3745-68-03 **Response actions**- landfills.

- (A) The owner or operator of landfill units subject to paragraph (A) of rule 3745-68-05 of the Administrative Code <u>mustshall</u> submit a response action plan to the director when submitting the proposed action leakage rate under rule 3745-68-02 of the Administrative Code. The response action plan <u>must set forthshall describe</u> the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan <u>mustshall</u> describe the actions specified in paragraph (B) of this rule.
- (B) If the flow rate into the leak detection system exceeds the action leakage rate for any sump, the owner or operator must shall do all of the following:
 - (1) Notify the director in writing of the exceedance within seven days after the determination;
 - (2) Submit a preliminary written assessment to the director within fourteen days after the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
 - (3) Determine to the extent practicable the location, size, and cause of any leak;
 - (4) Determine whether waste receipt should cease or should be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether or not the unit should be closed;
 - (5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and.
 - (6) Within thirty days after the notification that the action leakage rate has been exceeded, submit to the director the results of the analyses specified in paragraphs (B)(3), (B)(4), and (B)(5) of this rule, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the leak detection system exceeds the action leakage rate, the owner or operator mustshall submit to the director a report summarizing the results of any remedial actions taken and actions planned.
- (C) To make the leak <u>and/oror</u> remediation determinations in paragraphs (B)(3), (B)(4), and (B)(5) of this rule, the owner or operator <u>mustshall do either of the following</u>:
 - (1) Conduct the following assessments and analyses:

3745-68-03

- (a) Assess the source of liquids and amounts of liquids by source;
- (b) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the leak detection system to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and.
- (c) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or.
- (2) Document why such assessments are not needed.

3745-68-03

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 12/07/2004, 09/05/2010

3745-69-30 **Applicability- underground injection.**

Except as rule 3745-65-01 of the Administrative Code provides otherwise:

The requirements set forth in Except as rule 3745-65-01 of the Administrative Code provides otherwise, rules 3745-34-01 to 3745-34-62 of the Administrative Code apply to owners and operators of wells used to dispose of hazardous waste which are classified as "Class I" under 40 CFR 144.6(a) and which are classified as "Class IV" under 40 CFR 144.6(d).

[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."]

3745-69-30

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 04/15/1981, 01/07/1983, 08/30/1984, 05/29/1985

(Emer.), 08/29/1985, 02/11/1992, 02/14/1995,

12/07/2004, 09/05/2010

3745-205-100 Applicability- containment buildings.

The requirements of rules Rules 3745-205-100 to 3745-205-102 of the Administrative Code apply to owners or operators who store or treat hazardous waste in units designed and operated under rule 3745-205-101 of the Administrative Code. The owner or operator is not subject to the definition of "land disposal" in rule 3745-270-02 of the Administrative Code, provided that the unit meets the following requirements:

- (A) Is a completely enclosed, self-supporting structure that is designed and constructed of man mademan-made materials of sufficient strength and thickness to support themselves the materials, the waste contents, and any personnel and heavy equipment that operate within the unit; and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the wastes to which they the materials are exposed, climatic conditions, and the stresses of daily operation (including the movement of heavy equipment within the unit and contact of such equipment with containment walls).
- (B) Has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit:
- (C) If used to manage a hazardous waste containing free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), has the following:
 - (1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier.
 - (2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and.
 - (3) A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under paragraph (B)(4) of rule 3745-205-101 of the Administrative Code;
- (D) Has controls sufficient to prevent fugitive dust emissions to meet the no visible emission standard in paragraph (C)(1)(d) of rule 3745-205-101 of the Administrative Code; and.
- (E) Is designed and operated to ensure containment and to prevent the tracking of materials from the unit by personnel or equipment.

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 12/07/2000, 12/07/2004, 09/05/2010

3745-205-101 Design and operating standards for containment buildings.

- (A) All containment buildings mustshall comply with the following design standards:
 - (1) The containment buildings <u>mustshall</u> be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, run-on), and to assure containment of managed wastes.
 - (2) The floor and containment walls of the unit, including the secondary containment system if required under paragraph (B) of this rule, mustshall be designed and constructed of man-mademan-made materials of sufficient strength and thickness to support themselves such floor and walls, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, uplift, physical contact with the wastes to which they such floor and walls are exposed, climatic conditions, and the stresses of daily operation (including the movement of heavy equipment within the unit and contact of such equipment with containment walls). The unit must shall be designed so that it the unit has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must shall be chemically compatible with those wastes. Ohio EPA will consider standards established by professional organizations generally recognized by the industry such as the American concrete institute (ACI) and the American society of testing materials (ASTM) in judging the structural integrity requirements of paragraphs (A) to (A)(4) of this rule. If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet thesethe following criteria:
 - (a) They The doors and windows provide an effective barrier against fugitive dust emissions under paragraph (C)(1)(d) of this rule; and.
 - (b) The unit is designed and operated in a manner that assures that wastes will not actually come in contact with these openings.
 - (3) Incompatible hazardous wastes or treatment reagents mustshall not be placed in the unit or itsthe unit's secondary containment system if they such substances could cause the unit or secondary containment system to leak, corrode, or otherwise fail.

(4) A containment building mustshall have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.

- (B) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must shall include all of the following:
 - (1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).
 - (2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building.
 - (a) The primary barrier <u>mustshall</u> be sloped to drain liquids to the associated collection system; and.
 - (b) Liquids and waste <u>mustshall</u> be collected and removed <u>at the earliest</u> <u>practicable time</u> to minimize hydraulic head on the containment system <u>at the earliest practicable time</u>.
 - (3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
 - (a) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, both:
 - (i) Constructed with a bottom slope of one per cent or more; and.
 - (ii) Constructed of a granular drainage material with a hydraulic conductivity of 1 x $\frac{10-210}{2}$ centimeters per second or more and a thickness of twelve inches (30.5 centimeters) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of $\frac{3\times10-53}{2}$ x $\frac{10}{2}$ meters squared per second or

more.

(b) If treatment is to be conducted in the building, an area in which such treatment will be conducted <u>mustshall</u> be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.

(c) The secondary containment system <u>mustshall</u> be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building.

[Comment: Containment buildings may serve as secondary containment systems for tanks placed within the building. A containment building may serve as an external liner system for a tank, provided it meets the requirements—ofthe containment building complies with paragraph (E)(1) of rule 3745-55-93 of the Administrative Code. In addition, the containment building must meet the requirements of shall comply with paragraphs (B), (C)(1), and (C)(2) of rule 3745-55-93 of the Administrative Code to be considered an acceptable secondary containment system for a tank.]

- (4) For existing units other than ninety-day generator units, the director may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards in rules 3745-205-100 to 3745-205-102 of the Administrative Code. In making this demonstration, the owner or operator must shall do the following:
 - (a) Provide written notice to the director of theirthe owner's or operator's request. This notification mustshall describe the unit and its operating practices with specific reference to the performance of existing containment systems, and specific plans for retrofitting the unit with secondary containment;
 - (b) Respond within thirty days to any comments from the director on these plans; and.
 - (c) Fulfill the terms of the revised plans if such plans are approved by the director.
- (C) Owners or operators of all containment buildings mustshall:

(1) Use controls and practices to ensure containment of the hazardous waste within the unit; and, at a minimum, do all of the following:

- (a) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the primary barrier;
- (b) Maintain the level of the stored/treated stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;
- (c) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area mustshall be designated to decontaminate equipment, and any rinsate mustshall be collected and properly managed; and.
- (d) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see method 22 in appendix A to 40 CFR Part 60, appendix A, method 22-visual determination of fugitive emissions from material sources and smoke emissions from flares). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator) mustshall be operated and maintained with sound air pollution control practices (see 40 CFR Part 60, subpart 292 for guidance). This state of no visible emissions mustshall be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.
- (2) Obtain and keep on-site a certification by a qualified professional engineer that the containment building design meets the requirements of complies with paragraphs (A) to (C)(4) of this rule.
- (3) Throughout the active life of the containment building, repair promptly upon detection any condition that could lead to or has caused a release of hazardous waste, in accordance with the following procedures:
 - (a) Upon detection of a condition that has led to a release of hazardous waste (e.g., upon detection of leakage from the primary barrier), the owner or operator must hall do the following:
 - (i) Enter a record of the discovery in the facility operating record;

