

3745-266-103

**Interim standards for burners.**

## (A) Purpose, scope, and applicability.

## (1) General.

(a) The purpose of this rule is to establish minimum standards for owners and operators of "existing" boilers and industrial furnaces that burn hazardous waste where such standards define the acceptable management of hazardous waste until final administrative disposition of the owner's or operator's permit application is made pursuant to section 3734.05 of the Revised Code. The standards of this rule apply to owners and operators of existing facilities until either a permit is issued, or closure responsibilities are fulfilled. However, when the owner and operator of an existing boiler or industrial furnace that burns hazardous waste has obtained interim status or received a permit from U.S. EPA, the director may apply this rule on a case-by-case basis.

(b) "Existing" or "in existence" means a boiler or industrial furnace that on or before December 7, 2004, or the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, was either in operation burning or processing hazardous waste or for which construction (including the ancillary facilities to burn or to process the hazardous waste) had commenced. A facility has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction, and either:

(i) A continuous on-site, physical construction program has begun.

(ii) The owner or operator has entered into contractual obligations-which cannot be canceled or modified without substantial loss-for physical construction of the facility to be completed within a reasonable time.

(c) If a boiler or industrial furnace is located at a facility that already has a permit or permit by rule, the owner or operator of the facility shall comply with the applicable requirements for permit modifications in rule 3745-50-51 of the Administrative Code.

(2) Exemptions. This rule does not apply to hazardous waste and facilities exempt under rule 3745-266-108 or paragraph (B) of rule 3745-266-100 of the Administrative Code.

- (3) Prohibition on burning dioxin-listed wastes. The following hazardous waste listed for dioxin and hazardous waste derived from any of these wastes may not be burned in a boiler or industrial furnace operating under permit by rule: F020, F021, F022, F023, F026, and F027.
- (4) Applicability of standards in Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code. Owners and operators of boilers and industrial furnaces that burn hazardous waste and are operating under permit by rule are subject to the following provisions of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code, except as provided otherwise by this rule:
- (a) [Reserved.]
  - (b) Rules 3745-65-11 to 3745-65-17 of the Administrative Code (general facility standards).
  - (c) Rules 3745-65-31 to 3745-65-37 of the Administrative Code (preparedness and prevention).
  - (d) Rules 3745-65-51 to 3745-65-56 of the Administrative Code (contingency plan and emergency procedures).
  - (e) Rules 3745-65-71 to 3745-65-77 of the Administrative Code, except that rules 3745-65-71, 3745-65-72, and 3745-65-76 of the Administrative Code do not apply to owners and operators of on-site facilities that do not receive any hazardous waste from off-site sources (manifest system, recordkeeping, and reporting).
  - (f) Rules 3745-66-11 to 3745-66-21 of the Administrative Code (closure and post-closure).
  - (g) Rules 3745-66-41, 3745-66-42, 3745-66-43, and 3745-66-47 to 3745-66-48 of the Administrative Code, except that states and the federal government are exempt from rules 3745-66-40 to 3745-66-48 of the Administrative Code (financial requirements).
  - (h) [Reserved.]
- (5) Special requirements for furnaces. The following controls apply during permit by rule to industrial furnaces (e.g., kilns, cupolas) that feed hazardous waste for a purpose other than solely as an ingredient [see paragraph (A)(5)(b) of this rule] 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 shall be fed at a location where combustion gas temperatures are at least eighteen hundred degrees Fahrenheit.
- (ii) The owner or operator shall determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and shall retain documentation of such determination in the facility record.
- (iii) For cement kiln systems, the hazardous waste shall be fed into the kiln.
- (iv) The hydrocarbon controls in paragraph (C) of rule 3745-266-104 of the Administrative Code or paragraph (C)(5) of this rule apply upon certification of compliance under paragraph (C) of this rule irrespective of the carbon monoxide 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 the hazardous waste meets either of the following criteria:

- (i) The hazardous waste has a total concentration of nonmetal compounds listed in the appendix to rule 3745-51-11 of the Administrative Code exceeding five hundred parts per million (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 five hundred ppm limit by bona fide treatment that removes or destroys nonmetal constituents. Blending for dilution to meet the five hundred ppm limit is prohibited, and documentation that the waste has not been impermissibly diluted shall be retained in the facility record.
- (ii) The hazardous waste has a heating value of five thousand British thermal units (Btu) per pound 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 five thousand Btu per pound limit by bona fide treatment that removes or destroys organic constituents. Blending to augment the heating value to meet the five thousand Btu per pound limit is prohibited, and documentation that the waste has not been impermissibly blended shall be retained in the facility record.

