

3745-50-02**Business confidentiality - hazardous waste management.**

(A) Any information provided to Ohio EPA under Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code may be made available to the public to the extent and in the manner authorized by rule 3745-49-03 of the Administrative Code.

(B) Except as provided under paragraphs (C) and (D) of this rule, any person who submits information to Ohio EPA in accordance with Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code may assert a claim of trade secret confidentiality covering all or part of that information by following the procedures provided in rule 3745-49-03 of the Administrative Code. Information covered by such a claim may be disclosed by Ohio EPA only to the extent, and by means of the procedures, provided in rule 3745-49-03 of the Administrative Code.

(C) Hazardous waste manifests.

(1) After August 6, 2014, no claim of business confidentiality may be asserted by any person with respect to information that may be prepared and used under 40 C.F.R. 262.20(a)(3) or paragraph (A)(3) of rule 3745-52-20 of the Administrative Code that is provided via any of the following means:

(a) A hazardous waste manifest (U.S. EPA form 8700-22).

(b) A hazardous waste manifest continuation sheet (U.S. EPA form 8700-22A).

(c) An electronic manifest format.

(2) When the electronic or paper manifest is a complete and final document as described in paragraph (C)(3) of this rule, U.S. EPA or Ohio EPA may make available to the public any of the following:

(a) Any electronic manifest that is prepared and used in accordance with 40 C.F.R. 262.20(a)(3) or paragraph (A)(3) of rule 3745-52-20 of the Administrative Code.

(b) Any paper manifest that is submitted to U.S. EPA's waste import-export tracking system under 40 C.F.R. 264.71 or 40 C.F.R. 265.71, or rule 3745-54-71 or 3745-65-71 of the Administrative Code.

(3) Submitted electronic manifests and paper manifests are considered to be complete and final documents and publicly available information ninety days after the delivery to the designated facility of the hazardous waste shipment that is identified in the manifest.

(D) Cathode ray tube import or export documents.

- (1) After June 26, 2018, whether the information is submitted electronically into U.S. EPA's waste import-export tracking system or in paper format, no claim of business confidentiality may be asserted by any person with respect to information in cathode ray tube export documents that are prepared, used, and submitted under 40 C.F.R. 261.39(a)(5) or 40 C.F.R. 261.41(a), and with respect to information in hazardous waste export, import, and transit documents that are prepared, used, and submitted under 40 C.F.R. 262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, or 265.71 or rule 3745-53-20, 3745-54-12, 3745-54-71, 3745-65-12, or 3745-65-71 of the Administrative Code.
- (2) When the electronic or paper documents described in paragraph (D)(1) of this rule are considered to be final documents as described in paragraph (D)(3) of this rule, U.S. EPA or Ohio EPA may make available to the public any of the following:

 - (a) Any cathode ray tube export documents that are prepared, used, and submitted under 40 C.F.R. 261.39(a)(5) or 40 C.F.R. 261.41(a).
 - (b) Any hazardous waste export, import, and transit documents prepared, used and submitted under 40 C.F.R. 262.82, 262.83, 262.84, 263.20, 264.12, 264.71, 265.12, or 265.71 or rule 3745-53-20, 3745-54-12, 3745-54-71, 3745-65-12, or 3745-65-71 of the Administrative Code.
- (3) Submitted electronic and paper documents that are related to hazardous waste exports, imports, and transits and cathode ray tube exports are considered to be final documents on March first of the calendar year after the related cathode ray tube exports or hazardous waste exports, imports, or transits occur.

[Comment 1: For additional information regarding business confidentiality, see rule 3745-49-03 of the Administrative Code.]

[Comment 2: 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: 10/5/2020

Five Year Review (FYR) Dates: 10/05/2025

CERTIFIED ELECTRONICALLY

Certification

09/21/2020

Date

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

3745-50-04**Manifest copy submittal requirements for certain interstate waste shipments.**

In any case in which the state in which waste is generated, or the state in which waste will be transported to a designated facility, requires that the waste be regulated as a hazardous waste or otherwise be tracked through a hazardous waste manifest, the designated facility that receives the waste shall do all of the following, regardless of the state in which the facility is located:

- (A) Complete the facility portion of the applicable manifest.
- (B) Sign and date the facility certification.
- (C) Submit to the e-manifest system a final copy of the manifest for data processing purposes.
- (D) Pay the appropriate per manifest fee to U.S. EPA for each manifest submitted to the e-manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 C.F.R. Part 264 subpart FF.

[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."]

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3745-50-05

Applicability- electronic manifest system and user fee requirements to facilities that receive state-only regulated waste shipments.

(A) For purposes of this rule, "state-only regulated waste" means either of the following:

- (1) A non-RCRA waste that a state regulates more broadly under the state's regulatory program.
- (2) A RCRA hazardous waste that is federally exempt from manifest requirements, but not exempt from manifest requirements under state law.