(ii) Immediately remove from service the portion of the containment building affected by the condition;

- (iii) Determine what steps <u>mustshall</u> be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and.
- (iv) Within seven days after the discovery of the condition, notify the director of the condition, and within fourteen working days, provide a written plan to the director with a description of the steps taken to repair the containment building and with the schedule for accomplishing the work.
- (b) The director will review the information submitted, will make a determination regarding whether the containment building mustshall be removed from service completely or partially until repairs and cleanup are complete, and will notify the owner or operator in writing of the determination and the underlying rationale.
- (c) Upon completing all repairs and cleanup, the owner or operator <u>mustshall</u> notify the director in writing and provide a verification, signed by a qualified professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with paragraph (C)(3)(a)(iv) of this rule.
- (4) Inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring equipment, leak detection equipment, the containment building, and the area immediately surrounding the containment building, to detect signs of releases of hazardous waste.
- (D) For a containment building that contains both areas with secondary containment and without secondary containment, the owner or operator <u>mustshall do the following</u>:
 - (1) Design and operate each area in accordance with the requirements in paragraphs (A) to (C)(4) of this rule;.
 - (2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and.

(3) Maintain in the facility's operating record a written description of the operating procedures used to maintain the integrity of areas without secondary containment.

(E) Notwithstanding any other provisions of rules 3745-205-100 to 3745-205-102 of the Administrative Code, the director may waive requirements for secondary containment for a permitted containment building where the owner or operator demonstrates that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

[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: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 12/07/2000, 12/07/2004, 09/05/2010

3745-266-20 Applicability- recyclable materials used in a manner that constitutes disposal.

- (A) Rules 3745-266-20 to 3745-266-23 of the Administrative Code apply to recyclable materials that are applied to or placed on the land:
 - (1) Without mixing with any other substance(s)substances; or
 - (2) After mixing or combination with any other substance(s).substances. These materials will be referred to throughout rules 3745-266-20 to 3745-266-23 of the Administrative Code as "materials used in a manner that constitutes disposal."
 - (3) The materials in paragraphs (A)(1) and (A)(2) of this rule will be referred to throughout rules 3745-266-20 to 3745-266-23 of the Administrative Code as "materials used in a manner that constitutes disposal."
- (B) Products produced for use by the general public that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation 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 rules 3745-270-40 to 3745-270-49 of the Administrative Code [or applicable prohibition levels in rule 3745-270-32 of the Administrative Code or Section 3004(d) of RCRA, where no treatment standards have been established] for each recyclable material (i.e., hazardous waste) that they such products contain, and the recycler complies with paragraph (B)(6) of rule 3745-270-07 of the Administrative Code.
- (C) Anti-skid/deicingAnti-skid and deicing uses of slags, which 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 paragraph (B) of this rule and remain subject to regulation.
- (D) Fertilizers that contain recyclable materials are not subject to regulation provided that:
 - (1) They The fertilizers are zinc fertilizers excluded from the definition of "waste" according to paragraph (A)(21) of rule 3745-51-04 of the Administrative Code; or

(2) They The fertilizers meet the applicable treatment standards in rules 3745-270-40 to 3745-270-49 of the Administrative Code for each hazardous waste that they the fertilizers contain.

[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: 03/24/2017

Five Year Review (FYR) Dates: Exempt

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 01/30/1986, 12/08/1988, 12/30/1989, 02/11/1992,

12/07/2000, 12/07/2004, 09/05/2010, 03/17/2012

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 theirthe 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 the requirements of 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; or.
 - (ii) The owner or operator has entered into contractual obligationswhich cannot be canceled or modified without substantial lossfor physical construction of the facility to be completed within a reasonable time.
 - (c) Owners and operators of existing boilers and industrial furnaces not operating under rule 3745-266-102 of the Administrative Code must comply with the applicable permit by rule requirements in rule 3745-50-40 of the Administrative Code.

(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. The requirements of this This rule dodoes 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 the requirements of rules 3745-66-40 to 3745-66-48 of the Administrative Code (financial requirements); and.

(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 <u>mustshall</u> be fed at a location where combustion gas temperatures are at least eighteen hundred degrees Fahrenheit;.
- (ii) The owner or operator <u>mustshall</u> determine that adequate oxygen is present in combustion gases to combust organic constituents in the waste and <u>shall</u> retain documentation of such determination in the facility record;
- (iii) For cement kiln systems, the hazardous waste <u>mustshall</u> be fed into the kiln; <u>and.</u>
- (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 thesethe 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 mustshall be retained in the facility record; or.

- (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 mustshall 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 mustshall 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 mustshall 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 provided by 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 <u>mustshall</u> comply with rule 3745-266-111 of the Administrative Code.

(B) Certification of precompliance.

(1) General. The owner or operator mustshall 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 mustshall 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 provided byin 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 <u>mustshall</u> 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; and.
 - (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 provided by 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 mustshall 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 mustshall 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 mustshall be made by a qualified professional engineer and a certification of hissuch engineer's determinations in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code mustshall 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 provided byin 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 (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 <u>mustshall</u> 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 <u>mustshall</u> 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 by 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; and.
 - (g) Identify land use: urban or rural.

(ii) For owners and operators using "Tier III" 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); and.
- (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; and.
- (h) For industrial furnaces that feed hazardous waste for any purpose other than solely as an ingredient [as defineddetermined by paragraph (A)(5)(b) of this rule] at any location other than the product discharge end of the device, documentation of compliance with the requirements of 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; and.

- (ii) The precompliance limit on the concentration of each metal in collected particulate matter.
- (3) Limits on operating conditions. The owner or operator mustshall 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:
 - (i) Total feed streams, except that industrial furnaces that comply with the alternative metals implementation approach under paragraph (B)(4) of this rule <u>mustshall</u> 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; and.
 - (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.
 - (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; and.

(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 mustshall comply with the special operating requirements provided 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) mustshall 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; or.
 - (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 <u>mustshall</u> 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 <u>mustshall</u> 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 defined as 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 mustshall 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 mustshall 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 mustshall provide to the director with the certification of precompliance evidence of submitting the notice for publication.

- (a) The notice, which mustshall be entitled "Notice of Certification of Precompliance with Hazardous Waste Burning Requirements of Paragraph (B) of Rule 3745-266-103 of the Administrative Code,", must 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 the requirements of 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; and.

(b) The boiler and industrial furnace correspondence file kept at the facility site where the device is located. The correspondence file mustshall include all correspondence between the facility and the director, state and local regulatory officials, including copies of all certifications and notifications, such as the precomplicance 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 they such interested parties wish to be placed on the mailing list to receive future information and notices about this facility; and.
- (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 records and locations must 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 mustshall 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 <u>mustshall</u> notify Ohio EPA that <u>theysuch interested</u> <u>parties</u> wish to be placed on the mailing list to receive future information and notices about this facility; and.

(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 provided byin the appendix to this rule, as appropriate, the parameters mustshall be continuously monitored and records mustshall 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 provided by 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 <u>mustshall</u> 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 (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 <u>mustshall</u> 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 mustshall 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 prescribed byin paragraphs (C) to (C)(8)(d) of this rule, except under extensions of time provided byin paragraph (C)(7) of this rule. Based on the compliance test, the owner or operator mustshall 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 mustshall be submitted with the "Part A" application required by rule 3745-50-40 of the Administrative Code, and mustshall be considered part of such application.

(1) Limits on operating conditions. The owner or operator mustshall 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 mustshall 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 their 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; and.
 - (b) Industrial furnaces that mustshall comply with the alternative metals implementation approach under paragraph (C)(3)(b) of this rule mustshall 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]; and.
 - (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, except that facilities that comply with "Tier I" or "Adjusted Tier I" feed rate screening limits may set their 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, 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; 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 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; 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 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; 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" 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 Codel.

(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 mustshall 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/quality assurance or quality control 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 particulate matter); and.
 - (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 mustshall 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 mustshall 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 mustshall provide a written approval to use compliance test data in lieu of testing a similar unit if hethe 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 mustshall 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; or.