- (6) Restrictions on burning hazardous waste that is not a fuel. Prior to certification of compliance under paragraph (C) of this rule, owners and operators shall not feed hazardous waste that has a heating value less than five thousand Btu per pound, as-generated, (except that the heating value of a waste as-generated may be increased to above the five thousand Btu per pound limit by bona fide treatment; however, blending to augment the heating value to meet the five thousand Btu per pound limit is prohibited, and records shall be kept to document that impermissible blending has not occurred) in a boiler or industrial furnace, except that:
- (a) Hazardous waste may be burned solely as an ingredient; or
  - (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 seven hundred twenty hours; or
  - (c) Such waste may be burned if the director has documentation to show that, prior to December 7, 2004, or prior to the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule:
    - (i) The boiler or industrial furnace is operating under the standards for incinerators in rules 3745-68-40 to 3745-68-52 of the Administrative Code, or the standards for thermal treatment units provided by rules 3745-68-70 to 3745-68-83 of the Administrative Code; and
    - (ii) The boiler or industrial furnace met the permit by rule eligibility requirements under rule 3745-50-40 of the Administrative Code for rules 3745-68-40 to 3745-68-52 or rules 3745-68-70 to 3745-68-83 of the Administrative Code; and
    - (iii) Hazardous waste with a heating value less than five thousand Btu per pound was burned prior to December 7, 2004, or prior to the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule; or
  - (d) Such waste may be burned in a halogen acid furnace if the waste was burned as an excluded ingredient under paragraph (E) of rule 3745-51-02 of the Administrative Code prior to December 7, 2004, or prior to the effective date of any new, amended, or rescinded rule or statute that renders the

owner or operator of the boiler or industrial furnace subject to this rule, 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 boiler or industrial furnace without the use of a storage unit, the owner or operator shall comply with rule 3745-266-111 of the Administrative Code.

(B) Certification of precompliance.

- (1) General. The owner or operator shall provide complete and accurate information specified in paragraph (B)(2) of this rule to the director within thirty days after December 7, 2004, or within thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, and shall establish limits for the operating parameters specified in paragraph (B)(3) of this rule. Such information is termed a "certification of precompliance" and constitutes a certification that the owner or operator has determined that, when the facility is operated within the limits specified in paragraph (B)(3) of this rule, the owner or operator believes that, using best engineering judgment, emissions of particulate matter, metals, hydrogen chloride, and chlorine gas are not likely to exceed the limits in rules 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code. The facility may burn hazardous waste only under the operating conditions that the owner or operator establishes under paragraph (B)(3) of this rule until the owner or operator submits a revised certification of precompliance under paragraph (B)(8) of this rule or a certification of compliance under paragraph (C) of this rule, or until a permit is issued.
- (2) Information required. The following information shall be submitted with the certification of precompliance to support the determination that the limits established for the operating parameters identified in paragraph (B)(3) of this rule are not likely to result in an exceedance of the allowable emission rates for particulate matter, metals, hydrogen chloride, and chlorine gas:
  - (a) General facility information:
    - (i) U.S. EPA identification number.
    - (ii) Facility name, contact person, telephone number, and address.
    - (iii) Description of boilers and industrial furnaces burning hazardous waste, including type and capacity of device.

- (iv) A scaled plot plan showing the entire facility and location of the boilers and industrial furnaces burning hazardous waste.
  - (v) A description of the air pollution control system on each device burning hazardous waste, including the temperature of the flue gas at the inlet to the particulate matter control system.
- (b) Except for facilities complying with the "Tier I" or "Adjusted Tier I" feed rate screening limits for metals or total chlorine and chloride in paragraph (B) or (E) of rule 3745-266-106 and paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code, respectively, the estimated uncontrolled (at the inlet to the air pollution control system) emissions of particulate matter, each metal controlled by rule 3745-266-106 of the Administrative Code, hydrogen chloride, and chlorine, and the following information to support such determinations:
- (i) The feed rate (pounds per hour) of ash, chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each feedstream (hazardous waste, other fuels, industrial furnace feedstocks).
  - (ii) For industrial furnaces that recycle collected particulate matter back into the furnace and that will certify compliance with the metals emissions standards under paragraph (C)(3)(b)(i) of this rule, the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator shall use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in the appendix to this rule.
  - (iii) For industrial furnaces that recycle collected particulate matter back into the furnace and that will certify compliance with the metals emissions standards under paragraph (C)(3)(b)(i) of this rule, the estimated enrichment factor for each metal. To estimate the enrichment factor, the owner or operator shall use either best engineering judgment or the procedures specified in "Alternative Methodology for Implementing Metals Controls" in the appendix to this rule.
  - (iv) If best engineering judgment is used to estimate partitioning factors or enrichment factors under paragraph (B)(2)(b)(ii) or (B)(2)(b)(iii) of this rule, respectively, the basis for the judgment. When best engineering judgment is used to develop or evaluate data

or information and make determinations under this rule, the determinations shall be made by a qualified professional engineer and a certification of such engineer's determinations in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code shall be provided in the certification of precompliance.

- (c) For facilities complying with the "Tier I" or "Adjusted Tier I" feed rate screening limits for metals or total chlorine and chloride in paragraph (B) or (E) of rule 3745-266-106 and paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code, the feed rate (pounds per hour) of total chloride and chlorine, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium in each ~~feed stream~~feedstream (hazardous waste, other fuels, industrial furnace feedstocks).
- (d) For facilities complying with the "Tier II" or "Tier III" emission limits for metals or hydrogen chloride and chlorine gas [under paragraph (C) or (D) of rule 3745-266-106 or paragraph (B)(2) or (C) of rule 3745-266-107 of the Administrative Code], the estimated controlled (outlet of the air pollution control system) emissions rates of particulate matter, each metal controlled by rule 3745-266-106 of the Administrative Code, hydrogen chloride, and chlorine gas, and the following information to support such determinations:
  - (i) The estimated air pollution control system removal efficiency for particulate matter, hydrogen chloride, chlorine gas, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium.
  - (ii) To estimate air pollution control system removal efficiency, the owner or operator shall use either best engineering judgment or the procedures prescribed in the appendix to this rule.
  - (iii) If best engineering judgment is used to estimate air pollution control system removal efficiency, the basis for the judgment. Use of best engineering judgment shall be in conformance with provisions of paragraph (B)(2)(b)(iv) of this rule.
- (e) Determination of allowable emissions rates for hydrogen chloride, chlorine gas, antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, silver, and thallium, and the following information to support such determinations:

- (i) For all facilities:
  - (a) Physical stack height.
  - (b) "Good engineering practice stack height" as defined in 40 CFR 51.100(ii).
  - (c) Maximum flue gas flow rate.
  - (d) Maximum flue gas temperature.
  - (e) Attach a U.S. geological service topographic map (or equivalent) showing the facility location and surrounding land within five kilometers of the facility.
  - (f) Identify terrain type: complex or noncomplex.
  - (g) Identify land use: urban or rural.
- (ii) For owners and operators using "Tier III" ~~site specific~~site-specific dispersion modeling to determine allowable levels under paragraph (D) of rule 3745-266-106 or paragraph (C) of rule 3745-266-107 of the Administrative Code, or "Adjusted Tier I" feed rate screening limits under paragraph (E) of rule 3745-266-106 or paragraph (E) of rule 3745-266-107 of the Administrative Code, by providing the following:
  - (a) Dispersion model and version used.
  - (b) Source of meteorological data.
  - (c) The dilution factor in micrograms per cubic meter per gram per second of emissions for the maximum annual average off-site (unless on-site is required) ground level concentration (MEI location).
  - (d) Indicate the MEI location on the map required under paragraph (B)(2)(e)(i)(e) of this rule.
- (f) For facilities complying with the "Tier II" or "Tier III" emissions rate controls for metals or hydrogen chloride and chlorine gas, a comparison of the estimated controlled emissions rates determined under paragraph (B)(2)(d) of this rule with the allowable emission rates determined under paragraph (B)(2)(e) of this rule.

- (g) For facilities complying with the "Tier I" (or "Adjusted Tier I") feed rate screening limits for metals or total chloride and chlorine, a comparison of actual feed rates of each metal and total chlorine and chloride determined under paragraph (B)(2)(c) of this rule to the "Tier I" allowable feed rates.
  - (h) For industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient [as determined by paragraph (A)(5)(b) of this rule] at any location other than the product discharge end of the device, documentation of compliance with paragraphs (A)(5)(a)(i), (A)(5)(a)(ii), and (A)(5)(a)(iii) of this rule.
  - (i) For industrial furnaces that recycle collected particulate matter back into the furnace and that will certify compliance with the metals emissions standards under paragraph (C)(3)(b)(i) of this rule:
    - (i) The applicable particulate matter standard in rule 3745-266-105 of the Administrative Code in pounds per hour.
    - (ii) The precompliance limit on the concentration of each metal in collected particulate matter.
- (3) Limits on operating conditions. The owner or operator shall establish limits on the following parameters consistent with the determinations made under paragraph (B)(2) of this rule and certify [under provisions of paragraph (B)(9) of this rule] to the director that the facility will operate within these limits when there is hazardous waste in the unit until revised certification of precompliance under paragraph (B)(8) of this rule or certification of compliance under paragraph (C) of this rule:
- (a) Feed rate of total hazardous waste and [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code] pumpable hazardous waste.
  - (b) Feed rate of each metal in the following ~~feed streams~~feedstreams:
    - (i) Total ~~feed streams~~feedstreams, except that industrial furnaces that comply with the alternative metals implementation approach under paragraph (B)(4) of this rule shall specify limits on the concentration of each metal in collected particulate matter in lieu of feed rate limits for total feedstreams.

- (ii) Total hazardous waste feed, unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code.
    - (iii) Total pumpable hazardous waste feed, unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code.
  - (c) Total feed rate of chlorine and chloride in total ~~feed streams~~feedstreams.
  - (d) Total feed rate of ash in total ~~feed streams~~feedstreams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited.
  - (e) Maximum production rate of the device in appropriate units when producing normal product, unless complying with the "Tier I" or "Adjusted Tier I" feed rate screening limits for chlorine under rule paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code and for all metals under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code, and the uncontrolled particulate emissions do not exceed the standard under rule 3745-266-105 of the Administrative Code.
- (4) Operating requirements for furnaces that recycle particulate matter. Owners and operators of furnaces that recycle collected particulate matter back into the furnace and that will certify compliance with the metals emissions controls under paragraph (C)(3)(b)(i) of this rule shall comply with the special operating requirements in "Alternative Methodology for Implementing Metals Controls" in the appendix to this rule.
- (5) Measurement of feed rates and production rate.
- (a) General requirements. Limits on each of the parameters specified in paragraph (B)(3) of this rule (except for limits on metals concentrations in collected particulate matter for industrial furnaces that recycle collected particulate matter) shall be established and continuously monitored under either of the following methods:
    - (i) Instantaneous limits. A limit for a parameter may be established and continuously monitored and recorded on an instantaneous basis (i.e., the value that occurs at any time) not to be exceeded at any time.