(B) In any case in which a state requires a RCRA manifest to be used under state law to track the shipment and transportation of a state-only regulated waste to a receiving facility, the facility receiving such a waste shipment for management shall do the following:

- (1) Comply with rules 3745-54-71 and 3745-54-72 of the Administrative Code.
- (2) Pay the appropriate per manifest fee to U.S. EPA for each manifest submitted to the e-manifest system, subject to the fee determination methodology, payment methods, dispute procedures, sanctions, and other fee requirements specified in 40 C.F.R. Part 264 subpart FF.

[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."]

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3745-50-10

Definitions and computation of time.

As used in the hazardous waste rules the following terms have the meanings given:

(A) ~~As used in the hazardous waste rules:~~

- (1) "Aboveground tank" means a device that meets the definition of "tank" in this rule and that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.
- (2) "Active life of a facility" means the period from the initial receipt of hazardous waste at the facility until the director receives certification of final closure.
- (3) "Active portion" means that portion of a facility where treatment, storage, or disposal operations are being or have been conducted after April 15, 1981 and which is not a closed portion. (See also "closed portion" and "inactive portion.")
- (4) "Acute hazardous waste" mean hazardous wastes that meet the listing criteria in paragraph (A)(2) of rule 3745-51-11 of the Administrative Code and therefore are either listed in rule 3745-51-31 of the Administrative Code with the assigned hazard code of (H) or are listed in paragraph (E) of rule 3745-51-33 of the Administrative Code.
- ~~(4)~~(5) "Administrator" means the administrator of the U.S. EPA, or the administrator's authorized representative.
- (6) "AES filing compliance date" means the date that U.S. EPA announced in the Federal Register as December 31, 2017, on or after which exporters of hazardous waste and exporters of cathode ray tubes for recycling are required to file U.S. EPA information in the automated export system (AES) or the AES's successor system, under the international trade data system platform.
- ~~(5)~~(7) "Aerosol container" means a non-opening, non-refillable container that holds a substance under pressure and that can release the substance as a spray, gel, or foam by means of a propellant gas, for example nitrogen.
- (8) "Airbag waste" means any hazardous waste airbag modules or hazardous waste airbag inflators.
- (9) "Airbag waste collection facility" means any facility that receives airbag waste from airbag handlers subject to regulation under paragraph (J) of rule 3745-51-04 of the Administrative Code, and accumulates the waste for more than ten days.

(10) "Airbag waste handler" means any person, by site, who generates airbag waste that is subject to regulation under this chapter.

~~(6)~~(11) "Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter, or control the flow of hazardous waste from the point of generation to a storage or treatment tank, between hazardous waste storage and treatment tanks to a point of disposal on-site, or to a point of shipment for disposal off-site.

~~(7)~~(12) "Antifreeze" means propylene glycol or ethylene glycol, including aggregated batches of propylene glycol or ethylene glycol, used as a heat transfer medium in an internal combustion engine; heating, ventilating, and air conditioning units; and electronics cooling applications; or used for winterizing equipment.

~~(8)~~(13) "Applicable law" means any applicable provisions of Chapters 3704., 3734., 3745., 6109., and 6111. of the Revised Code; the rules promulgated thereunder; orders of the director; the Resource Conservation and Recovery Act, 42 U.S.C. 6921; the Toxic Substances Control Act, 15 U.S.C. 2601; the Safe Drinking Water Act, 42 U.S.C. 300f; the Clean Water Act, and the Clean Air Act, 42 U.S.C. 7401; and the regulations of the administrator promulgated thereunder.

~~(9)~~(14) "Aquifer" means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells or springs.

~~(10)~~(15) "Authorized representative of a facility" means an individual responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.

(B)

~~(H)~~(1) "Battery" means a device, consisting of one or more electrically connected electrochemical cells, which is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

~~(I)~~(2) "Boiler" means an enclosed device using controlled flame combustion and having either of the following characteristics:

(a) The unit shall:

- (i) Have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases.
 - (ii) Have a combustion chamber and primary energy recovery sections that are of integral design. To be of integral design the combustion chamber and the primary energy recovery section (such as waterwalls and superheaters) shall be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because the units are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units.
 - (iii) While in operation, maintain a thermal energy recovery efficiency of at least sixty per cent, calculated in terms of the recovered energy compared with the thermal value of the fuel.
 - (iv) Export and utilize at least seventy-five per cent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit (examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feed-water pumps).
- (b) The unit is one which the director, on a case-by-case basis, and after considering the standards in rule 3745-50-25 of the Administrative Code, has determined to be a boiler.