- (ii) Stack emissions testing for a minimum of six hours each day while hazardous waste is burned during permit by rule. The testing mustshall 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 mustshall 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] mustshall be established during compliance testing under paragraph (C)(3) of this rule only on the following parameters:
 - (a) Feed rate of total hazardous waste;
 - (b) Total feed rate of chlorine and chloride in total feed streams.
 - (c) 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.
 - (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; or.
- (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 it 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 must 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 mustshall 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 mustshall operate under compliance test conditions for a sufficient period to reach steady-state operations. 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 mustshall be established in the certification of compliance mustshall be obtained during emissions sampling for the pollutants (i.e., metals, particulate matter, hydrogen chloride/chlorine chloride or chlorine gas, organic compounds) for which the parameter mustshall 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 mustshall 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 mustshall 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) Date(s) Dates of each compliance test;
- (v) Description of boiler or industrial furnace tested.
- (vi) Person responsible for quality assurance/quality assurance or quality control, title, and telephone number, and statement that procedures prescribed in the quality assurance/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; and.
- (ix) The complete report on results of emissions testing.
- (b) Specific information on each test including:
 - (i) <u>Purpose(s)Purposes</u> 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; and.
- (i) Quality assurance/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 eitherany 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; or.

- (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 <u>"continuous monitor"</u> 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 mustshall 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 mustshall 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 mustshall 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 defined asthe 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; and.

- (c) The operating limit for the feed rate of each metal mustshall 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, ehloride/ehlorinechloride 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 mustshall be monitored under the continuous monitoring requirements of paragraphs (C)(4)(d)(i) to (C)(4)(d)(iii) of this rule.
- (e) Certification of compliance statement. The following statement <u>mustshall</u> 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 provided byin 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 provided in the appendix to this rule provided that the owner or operator submits a certification of compliance without using extensions of time provided byin 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 must shall:
 - (a) When complying with the requirements of 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; and.
 - (b) When complying with the requirements of 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, he must either 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; or.
 - (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; or.

- (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 provided by 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 the requirements of 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) The director must, in In considering whether to grant the extension, the director shall both:
 - (i) Determine whether the owner or operator has submitted in a timely manner a complete "Part B" permit application that includes information required under paragraphs (C)(9)(b) to (C)(9)(b)(vi) of rule 3745-50-44 of the Administrative Code; and.

(ii) Consider whether the owner or operator has made a good faith effort to certify compliance with all other emission controls, including the controls on dioxins and furans of paragraph (E) of rule 3745-266-104 of the Administrative Code and the controls on particulate matter, metals, and hydrogen chloride/chlorinechloride or chlorine gas.

- (b) If an extension is granted, the director mustshall, as a condition of the extension, require the facility to operate under flue gas concentration limits on carbon monoxide and hydrocarbon that, based on available information, including information in the "Part B" permit application, are baseline carbon monoxide and hydrocarbon levels as defined determined by paragraph (F)(1)(F) of rule 3745-266-104 of the Administrative Code.
- (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 may not be burned for more than a total of seven hundred twenty hours under operating conditions that exceed those established under a current certification of compliance, and such burning may be conducted only for purposes of determining whether the facility can operate under revised conditions and continue to meet the applicable emissions standards of rules 3745-266-104, 3745-266-105, 3745-266-106, and 3745-266-107 of the Administrative Code;
 - (b) At least thirty days prior to first burning hazardous waste under operating conditions that exceed those established under a current certification of compliance, the owner or operator mustshall notify the director and submit the following information:
 - (i) U.S. EPA identification 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 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 mustshall submit the applicable information required under paragraph (B)(2) of this rule; and.

- (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 mustshall include a schedule of pre-testing and compliance testing. If the owner or operator revises the scheduled date for the compliance test, he must he 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; and.
- (d) Submit a revised certification of compliance under paragraph (C)(4) of this rule.
- (D) Periodic recertifications. The owner or operator mustshall 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, he must he owner or operator shall comply with the requirements of paragraph (C)(8) of this rule.
- (E) Noncompliance with certification schedule. If the owner or operator does not comply with the compliance schedule provided byin paragraphs (B), (C), and (D) of this rule, hazardous waste burning mustshall terminate on the date that the deadline is missed, closure activities mustshall 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 ehloride/chlorine) mustchloride 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 <u>mustshall</u> 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 mustshall be maintained while hazardous waste or hazardous waste residues remain in the combustion chamber, with the minimum temperature during the compliance test defined asdetermined 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 mustshall continue to be monitored during the cutoff, and the hazardous waste feed mustshall not be restarted until the levels of those parameters comply with the limits established in the certification of compliance.
- (H) Fugitive emissions. Fugitive emissions <u>mustshall</u> be controlled by <u>any of the following</u>:

- (1) Keeping the combustion zone totally sealed against fugitive emissions; or.
- (2) Maintaining the combustion zone pressure lower than atmospheric pressure; or.
- (3) An alternate means of control that the owner or operator can demonstrate provide fugitive emissions control equivalent to maintenance of combustion zone pressure lower than atmospheric pressure. Support for such demonstration mustshall be included in the operating record.
- (I) Changes. A boiler or industrial furnace <u>mustshall</u> 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 owner or operator <u>mustshall</u> 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 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 mustshall 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 as appropriate) and the stack gas emissions <u>mustshall</u> 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.) <u>mustshall</u> be subjected to thorough visual inspection when <u>they containsuch equipment contains</u> 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 mustshall 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 mustshall be included in the operating record. At a minimum, operational testing mustshall be conducted at least once every thirty days.
- (4) These monitoring and inspection data <u>mustshall</u> be recorded and the records <u>mustshall</u> be placed in the operating log.
- (K) Recordkeeping. The owner or operator <u>mustshall</u> 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 <u>mustshall</u> 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 <u>mustshall</u> 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: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

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

3745-270-07 Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities.

(A) Requirements for generators:

- (1) A generator of a hazardous waste mustshall determine if the waste has to be treated before itthe waste can be land disposed. This is done by determining if the hazardous waste meets the treatment standards in rule 3745-270-40, 3745-270-45, or 3745-270-49 of the Administrative Code. This determination can be made concurrently with the hazardous waste determination required in rule 3745-52-11 of the Administrative Code, in either of two ways: by testing the waste, or by using knowledge of the waste.
 - (a) If the generator tests the waste, testing would normally determine the total concentration of hazardous constituents, or the concentration of hazardous constituents in an extract of the waste obtained using test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846, depending on whether the treatment standard for the waste is expressed as a total concentration or as concentration of hazardous constituent in the waste's extract. [Alternatively, the generator mustshall send the waste to a permitted hazardous waste treatment facility, where the waste treatment facility mustshall comply with the requirements of rule 3745-54-13 of the Administrative Code and paragraph (B) of this rule.]
 - (b) In addition, some hazardous waste mustwastes shall be treated by particular treatment methods before they such hazardous wastes can be land disposed, and some soils are contaminated with such hazardous wastes. These treatment standards are in rule 3745-270-40 of the Administrative Code, and are described in detail in the table in rule 3745-270-42 of the Administrative Code. These wastes, and soils contaminated with such wastes, do not need to be tested (however, if they such wastes are in a waste mixture, other wastes with concentration level treatment standards would have to be tested).
 - (c) If a generator determines that hethe generator is managing a waste, or soil contaminated with a waste, that displays a hazardous characteristic of ignitability, characteristic of corrosivity, characteristic of reactivity, or characteristic of toxicity, he must the generator shall comply with the special requirements of rule 3745-270-09 of the Administrative Code in addition to any applicable requirements in this rule.
- (2) If the waste or contaminated soil does not meet the treatment standards, or if the generator chooses not to make the determination of whether histhe generator's waste mustshall be treated, with the initial shipment of waste to each

treatment or storage facility, the generator <code>mustshall</code> send a one-time written notice to each treatment or storage facility receiving the waste, and place a copy in the generator's files. The notice <code>mustshall</code> include the information in column A of table 1 of this rule. (Alternatively, if the generator chooses not to make the determination of whether the waste <code>mustshall</code> be treated, the notification <code>mustshall</code> include the EPA hazardous waste numbers and manifest number of the first shipment and <code>mustshall</code> state "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility <code>mustshall</code> make that determination.") No further notification is necessary until such time as the waste changes or the treatment or storage facility changes, in which case a new notification <code>mustshall</code> be sent to the new treatment or storage facility and a copy <code>mustshall</code> be placed in the generator's files.