- (ii) Hourly rolling average limits. A limit for a parameter may be established and "continuously monitored" on an "hourly rolling average" basis defined as follows:
  - (a) A "continuous monitor" is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each fifteen seconds, and computes and records the average value at least every sixty seconds.
  - (b) An "hourly rolling average" is the arithmetic mean of the sixty most recent one-minute average values recorded by the continuous monitoring system.
- (b) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (arsenic, beryllium, cadmium, and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (B)(5)(a)(ii) of this rule or on (up to) a twenty-four hour rolling average basis. If the owner or operator elects to use an averaging period from two to twenty-four hours:
  - (i) The feed rate of each metal shall 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 shall meet the following specifications:
    - (a) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each fifteen seconds, and computes and records the average value at least every sixty seconds.
    - (b) The "rolling average" for the selected averaging period is the arithmetic mean of one hour block averages for the averaging period. A "one hour block average" is the arithmetic mean of the one minute averages recorded during the sixty-minute period beginning at one minute after the beginning of preceding clock hour.
- (c) Feed rate limits for metals, total chloride and chlorine, 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 or 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 shall be monitored under the continuous monitoring requirements of paragraphs (B)(5)(a) and (B)(5)(b) of this rule.

- (6) Public notice requirements at precompliance. Within thirty days after December 7, 2004, or within thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, the owner or operator shall submit a notice with the following information for publication in a major local newspaper of general circulation and send a copy of the notice to the appropriate units of state and local government. The owner or operator shall provide to the director with the certification of precompliance evidence of submitting the notice for publication.
- (a) The notice, which shall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of Paragraph (B) of Rule 3745-266-103 of the Administrative Code," shall include:
- (i) Name and address of the owner and operator of the facility as well as the location of the device burning hazardous waste.
  - (ii) Date that the certification of precompliance is submitted to Ohio EPA.
  - (iii) Brief description of the regulatory process required to comply with this rule including required emissions testing to demonstrate conformance with emissions standards for organic compounds, particulate matter, metals, hydrogen chloride, and chlorine gas.
  - (iv) Types and quantities of hazardous waste burned including, but not limited to, source, whether solids or liquids, as well as an appropriate description of the waste.
  - (v) Type of devices in which the hazardous waste is burned including a physical description and maximum production rate of each device.
  - (vi) Types and quantities of other fuels and industrial furnace feedstocks fed to each unit.
  - (vii) Brief description of the basis for this certification of precompliance as specified in paragraph (B)(2) of this rule.
  - (viii) Locations where the record for the facility can be viewed and copied by interested parties:

- (a) The administrative record kept by Ohio EPA where the supporting documentation was submitted or another location designated by the director.
- (b) The boiler and industrial furnace correspondence file kept at the facility site where the device is located. The correspondence file shall include all correspondence between the facility and the director, state and local regulatory officials, including copies of all certifications and notifications, such as the precompliance certification, precompliance public notice, notice of compliance testing, compliance test report, compliance certification, time extension requests and approvals or denials, enforcement notifications of violations, and copies of U.S. EPA and Ohio EPA site visit reports submitted to the owner or operator.
- (ix) Notification of the establishment of a facility mailing list whereby interested parties may notify Ohio EPA that such interested parties wish to be placed on the mailing list to receive future information and notices about this facility.
- (x) Location (mailing address) of the applicable Ohio EPA office, hazardous waste division, where further information can be obtained on Ohio EPA regulation of hazardous waste burning.
- (b) ~~These~~ At a minimum, these records and locations shall ~~at a minimum~~ include:
  - (i) The administrative record kept by the Ohio EPA office where the supporting documentation was submitted or another location designated by Ohio EPA; and
  - (ii) Files kept at the facility site where the device is located. The files shall include all correspondence between the facility and the U.S. EPA, state and local regulatory officials, including copies of all certifications and notifications, such as the precompliance certification, precompliance public notice, notice of compliance testing, compliance test report, compliance certification, time extension requests and approvals or denials, enforcement notifications of violations, and copies of U.S. EPA and Ohio EPA site visit reports submitted to the owner or operator.

- (c) Notification of the establishment of a facility mailing list whereby interested parties shall notify Ohio EPA that such interested parties wish to be placed on the mailing list to receive future information and notices about this facility.
  - (d) Location (mailing address) of the applicable U.S. EPA regional office, hazardous waste division, where further information can be obtained on regulation of hazardous waste burning.
- (7) Monitoring other operating parameters. When the monitoring systems for the operating parameters listed in paragraphs (C)(1)(e) to (C)(1)(m) of this rule are installed and operating in conformance with vendor specifications or (for carbon monoxide, hydrocarbon, and oxygen) specifications in the appendix to this rule, as appropriate, the parameters shall be continuously monitored and records shall be maintained in the operating record.
- (8) Revised certification of precompliance. The owner or operator may revise at any time the information and operating conditions documented under paragraphs (B)(2) and (B)(3) of this rule in the certification of precompliance by submitting a revised certification of precompliance under procedures in those paragraphs.
- (a) The public notice requirements of paragraph (B)(6) of this rule do not apply to recertifications.
  - (b) The owner and operator shall operate the facility within the limits established for the operating parameters under paragraph (B)(3) of this rule until a revised certification is submitted under ~~paragraphs~~paragraph (B)(8) ~~to (B)(8)(b)~~ of this rule or a certification of compliance is submitted under paragraph (C) of this rule.
- (9) Certification of precompliance statement. The owner or operator shall include the following signed statement with the certification of precompliance submitted to the director:

"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 paragraphs (B)(3) and (B)(4) of rule 3745-266-103 of the Administrative Code 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 manages 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 in this certification pursuant to paragraphs (B)(3) and (B)(4) of rule 3745-266-103 of the Administrative Code are enforceable limits at which the facility can legally operate during interim status until a revised certification of precompliance is submitted, a certification of compliance is submitted, or an operating permit is issued."

