on Air Quality Models (Repealed)

(Source: Repealed at 30 Ill. Reg. 3700, effective February 23, 2006)

Section 726.APPENDIX K Lead-Bearing Materials that May be Processed in Exempt Lead Smelters

- a) Exempt lead-bearing materials when generated or originally produced by lead-associated industries.

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

Acid dump/fill solids

Sump mud

Materials from laboratory analyses

Acid filters

Baghouse bags

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

Sweepings

Air filter bags and cartridges

Respiratory cartridge filters

Shop abrasive

Stacking boards

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

Paper hand towels

Wiping rags and sponges

Contaminated pallets

Water treatment sludges, filter cakes, residues, and solids

Emission control dusts, sludges, filter cakes, residues, and solids from lead-associated industries (e.g., K069 and D008 wastes)

Spent grinds, posts and separators

Spent batteries

Lead oxide and lead oxide residues

Lead plates and groups

Spent battery cases, covers, and vents

Pasting belts

Water filter media

Cheesecloth from pasting rollers

Pasting additive bags

Asphalt paving materials

- b) Exempt lead-bearing materials when generated or originally produced by any industry.

Charging jumpers and clips

Platen abrasive

Fluff from lead wire and cable casings

Lead-based pigments and compounding pigment dust

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

Section 726.APPENDIX L Nickel or Chromium-Bearing Materials that May be Processed in Exempt Nickel-Chromium Recovery Furnaces

- a) Exempt nickel or chromium-bearing materials when generated by manufacturers or users of nickel, chromium, or iron.

Baghouse bags

Raney nickel catalyst

Floor sweepings

Air filters

Electroplating bath filters

Wastewater filter media

Wood Pallets

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

Laboratory samples and spent chemicals

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

Respirator cartridge filters

Paper hand towels

b) Exempt nickel or chromium-bearing materials when generated by any industry.

Electroplating wastewater treatment sludges (F006)

Nickel or chromium-containing solutions

Nickel or chromium-containing catalysts

Nickel-cadmium and nickel-iron batteries

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

Filter cake from nickel-chromium alloy pickling operations

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

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

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

Activated carbon

Decomposer graphite

Wood

Paper

Protective clothing

Sweepings

Respiratory cartridge filters

Cleanup articles

Plastic bags and other contaminated containers
 Laboratory and process control samples
 K106 and other wastewater treatment plant sludge and filter cake
 Mercury cell sump and tank sludge
 Mercury cell process solids
 Recoverable levels of mercury contained in soil

(Source: Amended at 37 Ill. Reg. 3249, effective March 4, 2013)

Section 726.TABLE A Exempt Quantities for Small Quantity Burner Exemption

| TESH (m) | Allowable Hazardous Waste Burning Rate (gal/mo) | TESH | Allowable Hazardous Waste Burning Rate (gal/mo) |
|--------------|---|------------------|---|
| 0 to 3.9 | 0 | 40.0 to 44.9 | 210 |
| 4.0 to 5.9 | 13 | 45.0 to 49.9 | 260 |
| 6.0 to 7.9 | 18 | 50.0 to 54.9 | 330 |
| 8.0 to 9.9 | 27 | 55.0 to 59.9 | 400 |
| 10.0 to 11.9 | 40 | 60.0 to 64.9 | 490 |
| 12.0 to 13.9 | 48 | 65.0 to 69.9 | 610 |
| 14.0 to 15.9 | 59 | 70.0 to 74.9 | 680 |
| 16.0 to 17.9 | 69 | 75.0 to 79.9 | 760 |
| 18.0 to 19.9 | 76 | 80.0 to 84.9 | 850 |
| 20.0 to 21.9 | 84 | 85.0 to 89.9 | 960 |
| 22.0 to 23.9 | 93 | 90.0 to 94.9 | 1,100 |
| 24.0 to 25.9 | 100 | 95.0 to 99.9 | 1,200 |
| 26.0 to 27.9 | 110 | 100.0 to 104.9 | 1,300 |
| 28.0 to 29.9 | 130 | 105.0 to 109.9 | 1,500 |
| 30.0 to 34.9 | 140 | 110.0 to 114.9 | 1,700 |
| 35.0 to 39.9 | 170 | 115.0 or greater | 1,900 |

BOARD NOTE: Derived from table to 40 CFR 266.108(a)(1).

(Source: Amended at 40 Ill. Reg. 11955, effective August 9, 2016)