(a) For contaminated soil, the following certification statement should be included, signed by an authorized representative:

"I certify under penalty of law that I personally have examined this contaminated soil and it [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and requires treatment to meet the soil treatment standards as provided by paragraph (C) of rule 3745-270-49 of the Administrative Code."

(b) Reserved.

- (3) If the waste or contaminated soil meets the treatment standard at the original point of generation:
 - (a) With the initial shipment of waste to each treatment, storage, or disposal facility, the generator mustshall send a one-time written notice to each treatment, storage, or disposal facility receiving the waste, and place a copy in the generator's files. The notice mustshall include the information in column B of table 1 of this rule and the following certification statement, signed by an authorized representative:

"I certify under penalty of law that I personally have examined and am familiar with the waste, through analysis and testing or through knowledge of the waste, to support this certification that the waste complies with the treatment standards specified in rules 3745-270-40 to 3745-270-49 of the Administrative Code. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(b) For contaminated soil, with the initial shipment of wastes to each

treatment, storage, or disposal facility, the generator <u>mustshall</u> send a one-time written notice to each facility receiving the waste, and place a copy in the generator's files. The notice <u>mustshall</u> include the information in column B of table 1 of this rule.

- (c) If the waste changes, the generator <u>mustshall</u> send a new notice and certification to the receiving facility, and place a copy in <u>theirthe</u> <u>generator's</u> files. Generators of hazardous debris excluded from the definition of "hazardous waste" under paragraph (F) of rule 3745-51-03 of the Administrative Code are not subject to these requirements.
- (4) For reporting, tracking, and recordkeeping when exceptions allow certain wastes or contaminated soil that do not meet the treatment standards to be land disposed. There are certain exemptions from the requirements that hazardous wastes or contaminated soil meet treatment standards before theysuch hazardous wastes or contaminated soil can be land disposed. These include, but are not limited to case-by-case extensions under rule 3745-270-05 of the Administrative Code, disposal in a no-migration unit under rule 3745-270-06 of the Administrative Code, or a national capacity variance or case-by-case capacity variance under rules 3745-270-20 to 3745-270-39 of the Administrative Code. If a generator's waste is so exempt, then with the initial shipment of waste, the generator mustshall send a one-time written notice to each land disposal facility receiving the waste. The notice mustshall include the information in column C of table 1 of this rule. If the waste changes, the generator mustshall send a new notice to the receiving facility, and place a copy in the generator's files.

Table 1: Generator Paperwork Requirements				
	Column A	Column B	Column C	Column D
Required Information	3745-270-07 (A)(2)	3745-270-07 (A)(3)	3745-270-07 (A)(4)	3745-270-07 (A)(9)
1. EPA hazardous waste numbers and manifest number of first shipment.	X	X	X	X
2. Statement: This waste is not prohibited from land disposal.			X	
3. The waste is subject to the land disposal restrictions (LDRs) of Chapter 3745-270 of the	X	X		

Administrative Code. The constituents of concern for F001 to F005, and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice.				
4. The notice mustshall include the applicable wastewater/nonwastewater eategory wastewater or non-wastewater category (see the definitions of "wastewaters" and "nonwastewaters" in rule 3745-270-02 of the Administrative Code) and subdivisions made within an EPA hazardous waste number based on waste-specific criteria (such as D003 reactive cyanide).	X	X		
5. Waste analysis data (when available).	X	X	X	
6. Date the waste is subject to the prohibition.			X	
7. For hazardous debris, when treating with the alternate treatment technologies provided by rule 3745-270-45 of the Administrative Code: the	X		X	

contaminants subject to treatment, as described in paragraph (B) of rule 3745-270-45 of the Administrative Code; and an indication that these contaminants are being treated to comply with rule 3745-270-45 of the Administrative Code.			
8. For contaminated soil subject to LDRs as provided in paragraph (A) of rule 3745-270-49 of the Administrative Code, the constituents subject to treatment as described in paragraph (D) of rule 3745-270-49 of the Administrative Code, and the following statement: This contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies with] the soil treatment standards as provided by paragraph (C) of rule 3745-270-49 of the Administrative Code or the universal treatment standards.	X	X	
9. A certification is needed (see applicable rule for exact wording).		X	X

⁽⁵⁾ If a generator is managing and treating prohibited waste or contaminated soil in tanks, containers, or containment buildings regulated under rule 3745-52-34

of the Administrative Code to meet applicable LDR treatment standards in rule 3745-270-40 of the Administrative Code, the generator <u>mustshall</u> develop and follow a written waste analysis plan which describes the procedures <u>hethe generator</u> will carry out to comply with the treatment standards. (Generators treating hazardous debris under the alternate treatment standards of the table in rule 3745-270-45 of the Administrative Code, however, are not subject to this waste analysis requirement.) The <u>waste analysis</u> plan <u>mustshall</u> be kept on site in the generator's records, and the following requirements <u>mustshall</u> be met:

- (a) The waste analysis plan mustshall be based on a detailed chemical and physical analysis of a representative sample of the prohibited waste(s)wastes being treated, and contain all information necessary to treat the waste(s)wastes in accordance with the requirements of Chapter 3745-270 of the Administrative Code, including the selected testing frequency.
- (b) <u>SuchThe waste analysis</u> plan <u>mustshall</u> be kept in the generator's on-site files and made available to inspectors.
- (c) Wastes shipped off-site pursuant to paragraph (A)(5) of this rule <u>mustshall</u> comply with the notification requirements of paragraph (A)(3) of this rule.

(6) If a generator determines:

- (a) If a generator determines that That the waste or contaminated soil is restricted based solely on histhe generator's knowledge of the waste, all supporting data used to make this determination must hall be retained on-site in the generator's files.
- (b) If a generator determines that That the waste is restricted based on testing this waste or an extract developed using the test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846, and all waste analysis data must be retained on-site in the generator's files.
- (7) If a generator determines that hethe generator is managing a prohibited waste that is excluded from the definition of "hazardous waste" or "waste," or is exempt from regulation as a hazardous waste under rules 3745-51-02 to 3745-51-06 of the Administrative Code subsequent to the point of generation [including deactivated characteristic hazardous wastes managed in wastewater treatment systems subject to the Clean Water Act (CWA) as

specified in paragraph (A)(2) of rule 3745-51-04 of the Administrative Code, or are CWA-equivalent, or are managed in an underground injection well regulated by the Safe Drinking Water Act], he must the generator shall place in the generator's files a one-time notice describing such generation, subsequent exclusion from the definition of "hazardous waste" or "waste" or exemption from regulation as a hazardous waste, and the disposition of the waste.

- (8) Generators mustshall retain on-site a copy of all notices, certifications, waste analysis data, and other documentation produced pursuant to this rule for at least three years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site treatment, storage, or disposal. The three year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director. The requirements of this This paragraph applyapplies to the wastes even when the hazardous characteristic is removed prior to disposal, when the waste is excluded from the definition of "hazardous waste" or "waste" under rules 3745-51-02 to 3745-51-06 of the Administrative Code, or when the waste is exempted from regulation as a hazardous waste, subsequent to the point of generation.
- (9) If a generator is managing a lab pack containing hazardous wastes and wishes to use the alternative treatment standard for lab packs in paragraph (C) of rule 3745-270-42 of the Administrative Code:
 - (a) With the initial shipment of waste to a treatment facility, the generator mustshall submit a notice that provides the information in column D of table 1 of this rule, and the following certification. The certification, which mustshall be signed by an authorized representative and mustshall be placed in the generator's files, mustshall say the following:

"I certify under penalty of law that I personally have examined and am familiar with the waste, and that the lab pack contains only wastes that have not been excluded under appendix <u>IA</u> to rule 3745-270-42 of the Administrative Code, and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs in paragraph (C) of rule 3745-270-42 of the Administrative Code. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(b) No further notification is necessary until such time that the wastes in the lab pack change or the receiving facility changes, in which case a new notice and certification <u>mustshall</u> be sent to the new receiving facility and a copy placed in the generator's files.