- (C) Certification of compliance. The owner or operator shall conduct emissions testing to document compliance with the emissions standards of rules 3745-266-105, 3745-266-106, 3745-266-107, and paragraphs (B) to (E) of rule 3745-266-104 of the Administrative Code, and paragraph (A)(5)(a)(iv) of this rule, under the procedures in ~~paragraphs paragraph (C) to (C)(8)(d)~~ paragraph (C) to (C)(8)(d) of this rule, except under extensions of time in paragraph (C)(7) of this rule. Based on the compliance test, the owner or operator shall submit to the director within thirty days after December 7, 2004, or within thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, a complete and accurate "certification of compliance" [under paragraph (C)(4) of this rule] with those emission standards establishing limits on the operating parameters specified in paragraph (C)(1) of this rule.

For purposes of compliance with this rule, all owners and operators who have submitted a certification of compliance to U.S. EPA, in accordance with 40 CFR 266.103(c), may submit a copy of the certification of compliance to the director within thirty days after December 7, 2004, or within thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule. The copy of the certification of compliance that is submitted to the director shall be submitted with the "Part A" application required by rule 3745-50-40 of the Administrative Code, and shall be considered part of such application.

- (1) Limits on operating conditions. The owner or operator shall establish limits on the following parameters based on operations during the compliance test [under procedures prescribed in paragraph (C)(4)(d) of this rule] or as otherwise specified and include these limits with the certification of compliance. The boiler or industrial furnace shall be operated in accordance with these operating limits and the applicable emissions standards of rules 3745-266-105, 3745-266-106, 3745-266-107, and paragraphs (B) to (E) of rule 3745-266-104

of the Administrative Code and paragraph (A)(5)(a)(iv) of this rule at all times when there is hazardous waste in the unit.

(a) Feed rate of total hazardous waste and [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code], pumpable hazardous waste.

(b) Feed rate of each metal in the following feedstreams:

(i) Total feedstreams, except that:

(a) Facilities that comply with "Tier I" or "Adjusted Tier I" metals feed rate screening limits may set facility operating limits at the metals feed rate screening limits determined under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code.

(b) Industrial furnaces that shall comply with the alternative metals implementation approach under paragraph (C)(3)(b) of this rule shall specify limits on the concentration of each metal in the collected particulate matter in lieu of feed rate limits for total feedstreams.

(ii) Total hazardous waste feed [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code].

(iii) Total pumpable hazardous waste feed [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code].

(c) Total feed rate of chlorine and chloride in total ~~feed streams~~feedstreams, except that facilities that comply with "Tier I" or "Adjusted Tier I" feed rate screening limits may set facility operating limits at the total chlorine and chloride feed rate screening limits determined under paragraph (B) (1) or (E) of rule 3745-266-107 of the Administrative Code.

(d) Total feed rate of ash in total ~~feed streams~~feedstreams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited.

(e) Carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas. When complying with the carbon monoxide

controls of paragraph (B) of rule 3745-266-104 of the Administrative Code, the carbon monoxide limit is one hundred parts per million by volume (ppmv), and when complying with the hydrocarbon controls of paragraph (C) of rule 3745-266-104 of the Administrative Code, the hydrocarbon limit is twenty ppmv. When complying with the carbon monoxide controls of paragraph (C) rule 3745-266-104 of the Administrative Code, the carbon monoxide 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 the "Tier I" or "Adjusted Tier I" feed rate screening limits for chlorine under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code and for all metals under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code, and the uncontrolled particulate emissions do not exceed the standard under rule 3745-266-105 of the Administrative Code.
- (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" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code].
- (h) Maximum flue gas temperature entering a particulate matter control device [unless complying with "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B) or (E) of rule 3745-266-107 of the Administrative Code].
- (i) For systems using wet scrubbers, including wet ionizing scrubbers [unless complying with "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code], the following:
  - (i) Minimum liquid to flue gas ratio.
  - (ii) Minimum scrubber blowdown from the system or maximum suspended solids content of scrubber water.
  - (iii) Minimum pH level of the scrubber water.

