**Section 703.205 Incinerators that Burn Hazardous Waste**

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

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

1) Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is ignitable (Hazard Code I), corrosive (Hazard Code C), or both;

2) Documentation that the waste is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code 721 solely because it is reactive (Hazard Code R) for characteristics other than those listed in 35 Ill. Adm. Code 721.123(a)(4) and (a)(5) and will not be burned when other hazardous wastes are present in the combustion zone;

3) Documentation that the waste is a hazardous waste solely because it possesses the characteristic of ignitability or corrosivity, or both, as determined by the tests for characteristics of hazardous wastes pursuant to Subpart C of 35 Ill. Adm. Code 721; or

4) Documentation that the waste is a hazardous waste solely because it possesses the reactivity characteristics listed in 35 Ill. Adm. Code 721.123 (a)(1) through (a)(3) or (a)(6) through (a)(8), and that it will not be burned when other hazardous wastes are present in the combustion zone.

b) Submit a trial burn plan or the results of a trial burn, including all required determinations, in accordance with Section 703.222 through 703.224.

c) In lieu of a trial burn, the applicant may submit the following information:

1) An analysis of each waste or mixture of wastes to be burned including the following:

A) Heat value of the waste in the form and composition in which it will be burned;

B) Viscosity (if applicable) or description of physical form of the waste;

C) An identification of any hazardous organic constituents listed in Appendix H to 35 Ill. Adm. Code 721 that are present in the waste to be burned, except that the applicant need not analyze for constituents listed in Appendix H to 35 Ill. Adm. Code 721 that would reasonably not be expected to be found in the waste. The constituents excluded from analysis must be identified and the basis for their exclusion stated. The waste analysis must rely on appropriate analytical methods;

D) An approximate quantification of the hazardous constituents identified in the waste, within the precision produced by the appropriate analytical methods; and

E) A quantification of those hazardous constituents in the waste that may be designated as POHCs based on data submitted from other trial or operational burns that demonstrate compliance with the performance standard in 35 Ill. Adm. Code 724.443;

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.

2) A detailed engineering description of the incinerator, including the following:

A) Manufacturer's name and model number of incinerator;

B) Type of incinerator;

C) Linear dimension of incinerator unit including cross sectional area of combustion chamber;

D) Description of auxiliary fuel system (type/feed);

E) Capacity of prime mover;

F) Description of automatic waste feed cutoff systems;

G) Stack gas monitoring and pollution control monitoring system;

H) Nozzle and burner design;

I) Construction materials; and

J) Location and description of temperature, pressure and flow indicating devices and control devices;

3) A description and analysis of the waste to be burned compared with the waste for which data from operational or trial burns are provided to support the contention that a trial burn is not needed. The data should include those items listed in subsection (c)(1). This analysis should specify the POHCs that the applicant has identified in the waste for which a permit is sought, and any differences from the POHCs in the waste for which burn data are provided;

4) The design and operating conditions of the incinerator unit to be used, compared with that for which comparative burn data are available;

5) A description of the results submitted from any previously conducted trial burns, including the following:

A) Sampling and analysis techniques used to calculate performance standards in 35 Ill. Adm. Code 724.443;

B) Methods and results of monitoring temperatures, waste feed rates, carbon monoxide, and an appropriate indicator of combustion gas velocity (including a statement concerning the precision and accuracy of this measurement); and

C) The certification and results required by subsection (b);

6) The expected incinerator operation information to demonstrate compliance with 35 Ill. Adm. Code 724.443 and 724.445, including the following:

A) Expected carbon monoxide (CO) level in the stack exhaust gas;

B) Waste feed rate;

C) Combustion zone temperature;

D) Indication of combustion gas velocity;

E) Expected stack gas volume, flow rate, and temperature;

F) Computed residence time for waste in the combustion zone;

G) Expected hydrochloric acid removal efficiency;

H) Expected fugitive emissions and their control procedures; and

I) Proposed waste feed cut-off limits based on the identified significant operating parameters;

7) The Agency may, pursuant to 35 Ill. Adm. Code 705.122, request such additional information as may be necessary for the Agency to determine whether the incinerator meets the requirements of Subpart O of 35 Ill. Adm. Code 724 and what conditions are required by that Subpart and Section 39(d) of the Environmental Protection Act; and

8) Waste analysis data, including that submitted in subsection (c)(1), sufficient to allow the Agency to specify as permit Principal Organic Hazardous Constituents (permit POHCs) those constituents for which destruction and removal efficiencies will be required.

d) The Agency must approve a permit application without a trial burn if it finds the following:

1) The wastes are sufficiently similar; and

2) The incinerator units are sufficiently similar, and the data from other trial burns are adequate to specify (pursuant to 35 Ill. Adm. Code 724.445) operating conditions that will ensure that the performance standards in 35 Ill. Adm. Code 724.443 will be met by the incinerator.

e) When the owner or operator of a hazardous waste incineration unit becomes subject to RCRA permit requirements, or when the owner or operator of an existing hazardous waste incineration unit demonstrates compliance with the air emission standards and limitations of the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) in 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) (i.e., by conducting a comprehensive performance test and submitting a Notification of Compliance pursuant to 40 CFR 63.1207(j) and 63.1210(d) documenting compliance with all applicable requirements of subpart EEE of 40 CFR 63), this Section does not apply, except those provisions that the Agency determines are necessary to ensure compliance with 35 Ill. Adm. Code 724.445(a) and (c) if the owner or operator elects to comply with Section 703.320(a)(1)(A) to minimize emissions of toxic compounds from startup, shutdown, and malfunction events. Nevertheless, the Agency may apply the provisions of this Section, on a case-by-case basis, for purposes of information collection in accordance with Sections 703.188, 703.189, and 703.241(a)(2) and (a)(3).

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

BOARD NOTE: Derived from 40 CFR 270.19 (2017).

(Source: Amended at 42 Ill. Reg. 20993, effective November 19, 2018)