- (c) If the lab pack contains characteristic hazardous wastes (D001 to D043), "underlying hazardous constituents" (as defined in rule 3745-270-02 of the Administrative Code) need not be determined.
- (d) The generator $\frac{\text{must}}{\text{shall}}$ comply with the requirements in paragraphs (A)(6) and (A)(7) of this rule.
- (10) Small quantity generators with tolling agreements pursuant to paragraph (F) of rule 3745-52-20 of the Administrative Code mustshall comply with the applicable notification and certification requirements of paragraph (A) of this rule for the initial shipment of the waste subject to the agreement. Such generators mustshall retain on-site a copy of the notification and certification, together with the tolling agreement, for at least three years after termination or expiration of the agreement. The three-year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director.
- (B) Treatment facilities <u>mustshall</u> test <u>theirthe</u> wastes according to the frequency specified in <u>theirthe</u> treatment facility's waste analysis plans as required by rule 3745-54-13 or 3745-65-13 of the Administrative Code. Such testing <u>mustshall</u> be performed as provided in paragraphs (B)(1), (B)(2), and (B)(3) of this rule.
 - (1) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste extract (TCLP), the owner or operator of the treatment facility mustshall test an extract of the treatment residues, using test method 1311 in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846, to assure that the treatment residues extract meet the applicable treatment standards in Chapter 3745-270 of the Administrative Code.
 - (2) For wastes or contaminated soil with treatment standards expressed as concentrations in the waste, the owner or operator of the treatment facility mustshall test the treatment residues (not an extract of such residues) to assure that theythe treatment residues meet the applicable treatment standards in Chapter 3745-270 of the Administrative Code.

(3) A one-time notice <u>mustshall</u> be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice <u>mustshall</u> be placed in the treatment facility's file.

- (a) No further notification is necessary until such time that the waste changes or the receiving facility changes, in which case a new notice <u>mustshall</u> be sent to the new receiving facility and a copy placed in the treatment facility's files.
- (b) The one-time notice <u>mustshall</u> include the requirements in table 2 of this rule:

Table 2: Treatment Facility Paperwork Requirements	
Required information	3745-270-07(B)
EPA hazardous waste numbers and manifest number of first shipment	X
2. The waste is subject to the LDRs of Chapter 3745-270 of the Administrative Code. The constituents of concern for F001 to F005 and F039, and underlying hazardous constituents in characteristic wastes, unless the waste will be treated and monitored for all constituents. If all constituents will be treated and monitored, there is no need to put them all on the LDR notice.	X
3. The notice <u>mustshall</u> include the applicable <u>wastewater/nonwastewaterwastewater or nonwastewater</u> category [see the definitions of "wastewaters" and "nonwastewaters" in of rule 3745-270-02 of the Administrative Code and subdivisions made within an EPA hazardous waste number based on waste-specific criteria (such as D003 reactive cyanide)].	X
4. Waste analysis data (when available)	X
5. For contaminated soil subject to LDRs as provided in paragraph (A) of rule 3745-270-49 of the Administrative Code, the constituents subject to treatment as described in paragraph (D) of rule 3745-270-49 of the Administrative Code, and the following statement: "This contaminated soil [does/does not] contain listed hazardous waste and [does/does not] exhibit a characteristic of hazardous waste and [is subject to/complies withto or complies with] the soil treatment standards as provided by paragraph (C) of rule 3745-270-49 of the Administrative Code."	X

X

(4) The treatment facility <u>mustshall</u> submit a one-time certification signed by an authorized representative with the initial shipment of waste or treatment residue of a restricted waste to the land disposal facility. The certification <u>mustshall</u> state:

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in rule 3745-270-40 of the Administrative Code without impermissible dilution of the prohibited wastes. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

A certification is also necessary for contaminated soil, and it must the certification shall state:

"I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and believe that it has been maintained and operated properly so as to comply with treatment standards specified in rule 3745-270-49 of the Administrative Code without impermissible dilution of the prohibited wastes. I am aware there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

- (a) A copy of the certification <u>mustshall</u> be placed in the treatment facility's on-site files. If the waste or treatment residue changes or if the receiving facility changes, a new certification <u>mustshall</u> be sent to the receiving facility, and a copy placed in the file.
- (b) Debris excluded from the definition of "hazardous waste" under paragraph (F) of rule 3745-51-03 of the Administrative Code (i.e., debris treated by an extraction or destruction technology provided in the table in rule 3745-270-45 of the Administrative Code, and debris that the director has determined does not contain hazardous waste), however, is subject to the notification and certification requirements of paragraphs (D) to (D)(3) of this rule rather than the certification requirements of paragraphs (B)(4) to (B)(4)(e) of this rule.

(c) For wastes with organic constituents having treatment standards expressed as concentration levels, if compliance with the treatment standards is based in whole or in part on the analytical detection limit alternative specified in paragraph (D) of rule 3745-270-40 of the Administrative Code, the certification, signed by an authorized representative, mustshall state the following:

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification. Based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the nonwastewater organic constituents have been treated by combustion units as specified in the table in rule 3745-270-42 of the Administrative Code. I have been unable to detect the nonwastewater organic constituents, despite having used best good-faith efforts to analyze for such constituents. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(d) For characteristic wastes that are subject to the treatment standards in rule 3745-270-40 of the Administrative Code (other than those expressed as a method of treatment), or rule 3745-270-49 of the Administrative Code, and that contain "underlying hazardous constituents" as defined in rule 3745-270-02 of the Administrative Code; if these wastes are treated on-site to remove the hazardous characteristic; and are then sent off-site for treatment of underlying hazardous constituents, the certification mustshall state the following:

"I certify under penalty of law that the waste has been treated in accordance with the requirements of rule 3745-270-40 or 3745-270-49 of the Administrative Code to remove the hazardous characteristic. This decharacterized waste contains underlying hazardous constituents that require further treatment to meet treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

(e) For characteristic wastes that contain "underlying hazardous constituents" as defined in rule 3745-270-02 of the Administrative Code that are treated on-site to remove the hazardous characteristic and to treat underlying hazardous constituents to levels in the table in rule 3745-270-48 of the Administrative Code, the certification must shall state the following:

"I certify under penalty of law that the waste has been treated in accordance with the requirements of rule 3745-270-40 of the Administrative Code to remove the hazardous characteristic, and that "underlying hazardous constituents" as defined in rule 3745-270-02 of the Administrative Code have been treated on-site to meet the standards in the table in rule 3745-270-48 of the Administrative Code. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."

- (5) If the waste or treatment residue will be further managed at a different treatment, storage, or disposal facility, the treatment, storage, or disposal facility sending the waste or treatment residue off-site must_shall comply with the notice and certification requirements applicable to generators under this rule.
- (6) Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of paragraph (B) of rule 3745-266-20 of the Administrative Code regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e., the recycler), for the initial shipment of waste, mustshall prepare a one-time certification described in paragraph (B)(4) of this rule, and a one-time notice which includes the information in paragraph (B)(3) of this rule (except the manifest number). The certification and notification mustshall be placed in the facility's on-site files. if the waste or the receiving facility changes, a new certification and notification mustshall be prepared and placed in the on-site files. In addition, the recycling facility also mustshall keep records of the name and location of each entity receiving the hazardous waste-derived product.
- (C) Except where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal pursuant to paragraph (B) of rule 3745-266-20 of the Administrative Code, the owner or operator of any land disposal facility disposing any waste subject to restrictions under Chapter 3745-270 of the Administrative Code must shall:
 - (1) Have copies of the notice and certifications specified in paragraph (A) or (B) of this rule.
 - (2) Test the waste, or an extract of the waste or treatment residue developed using test method 1311 (the toxicity characteristic leaching procedure, described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846) to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in rules 3745-270-40 to 3745-270-49 of the Administrative Code. Such testing

<u>shall</u> be performed according to the frequency specified in the facility's waste analysis plan as required by rule 3745-54-13 or 3745-65-13 of the Administrative Code.