- (j) For systems using venturi scrubbers, the minimum differential gas pressure across the venturi [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code].
  - (k) For systems using dry scrubbers [unless complying with the "Tier I" or "Adjusted Tier I" metals feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code]:
    - (i) Minimum caustic feed rate.
    - (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 paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code]:
    - (i) Minimum electrical power in kilovolt amperes (kVA) to the precipitator plates.
    - (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" metal feed rate screening limits under paragraph (B) or (E) of rule 3745-266-106 of the Administrative Code and the total chlorine and chloride feed rate screening limits under paragraph (B)(1) or (E) of rule 3745-266-107 of the Administrative Code].
- (2) Prior notice of compliance testing. At least thirty days prior to the compliance testing required by paragraph (C)(3) of this rule, the owner or operator shall notify the director and submit the following information:
- (a) General facility information including:
    - (i) U.S. EPA identification 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:
- (i) Description of boiler or industrial furnace.
  - (ii) A scaled plot plan showing the entire facility and location of the boiler or industrial furnace.
  - (iii) A description of the air pollution control system.
  - (iv) Identification of the continuous emission monitors that are installed, including:
    - (a) Carbon monoxide monitor.
    - (b) Oxygen monitor.
    - (c) Hydrocarbon monitor, specifying the minimum temperature of the system and, if the temperature is less than one hundred fifty degrees Celsius, an explanation of why a heated system is not used [see paragraph (C)(5) of this rule] and a brief description of the sample gas conditioning system.
  - (v) Indication of whether the stack is shared with another device that will be in operation during the compliance test.
  - (vi) Other information useful to an understanding of the system design or operation.
- (c) Information on the testing planned, including a complete copy of the test protocol and quality assurance or quality control plan, and a summary description for each test providing, at a minimum, the following information ~~at a minimum~~:
- (i) Purpose of the test (e.g., demonstrate compliance with emissions of particulate matter).

- (ii) Planned operating conditions, including levels for each pertinent parameter specified in paragraph (C)(1) of this rule.

(3) Compliance testing.

- (a) General. Compliance testing shall be conducted under conditions for which the owner or operator has submitted a certification of precompliance under paragraph (B) of this rule and under conditions established in the notification of compliance testing required by paragraph (C)(2) of this rule. 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 shall 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 director shall provide a written approval to use compliance test data in lieu of testing a similar unit if the director finds that the hazardous wastes, the devices, and the operating conditions are sufficiently similar, and the data from the other compliance test is adequate to meet the requirements of paragraph (C) of this rule.
- (b) Special requirements for industrial furnaces that recycle collected particulate matter. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter from the air pollution control system shall comply with one of the following procedures for testing to determine compliance with the metals standards of paragraph (C) or (D) of rule 3745-266-106 of the Administrative Code:
  - (i) The special testing requirements prescribed in "Alternative Method for Implementing Metals Controls" in the appendix to this rule.
  - (ii) Stack emissions testing for a minimum of six hours each day while hazardous waste is burned during permit by rule. The testing shall be conducted when burning normal hazardous waste for that day at normal feed rates for that day and when the air pollution control system is operated under normal conditions. During permit by rule, hazardous waste analysis for metals content shall be sufficient for the owner or operator to determine if changes in metals content may affect the ability of the facility to meet the metals emissions standards established under paragraph (C) or (D) of rule 3745-266-106 of the Administrative Code. Under this option, operating limits [under paragraph (C)(1) of this rule] shall be established during compliance testing under paragraph (C)(3) of this rule on the following parameters:

- (a) Feed rate of total hazardous waste.
  - (b) Total feed rate of chlorine and chloride in total ~~feed streams~~feedstreams.
  - (c) Total feed rate of ash in total ~~feed streams~~feedstreams, except that the ash feed rate for cement kilns and light-weight aggregate kilns is not limited.
  - (d) Carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas.
  - (e) Maximum production rate of the device in appropriate units when producing normal product.
- (iii) Conduct compliance testing to determine compliance with the metals standards to establish limits on the operating parameters of paragraph (C)(1) of this rule only after the kiln system has been conditioned to enable the kiln system 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 shall 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 rules 3745-266-104 to 3745-266-107 of the Administrative Code 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 shall 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 rules 3745-266-104 to 3745-266-107 of the Administrative Code or establishing limits on operating parameters under this rule, the facility shall operate under compliance test conditions for a sufficient period to reach steady-state operations. ~~Industrial~~However, industrial furnaces that recycle collected particulate matter back into the furnace and that comply with paragraph (C)(3)(b)(i) or (C)(3)(b)(ii) of this rule, ~~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 shall be established in the certification of compliance shall be obtained during emissions sampling for the pollutants (i.e., metals, particulate matter, hydrogen chloride or chlorine gas, organic compounds) for which the parameter shall be established as specified by paragraph (C)(1) of this rule.

(4) Certification of compliance. Within ninety days after completing compliance testing, the owner or operator shall certify to the director compliance with the emissions standards of rules 3745-266-105, 3745-266-106, 3745-266-107, and paragraphs (B), (C), and (E) of rule 3745-266-104 of the Administrative Code and paragraph (A)(5)(a)(iv) of this rule. The certification of compliance shall include the following information:

(a) General facility and testing information including:

- (i) U.S. EPA identification 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 boiler or industrial furnace tested.
- (vi) Person responsible for quality assurance or quality control, title, and telephone number, and statement that procedures prescribed in the quality assurance or quality control plan submitted under paragraph (C)(2)(c) of this rule 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 paragraph (C)(2) of this rule, 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 paragraph (C)(2) of this rule, and an explanation of why the changes were necessary.

(ix) The complete report on results of emissions testing.

(b) Specific information on each test including:

(i) Purposes of test (e.g., demonstrate conformance with the emissions limits for particulate matter, metals, hydrogen chloride, chlorine gas, and carbon monoxide).

(ii) Summary of test results for each run and for each test including the following information:

(a) Date of run.

(b) Duration of run.