- (D) Generators or treaters who first claim that hazardous debris is excluded from the definition of "hazardous waste" under paragraph (F) of rule 3745-51-03 of the Administrative Code (i.e., debris treated by an extraction or destruction technology provided in the table in rule 3745-270-45 of the Administrative Code, and debris that the director has determined does not contain hazardous waste) are subject to all of the following notification and certification requirements:
 - (1) A one-time notification including the following information mustshall be submitted to the director:
 - (a) The name and address of the licensed solid waste landfill receiving the treated debris.
 - (b) A description of the hazardous debris as initially generated, including the applicable EPA hazardous waste number(s); and numbers.
 - (c) For debris excluded under paragraph (F)(1) of rule 3745-51-03 of the Administrative Code, the technology from the table in rule 3745-270-45 of the Administrative Code used to treat the debris.
 - (2) The notification mustshall be updated if the debris is shipped to a different facility, and, for debris excluded under paragraph (F)(1) of rule 3745-51-03 of the Administrative Code, if a different type of debris is treated or if a different technology is used to treat the debris.
 - (3) For debris excluded under paragraph (F)(1) of rule 3745-51-03 of the Administrative Code, the owner or operator of the treatment facility mustshall document and certify compliance with the treatment standards from the table in rule 3745-270-45 of the Administrative Code as follows:
 - (a) Records mustshall be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards.
 - (b) Records <u>mustshall</u> be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit; and.

(c) For each shipment of treated debris, a certification of compliance with the treatment standards mustshall be signed by an authorized representative and placed in the treatment facility's files. The certification mustshall state the following:

"I certify under penalty of law that the debris has been treated in accordance with the requirements of rule 3745-270-45 of the Administrative Code. I am aware that there are significant penalties for making a false certification, including the possibility of fine and imprisonment."

- (E) Generators and treaters who first receive from Ohio EPA a determination that a given contaminated soil subject to LDRs as provided in paragraph (A) of rule 3745-270-49 of the Administrative Code no longer contains a listed hazardous waste and generators and treaters who first determine that a contaminated soil subject to LDRs as provided in paragraph (A) of rule 3745-270-49 of the Administrative Code no longer exhibits a characteristic of hazardous waste must hall both:
 - (1) Prepare a one-time only documentation of these determinations including all supporting information; and.
 - (2) Maintain that information in the facility files and other records for a minimum of three years.

[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: 03/24/2017

Five Year Review (FYR) Dates: Exempt

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 12/30/1989, 02/11/1992, 09/02/1997, 10/20/1998,

12/07/2000, 12/07/2004, 09/05/2010, 03/17/2012

3745-270-09 Special rules regarding wastes that exhibit a characteristic.

- (A) The initial generator of a waste must shall determine each EPA hazardous waste number applicable to the waste in order to determine the applicable treatment standards under rules 3745-270-40 to 3745-270-49 of the Administrative Code. This determination may be made concurrently with the hazardous waste determination required for rule 3745-52-11 of the Administrative Code. For purposes of Chapter 3745-270 of the Administrative Code, the waste will carry the EPA hazardous waste number for any applicable listing under rules 3745-51-30 to 3745-51-35 of the Administrative Code. In addition, where the waste exhibits a characteristic, the waste will carry one or more of the characteristic EPA hazardous waste numbers under rules 3745-51-20 to 3745-51-24 of the Administrative Code, except when the treatment standard for the listed waste operates in lieu of the treatment standard for the characteristic waste, as specified in paragraph (B) of this rule. If the generator determines that histhe generator's waste displays a hazardous characteristic (and is not D001 nonwastewater treated by CMBST, RORGS, or POLYM in the table in rule 3745-270-42 of the Administrative Code), the generator mustshall determine "underlying hazardous constituents" (as defined in rule 3745-270-02 of the Administrative Code) in the characteristic waste.
- (B) Where a prohibited waste is both listed under rules 3745-51-30 to 3745-51-35 of the Administrative Code and exhibits a characteristic under rules 3745-51-20 to 3745-51-24 of the Administrative Code, the treatment standard for the EPA hazardous waste number listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code will operate in lieu of the standard for the EPA hazardous waste number under rules 3745-51-20 to 3745-51-24 of the Administrative Code, provided that the treatment standard for the listed waste includes a treatment standard for the constituent that causes the waste to exhibit the characteristic. Otherwise, the waste mustshall meet the treatment standards for all applicable listed and characteristic EPA hazardous waste numbers.
- (C) In addition to any applicable standards determined from the initial point of generation, no prohibited waste which exhibits a characteristic under rules 3745-51-20 to 3745-51-24 of the Administrative Code may be land disposed unless the waste complies with the treatment standards under rules 3745-270-40 to 3745-270-49 of the Administrative Code.
- (D) Wastes that exhibit a characteristic are also subject to requirements of rule 3745-270-07 of the Administrative Code, except that once the waste is no longer hazardous, a one-time notification and certification mustshall be placed in the generator's or treater's on-site files. The notification and certification mustshall be updated if the process or operation generating the waste changes and/oror if the licensed solid waste landfill facility receiving the waste changes.
 - (1) The notification must shall include the following information:

(a) The name and address of the licensed solid waste facility receiving the waste shipment; and.

- (b) A description of the waste as initially generated, including the applicable EPA hazardous waste number(s)numbers, treatability groups, and number(s)numbers, treatability <a href="group(s)groups, and number(s)numbers, treatability <a href="group(s)groups, and number(s)numbers, treatability <a href="mailto:group(s)groups, and <a href="mailto:group(s)group(s)groups, and <a href="mailto:group(s)group(s)groups, and <a href="mailto:group(s)group(s)group(s)groups, and <a href="mailto:group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)group(s)
- (2) The certification mustshall be signed by an authorized representative and mustshall state the language in paragraph (B)(4) of rule 3745-270-07 of the Administrative Code.
 - (a) If treatment removes the characteristic but does not meet standards applicable to underlying hazardous constituents, then the certification in paragraph (B)(4)(d) of rule 3745-270-07 of the Administrative Code applies.
 - (b) [Reserved.]

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 02/11/1992, 09/02/1997, 10/20/1998, 12/07/2000,

12/07/2004, 09/05/2010

3745-270-42 Treatment standards expressed as specified technologies.

(A) The following wastes in the table in rule 3745-270-40 of the Administrative Code "Treatment Standards for Hazardous Wastes," for which standards are expressed as a treatment method rather than a concentration level, <u>mustshall</u> be treated using the technology or technologies specified in the table in this rule.

Table: Technology Codes and Description of Technology-Based Standards

Technology code	Description of technology-based standards
ADGAS	Venting of compressed gases into an absorbing or reacting media (i.e., solid or liquid) - venting can be accomplished through physical release utilizing valves/pipingvalves or piping; physical penetration of the container; and/or, or penetration through detonation.
AMLGM	Amalgamation of liquid, elemental mercury contaminated with radioactive materials utilizing inorganic reagents such as copper, zinc, nickel, gold, and sulfur that result in a nonliquid, semi-solid amalgam and thereby reducing potential emissions of elemental mercury vapors to the air.
BIODG	Biodegradation of organics or non-metallic inorganics (i.e., degradable inorganics that contain the elements of phosphorus, nitrogen, and sulfur) in units operated under either aerobic or anaerobic conditions such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the biodegradation of many organic constituents that cannot be directly analyzed in wastewater residues).
CARBN	Carbon adsorption (granulated or powdered) of non-metallic inorganics, organo-metallics, and/oror organic constituents, operated such that a surrogate compound or indicator parameter has not undergone breakthrough (e.g., total organic carbon can often be used as an indicator parameter for the adsorption of many organic constituents that cannot be directly analyzed in wastewater residues). Breakthrough occurs when the carbon has become saturated with the constituent (or indicator parameter) and substantial change in adsorption rate associated with that constituent occurs.
CHOXD	Chemical or electrolytic oxidation utilizing the following oxidation reagents (or waste reagents) or combinations of reagents: (1) hypochlorite (e.g., bleach); (2) chlorine; (3) chlorine dioxide; (4) ozone or ultraviolet light assisted ozone; (5) peroxides; (6) persulfates; (7) perchlorates; (8) permangantes; and/oror (9) other oxidizing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the oxidation of many organic constitutents that cannot be directly analyzed in

	wastewater residues). Chemical oxidation specifically includes what is commonly referred to as alkaline chlorination.
CHRED	Chemical reduction utilizing the following reducing reagents (or waste reagents) or combinations of reagents: (1) sulfur dioxide; (2) sodium, potassium, or alkali salts or sulfites, bisulfites, metabisulfites, and polyethylene glycols (e.g., NaPEG and KPEG); (3) sodium hydrosulfide; (4) ferrous salts; and/oror (5) other reducing reagents of equivalent efficiency, performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic halogens can often be used as an indicator parameter for the reduction of many halogenated organic constituents that cannot be directly analyzed in wastewater residues). Chemical reduction is commonly used for the reduction of hexavalent chromium to the trivalent state.
CMBST	High temperature organic destruction technologies, such as combustion in incinerators, boilers, or industrial furnaces operated in accordance with the applicable requirements of rules 3745-57-40 to 3745-57-51, 3745-68-40 to 3745-68-52, or 3745-266-100 to 3745-266-112 of the Administrative Code, and in other units operated in accordance with applicable technical operating requirements in the hazardous waste rules; and certain non-combustive technologies, such as the catalytic extraction process.
DEACT	Deactivation to remove the hazardous characteristics of a waste due to its ignitability, corrosivity, and/oror reactivity.
FSUBS	Fuel substitution in units operated in accordance with applicable technical operating requirements in the hazardous waste rules.
HLVIT	Vitrification of high level mixed radioactive wastes in units in compliance with all applicable radioactive protection requirements under control of the nuclear regulatory commission.
IMERC	Incineration of wastes containing organics and mercury in units operated in accordance with the technical operating requirements of rules 3745-57-40 to 3745-57-51 and 3745-68-40 to 3745-68-52 of the Administrative Code. All wastewater and nonwastewater residues derived from this process mustshall then comply with the corresponding treatment standards per EPA hazardous waste number with consideration of any applicable subcategories (e.g., high or low mercury subcategories.)
INCIN	Incineration in units operated in accordance with the technical operating requirements of rules 3745-57-40 to 3745-57-51 and 3745-68-40 to 3745-68-52 of the Administrative Code.
LLEXT	Liquid-liquid extraction (often referred to as solvent extraction) of organics from liquid wastes into an immiscible solvent for which the hazardous

	constituents have a greater solvent affinity, resulting in an extract high in organics that mustshall undergo either incineration, reuse as a fuel, or other recovery/reuserecovery or reuse and a raffinate (extracted liquid waste) proportionately low in organics that mustshall undergo further treatment as specified in the standard.	
MACRO	Macroencapsulation with surface coating materials such as polymeric organics (e.g., resins and plastics) or with a jacket of inert inorganic materials to substantially reduce surface exposure to potential leaching media. Macroencapsulation specifically does not include any material that would be classified as a "tank" or "container" as those terms are defined in rule 3745-50-10 of the Administrative Code.	
NEUTR	Neutralization with the following reagents (or waste reagents) or combinations of reagents: (1) acids; (2) bases; or (3) water (including wastewaters) resulting in a pH greater than 2.0 but less than 12.5 as measured in the aqueous residuals.	
NLDBR	No land disposal based on recycling.	
POLYM	Formation of complex high-molecular weight solids through polymerization of monomers in high total organic carbon (TOC) D001 nonwastewaters which are chemical components in the manufacture of plastics.	
PRECP	Chemical precipitation of metals and other inorganics as insoluble precipitates of oxides, hydroxides, carbonates, sulfides, sulfates, chlorides, fluorides, or phosphates. The following reagents (or waste reagents) are typically used alone or in combination: (1) lime (i.e., containing oxides and/oror hydroxides of calcium and/oror magnesium; (2) caustic (i.e., sodium and/oror potassium hydroxides; (3) soda ash (i.e., sodium carbonate); (4) sodium sulfide; (5) ferric sulfate or ferric chloride; (6) alum; or (7) sodium sulfate. Additional flocculating, coagulation or similar reagents/processes_reagents or processes that enhance sludge dewatering characteristics are not precluded from use.	
RBERY	Thermal recovery of beryllium.	
RCGAS	Recovery/reuseRecovery or reuse of compressed gases including techniques such as reprocessing of the gases for reuse/resalereuse or resale; filtering/adsorption filtering or adsorption of 3745-270-42 3 impurities; remixing for direct reuse or resale; and use of the gas as a fuel source.	
RCORR	Recovery of acids or bases utilizing one or more of the following recovery technologies: (1) distillation (i.e., thermal concentration); (2) ion exchange; (3) resin or solid adsorption; (4) reverse osmosis; and/oror (5) incineration for the recovery of acid. NoteComment: This does not preclude the use of other physical phase separation or concentration techniques such as	

	decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.	
RLEAD	Thermal recovery of lead in secondary lead smelters.	
RMERC	Retorting or roasting in a thermal processing unit capable of volatilizing mercury and subsequently condensing the volatilized mercury for recovery. The retorting or roasting unit (or facility) mustshall be subject to one or more of the following: (a) a national emissions standard for hazardous air pollutants (NESHAP) for mercury; (b) a best available control technology (BACT) or a lowest achievable emission rate (LAER) standard for mercury imposed pursuant to a prevention of significant deterioration (PSD) permit; or (c) a state permit that establishes emission limitations (within meaning of Section 302 of the Clean Air Act) for mercury. All wastewater and nonwastewater residues derived from this process mustshall then comply with the corresponding treatment standards per EPA hazardous waste number with consideration of any applicable subcategories (e.g., high or low mercury subcategories).	
RMETL	Recovery of metals or inorganics utilizing one or more of the following direct physical/removalphysical or removal technologies: (1) ion exchange; (2) resin or solid (i.e., zeolites) adsorption; (3) reverse osmosis; (4) ehelation/solventchelation or solvent extraction; (5) freeze crystallization; (6) ultrafiltration; and/oror (7) simple precipitation (i.e., crystallization). NoteComment: This does not preclude the use of other physical phase separation or concentration techniques such as decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.	
RORGS	Recovery of organics utilizing one or more of the following technologies: (1) distillation; (2) thin film evaporation; (3) steam stripping; (4) carbon adsorption; (5) critical fluid extraction; (6) liquid-liquid extraction; (7) precipitation/crystallizationprecipitation or crystallization (including freeze crystallization); or (8) chemical phase separation techniques (i.e., addition of acids, bases, demulsifiers, or similar chemicals). NoteComment: This does not preclude the use of other physical phase separation techniques such as a decantation, filtration (including ultrafiltration), and centrifugation, when used in conjunction with the above listed recovery technologies.	
RTHRM	Thermal recovery of metals or inorganics from nonwastewaters in units identified as "industrial furnaces" according to the definition of that termas defined in rule 3745-50-10 of the Administrative Code in the subparagraphs for cement kilns; blast furnaces; smelting, melting, and refining furnaces; combustion devices used in the recovery of sulfur values from spent sulfuric acid; and halogen acid furnaces.	
RZINC	Resmelting in high temperature metal recovery units for the purpose of	

	recovery of zinc.	
STABL	Stabilization with the following reagents (or waste reagents) or combinations of reagents: (1) portland cement; or (2) https://lime/pozzolanslime.or.pozzolans (e.g., fly ash and cement kiln dust) - this does not preclude the addition of reagents (e.g., iron salts, silicates, and clays) designed to enhance the set/cureset time.or.cure time <a href="https://set/cureset.cureset</td></tr><tr><td>SSTRP</td><td>Steam stripping of organics from liquid wastes utilizing direct application of steam to the wastes operated such that liquid and vapor flow rates, as well as, temperature and pressure ranges, have been optimized, monitored, and maintained. These operating parameters are dependent upon the design parameters of the unit, such as, the number of separation stages and the internal column design, thus resulting in a condensed extract high in organics that mustshall undergo either incineration, reuse as a fuel, or other recovery/reuse-recovery or reuse and an extracted wastewater that mustshall undergo further treatment as specified in the standard.	
VDT	Vacuum thermal desorption of low-level radioactive hazardous mixed waste in units in compliance with all applicable radioactive protection requirements under control of the nuclear regulatory commission.	
WETOX	Wet air oxidation performed in units operated such that a surrogate compound or indicator parameter has been substantially reduced in concentration in the residuals (e.g., total organic carbon can often be used as an indicator parameter for the oxidation of many organic constituents that cannot be directly analyzed in wastewater residues).	
WTRRX	Controlled reaction with water for highly reactive inorganic or organic chemicals with precautionary controls for protection of workers from potential violent reactions as well as precautionary controls for potential emissions of toxic/ignitabletoxic or ignitable levels of gases released during the reaction.	
Notes Footne	otes:	
1 [Reserved	.]	
2 When more than one technology (or treatment train) is specified as alternative treatment standards, the five letter technology codes (or the treatment trains) are separated by a semicolon with the last technology preceded by the word "or". This indicates that any one of these BDATbest demonstrated available technologies (BDATs) or treatment trains can be used for compliance with the standard.		