(c) Time-weighted average and highest hourly rolling average carbon monoxide level for each run and for the test.

(d) Highest hourly rolling average hydrocarbon level, if hydrocarbon monitoring is required for each run and for the test.

(e) If dioxin and furan testing is required under paragraph (E) of rule 3745-266-104 of the Administrative Code, 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.

(f) Time-weighted average particulate matter emissions for each run and for the test.

(g) Time-weighted average hydrogen chloride and chlorine gas emissions for each run and for the test.

(h) Time-weighted average emissions for the metals subject to regulation under rule 3745-266-106 of the Administrative Code for each run and for the test.

(i) Quality assurance or quality control results.

- (c) Comparison of the actual emissions during each test with the emissions limits prescribed by rules 3745-266-105, 3745-266-106, 3745-266-107, and paragraphs (B), (C), and (E) of rule 3745-266-104 of the Administrative Code and established for the facility in the certification of precompliance under paragraph (B) of this rule.
- (d) Determination of operating limits based on all valid runs of the compliance test for each applicable parameter listed in paragraph (C)(1) of this rule using any of the following procedures:
  - (i) Instantaneous limits. A parameter may 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.
    - (a) The limit for a parameter may be established and "continuously monitored" on an "hourly rolling average" basis defined as follows:
      - (i) A "continuous monitor" is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each fifteen seconds, and computes and records the average value at least every sixty seconds.
      - (ii) An "hourly rolling average" is the arithmetic mean of the sixty most recent one-minute average values recorded by the continuous monitoring system.
    - (b) The operating limit for the parameter shall be established based on compliance test data as the average over all test runs of the highest hourly rolling average value for each run.
  - (iii) Rolling average limits for carcinogenic metals and lead. Feed rate limits for the carcinogenic metals (i.e., arsenic, beryllium, cadmium, and chromium) and lead may be established either on an hourly rolling average basis as prescribed by paragraph (C)(4) (d)(ii) of this rule or on (up to) a twenty-four hour rolling average basis. If the owner or operator elects to use an averaging period from two to twenty-four hours, the owner or operator shall include the following in determining those limits:

- (a) The feed rate of each metal shall be limited at any time to ten times the feed rate that would be allowed on an hourly rolling average basis.
- (b) The continuous monitor shall meet the following specifications:
- (i) A continuous monitor is one which continuously samples the regulated parameter without interruption, and evaluates the detector response at least once each fifteen seconds, and computes and records the average value at least every sixty seconds.
  - (ii) The "rolling average" for the selected averaging period is the arithmetic mean of one hour block averages for the averaging period. A "one hour block average" is the arithmetic mean of the one minute averages recorded during the sixty-minute period beginning at one minute after the beginning of preceding clock hour.
- (c) The operating limit for the feed rate of each metal shall 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.
- (iv) Feed rate limits for metals, total chloride and chlorine, 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 or 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 shall be monitored under the continuous monitoring requirements of ~~paragraphs (C)(4)(d)(i) to (C)(4)(d)(iii)~~ paragraph (C)(4)(d) of this rule.
- (e) Certification of compliance statement. The following statement shall 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 paragraph (C) of rule

3745-266-103 of the Administrative Code 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 manages 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 conditions established in this certification pursuant to paragraph (C)(4)(d) of rule 3745-266-103 of the Administrative Code are enforceable limits at which the facility can legally operate during permit by rule until a revised certification of compliance is submitted."

- (5) Special requirements for hydrocarbon monitoring systems. When an owner or operator is required to comply with the hydrocarbon controls in paragraph (C) of rule 3745-266-104 of the Administrative Code or paragraph (A)(5)(a)(iv) of this rule, a conditioned gas monitoring system may be used in conformance with specifications in the appendix to this rule provided that the owner or operator submits a certification of compliance without using extensions of time in paragraph (C)(7) of this rule.
- (6) Special operating requirements for industrial furnaces that recycle collected particulate matter. Owners and operators of industrial furnaces that recycle back into the furnace particulate matter from the air pollution control system shall:
  - (a) When complying with paragraph (C)(3)(b)(i) of this rule, comply with the operating requirements prescribed in "Alternative Method to Implement the Metals Controls" in the appendix to this rule.
  - (b) When complying with paragraph (C)(3)(b)(ii) of this rule, comply with the operating requirements prescribed by paragraph (C)(3)(b)(ii) of this rule.
- (7) Extensions of time.
  - (a) If the owner or operator does not submit a complete certification of compliance for all of the applicable emissions standards of rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code on or before thirty days after December 7, 2004, or on or before thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, the owner or operator shall do any of the following:

- (i) Stop burning hazardous waste and begin closure activities under paragraph (L) of this rule for the hazardous waste portion of the facility.
  - (ii) Limit hazardous waste burning only for purposes of compliance testing (and pretesting to prepare for compliance testing) for a total period of seven hundred twenty hours for the period of time beginning on December 7, 2004, or on the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, submitted a notification to the director by thirty days after December 7, 2004, or by thirty days after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule, stating that the facility is operating under restricted permit by rule and intends to resume burning hazardous waste, and submitted a complete certification of compliance within two years of December 7, 2004, or within two years after the effective date of any new, amended, or rescinded rule or statute that renders the owner or operator of the boiler or industrial furnace subject to this rule.
  - (iii) Obtain a case-by-case extension of time under paragraph (C)(7)(b) of this rule.
- (b) The owner or operator may request a case-by-case extension of time to extend any time limit in paragraph (C) of this rule if compliance with the time limit is not practicable for reasons beyond the control of the owner or operator.
- (i) In granting an extension, the director may apply conditions as the facts warrant to ensure timely compliance with this rule and that the facility operates in a manner that does not pose a hazard to human health and the environment.
  - (ii) When an owner or operator requests an extension of time to enable the facility to comply with the alternative hydrocarbon provisions of paragraph (F) of rule 3745-266-104 of the Administrative Code and obtain an installation and operation permit because the facility cannot meet the hydrocarbon limit of paragraph (C) of rule 3745-266-104 of the Administrative Code:
    - (a) In considering whether to grant the extension, the director shall both:



- (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 rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code are not likely to be exceeded. To document this determination, the owner or operator shall submit the applicable information required under paragraph (B)(2) of this rule.
    - (iv) Complete emissions testing protocol for any pretesting and for a new compliance test to determine compliance with the applicable emissions standards of rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code when operating under revised operating conditions. The protocol shall 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 shall notify the director in writing at least thirty 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 director to determine compliance with the applicable emissions standards of rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code.
  - (d) Submit a revised certification of compliance under paragraph (C)(4) of this rule.
- (D) Periodic recertifications. The owner or operator shall conduct compliance testing and submit to the director a recertification of compliance under provisions of paragraph (C) of this rule 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 shall comply with paragraph (C)(8) of this rule.
- (E) Noncompliance with certification schedule. If the owner or operator does not comply with the compliance schedule in paragraphs (B), (C), and (D) of this rule, hazardous waste burning shall terminate on the date that the deadline is missed, closure activities shall begin under paragraph (L) of this rule, and hazardous waste burning may not resume except under an operating permit issued under rule 3745-50-66 of the Administrative Code. For purposes of compliance with the closure provisions of paragraph (L) of this rule, paragraph (D)(2) of rule 3745-66-12, and rule 3745-66-13

of the Administrative Code, the boiler or industrial furnace has received "the known final volume of hazardous waste" on the date that 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 or chlorine] shall not be fed into the device during start-up and shut-down of the boiler or industrial furnace, 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 paragraph (C) (3) of this rule, and upon certification of compliance under paragraph (C) of this rule, a boiler or industrial furnace shall be operated with a functioning system that automatically cuts off the hazardous waste feed when the applicable operating conditions specified in paragraphs (C)(1)(a) and (C)(1)(e) to (C)(1)(m) of this rule deviate from those established in the certification of compliance. In addition, the boiler or industrial furnace shall be operated as follows:
- (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 shall be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test determined to be either:
    - (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 shall continue to be monitored during the cutoff, and the hazardous waste feed shall not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.
- (H) Fugitive emissions. Fugitive emissions shall be controlled by any of the following:
- (1) Keeping the combustion zone totally sealed against fugitive emissions.
  - (2) Maintaining the combustion zone pressure lower than atmospheric pressure.

(3) An alternate means of control that the owner or operator can demonstrate fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration shall be included in the operating record.

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

(J) Monitoring and inspections.

(1) ~~The~~ At a minimum, the owner or operator shall 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~~feedstocks, and feed rates of ash, metals, and total chloride and chlorine as necessary to ensure conformance with the certification of precompliance or certification of compliance.

(b) Carbon monoxide, oxygen, and if applicable, hydrocarbons, on a continuous basis at a common point in the boiler or industrial furnace 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. Carbon monoxide, hydrocarbon, and oxygen monitors shall be installed, operated, and maintained in accordance with methods specified in the appendix to this rule.

(c) Upon the request of the director, sampling and analysis of the hazardous waste (and other fuels and industrial furnace ~~feed stocks~~feedstocks as appropriate) and the stack gas emissions shall be conducted to verify that the operating conditions established in the certification of precompliance or certification of compliance achieve the applicable standards of rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code.

(2) The boiler or industrial furnace and associated equipment (pumps, valves, pipes, fuel storage tanks, etc.) shall be subjected to thorough visual inspection when such equipment contains 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 shall 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 testing will unduly restrict or upset operations and that less frequent inspections will be adequate. Support for such demonstration shall be included in the operating record. At a minimum, operational testing shall be conducted at least once every thirty days.
- (4) These monitoring and inspection data shall be recorded and the records shall be placed in the operating log.
- (K) Recordkeeping. The owner or operator shall keep in the operating record of the facility all information and data required by this rule for five years.
- (L) Closure. At closure, the owner or operator shall remove all hazardous waste and hazardous waste residues (including, but not limited to, ash, scrubber waters, and scrubber sludges) from the boiler or industrial furnace and shall comply with rules 3745-66-11 to 3745-66-15 of the Administrative Code.

[Comment: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-50-11 of the Administrative Code titled "Incorporated by reference."]

Effective: 9/29/2021  
Five Year Review (FYR) Dates: 6/7/2021 and 06/05/2026

CERTIFIED ELECTRONICALLY

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Certification

09/14/2021

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Date

Promulgated Under: 119.03  
Statutory Authority: 3734.12  
Rule Amplifies: 3734.12  
Prior Effective Dates: 12/07/2004, 02/16/2009, 09/05/2010, 03/24/2017