(B) Any person may submit an application to the director demonstrating that an

alternative treatment method can achieve a measure of performance equivalent to that achieved by methods specified in paragraphs (A), (C), and (D) of this rule for wastes or specified in the table in rule 3745-270-45 of the Administrative Code for hazardous debris. The applicant mustshall submit information demonstrating that histhe applicant's treatment method is in compliance with federal, state, and local requirements and is protective of human health and the environment. On the basis of such information and any other available information, the administrator may approve the use of the alternative treatment method if hethe director finds that the alternative treatment method provides a measure of performance equivalent to that achieved by methods specified in paragraphs (A), (C), and (D) of this rule for wastes or in the table in rule 3745-270-45 of the Administrative Code for hazardous debris. Any approval mustshall be stated in writing and may contain such provisions and conditions as the director deems appropriate. The person to whom such approval is issued mustshall comply with all limitations contained in such a determination.

- (C) As an alternative to the otherwise applicable treatment standards in rules 3745-270-40 to 3745-270-49 of the Administrative Code, lab packs are eligible for land disposal provided the <u>all of following requirements are met:</u>
 - (1) The lab packs comply with the applicable provisions of rules 3745-57-16 and 3745-68-16 of the Administrative Code;
 - (2) The lab pack does not contain any of the wastes listed in appendix \underline{A} to this rule.
 - (3) The lab packs are incinerated in accordance with the requirements of rules 3745-57-40 to 3745-57-51 or 3745-68-40 to 3745-68-52 of the Administrative Code; and.
 - (4) Any incinerator residues from lab packs containing D004, D005, D006, D007, D008, D010, and D011 are treated in compliance with the applicable treatment standards specified for such wastes in rules 3745-270-40 to 3745-270-49 of the Administrative Code.
- (D) Radioactive hazardous mixed wastes are subject to the treatment standards in rule 3745-270-40 of the Administrative Code. Where treatment standards are specified for radioactive mixed wastes in the table of treatment standards, those treatment standards will govern. Where there is no specific treatment standard for radioactive mixed waste, the treatment standard for the hazardous waste (as designated by EPA hazardous waste number) applies. Hazardous debris containing radioactive waste is subject to the treatment standards specified in rule 3745-270-45 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:	03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and 11/29/2021

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 10/20/1998, 03/13/2002, 12/07/2004, 09/05/2010,

10/31/2015

3745-279-01 Definitions<u>- pertaining to used oil management standards.</u>

- (A) For purposes of Chapter 3745-279 of the Administrative Code:
 - (1) "Aboveground tank" means a tank used to store or process used oil that is not an "underground storage tank" as defined in Chapter 1301:7-9 of the Administrative Code.
 - (2) "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.
 - (3) "Do-it-yourselfer used oil collection center" means any site or facility that accepts/aggregatesaccepts or aggregates and stores used oil collected only from household do-it-yourselfers.
 - (4) "Existing tank" means a tank that is used for the storage or processing of used oil and that is in operation, or for which installation has commenced, on or prior to October 20, 1998. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals or permits necessary to begin installation of the tank and if either:
 - (a) A continuous on-site installation program has begun, or.
 - (b) The owner or operator has entered into contractual obligations, which cannot be canceled or modified without substantial loss, for installation of the tank to be completed within a reasonable time.
 - (5) "Household do-it-yourselfer used oil" means oil that is derived from households, such as used oil generated by individuals who generate used oil through the maintenance of their personal vehicles.
 - (6) "Household do-it-yourselfer used oil generator" means an individual who generates "household do-it-yourselfer used oil."
 - (7) "New tank" means a tank that will be used to store or process used oil and for which installation has commenced after October 20, 1998.
 - (8) "Petroleum refining facility" means an establishment primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, and lubricants, through fractionation, straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking, or other processes (i.e., facilities classified as SIC 2911).

(9) "Processing" means chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived product. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oils to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

- (10) "Re-refining distillation bottoms" means the heavy fraction produced by vacuum distillation of filtered and dehydrated used oil. The composition of still bottoms varies with column operation and feedstock.
- (11) "Tank" means any stationary device, designed to contain an accumulation of used oil, which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.
- (12) "Used oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and, as a result of that use, is contaminated by physical or chemical impurities.
- (13) "Used oil aggregation point" means any site or facility that accepts, aggregates, and/oror stores used oil collected only from other used oil generation sites owned or operated by the owner or operator of the aggregation point, from which used oil is transported to the aggregation point in shipments of no more than fifty-five gallons. Used oil aggregation points may also accept used oil from household do-it-yourselfers.
- (14) "Used oil burner" means a facility where used oil that does not meet the specification requirements in rule 3745-279-11 of the Administrative Code is burned for energy recovery in devices identified in paragraph (A) of rule 3745-279-61 of the Administrative Code.
- (15) "Used oil collection center" means any site or facility that is registered with Ohio EPA to manage used oil and accepts/aggregatesaccepts or aggregates and stores used oil collected from used oil generators regulated under rules 3745-279-20 to 3745-279-24 of the Administrative Code who bringthat brings used oil to the collection center in shipments of no more than fifty-five gallons under the provisions of rule 3745-279-24 of the Administrative Code. Used oil collection centers may also accept used oil from household do-it-yourselfers.
- (16) "Used oil fuel marketer" means any person who conducts either of the following activities:

(a) Directs a shipment of off-specification used oil from theirthe facility to a used oil burner; or.

- (b) First claims that used oil that is to be burned for energy recovery meets the used oil fuel specifications set forth in rule 3745-279-11 of the Administrative Code.
- (17) "Used oil generator" means any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.
- (18) "Used oil processor/re-refinerprocessor or re-refiner" means a facility that processes used oil.
- (19) "Used oil transfer facility" means any transportation related facility including loading docks, parking areas, storage areas, and other areas where shipments of used oil are held for more than twenty-four hours and not longer than thirty-five days during the normal course of transportation or prior to an activity performed pursuant to paragraph (B)(2) of rule 3745-279-20 of the Administrative Code. Transfer facilities that store used oil for more than thirty-five days are subject to regulation under rules 3745-279-50 to 3745-279-59 of the Administrative Code.
- (20) "Used oil transporter" means any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but that are not designed to produce (or make more amenable for production of) used oil derived products or used oil fuel.

(B) [Reserved.]

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and Exempt

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 10/20/1998, 12/07/2000, 03/13/2002, 05/13/2007,

09/05/2010

ACTION: Final

DATE: 02/15/2017 9:44 AM

3745-279-81 Disposal of hazardous and of nonhazardous used oils.

- (A) Disposal of hazardous used oils. Used oils that are identified as a hazardous waste and cannot be recycled in accordance with Chapter 3745-279 of the Administrative Code mustshall be managed in accordance with the hazardous waste management requirements of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.
- (B) Disposal of nonhazardous used oils. Used oils that are not hazardous wastes and cannot be recycled under Chapter 3745-279 of the Administrative Code <u>mustshall</u> be disposed in accordance with the applicable requirements of Chapters 3745-27, 3745-28, 3745-29, and 3745-30 of the Administrative Code.

Effective: 03/24/2017

Five Year Review (FYR) Dates: 11/29/2016 and Exempt

CERTIFIED ELECTRONICALLY

Certification

02/15/2017

Date

Promulgated Under: 119.03 Statutory Authority: 3734.12 Rule Amplifies: 3734.12

Prior Effective Dates: 10/20/1998, 12/07/2000, 12/07/2004