(C)

~~(13)~~(1) "Carbon dioxide stream" means carbon dioxide that has been captured from an emissions source (e.g., power plant), plus incidental associated substances derived from the source materials and the capture process, and any substances added to the stream to enable or improve the injection process.

~~(14)~~(2) "Carbon regeneration unit" means any enclosed thermal treatment device used to regenerate spent activated carbon.

(3) "Central accumulation area" means any on-site hazardous waste accumulation area with hazardous waste accumulating in units subject to either rule 3745-52-16 of the Administrative Code (for small quantity generators) or rule 3745-52-17 of the Administrative Code (for large quantity generators). A central accumulation area at an eligible academic entity that chooses to operate under rules 3745-52-200 to 3745-52-216 of the Administrative Code is also subject to rule 3745-52-211 of the Administrative Code when accumulating unwanted material or hazardous waste.

~~(15)~~(4) "CERCLA" means the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9601 as amended through the date specified in rule 3745-50-11 of the Administrative Code.

~~(16)~~(5) "Certification" means a statement of professional opinion based upon knowledge and belief.

~~(17)~~(6) "Clean Water Act" or "Clean Water Act of 1977" means the Federal Water Pollution Control Act Amendments of 1972, 86 Stat. 886, 33 U.S.C. 1251, as amended through the date specified in rule 3745-50-11 of the Administrative Code by the Clean Water Act of 1977, 91 Stat. 1566, 33 U.S.C. 1251, as amended through the date specified in rule 3745-50-11 of the Administrative Code.

~~(18)~~(7) "Closed portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements in the hazardous waste rules. (See also "active portion" and "inactive portion.")

~~(19)~~(8) "Component" means either the tank or ancillary equipment of a tank system.

~~(20)~~(9) "Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer ~~itself~~; an aquifer containing confined ground water.

~~(21)~~(10) "Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

~~(22)~~(11) "Containment building" means a hazardous waste management unit that is used to store or treat hazardous waste under rules 3745-205-100 to 3745-205-102 or 3745-256-100 to 3745-256-102 of the Administrative Code.

~~(23)~~(12) "Contingency plan" means a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion,

or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

~~(24)~~(13) "Corrosion expert" means a person who, by reason of that person's knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person shall be certified as being qualified by the "National Association of Corrosion Engineers (NACE)" or be a professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

~~(25)~~(14) "CRT" or "cathode ray tube" means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A "used, intact CRT" means a CRT for which the vacuum has not been released. A "used, broken CRT" means glass removed from the housing or casing for which the vacuum has been released. Used CRTs are "spent materials" as defined in rule 3745-51-01 of the Administrative Code.

~~(26)~~(15) "CRT collector" means a person who receives used, intact CRTs for recycling, repair, resale, or donation.

~~(27)~~(16) "CRT exporter" means any person in the United States who initiates a transaction to send used CRTs outside the United States or the territories of the United States for recycling or reuse, or any intermediary in the United States arranging for such export.

~~(28)~~(17) "CRT glass manufacturer" means an operation or part of an operation that uses a furnace to manufacture CRT glass.

~~(29)~~(18) "CRT processing" means conducting all of the following activities:

- (a) Receiving broken or intact CRTs.
- (b) Intentionally breaking intact CRTs or further breaking or separating broken CRTs.
- (c) Sorting or otherwise managing glass removed from CRT monitors.

(D)

~~(30)~~(1) "Designated facility" means:

- (a) A hazardous waste treatment, storage, or disposal facility which:
- (i) Has received an Ohio hazardous waste permit or is deemed to have a permit by rule, or
 - (ii) In another state, has attained interim status or is operating under a permit or license issued in accordance with the Resource Conservation and Recovery Act, or
 - (iii) Is regulated under paragraph (C)(2) of rule 3745-51-06 or rule 3745-266-70 of the Administrative Code, and
 - (iv) Has been designated on the manifest by the generator pursuant to rule 3745-52-20 of the Administrative Code.
- (b) A generator site designated on the manifest to receive the waste as a return shipment from a facility that has rejected the waste in accordance with paragraph (F) of rule 3745-54-72 or paragraph (F) of rule 3745-65-72 of the Administrative Code.
- (c) If a waste is destined to a facility in an authorized state which has not yet obtained authorization to regulate that particular waste as hazardous, then the designated facility is required to be a facility allowed by the receiving state to accept such waste.

~~(31)~~(2) "Destination facility" means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in paragraphs (A) and (C) and (E), (F), and (G) of rule 3745-273-13 and paragraphs (A) and (C) and (E), (F), and (G) of rule 3745-273-33 of the Administrative Code. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste.

~~(32)~~(3) "Dike" means an embankment or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

~~(33)~~(4) "Dioxins and furans" or "(D/F)" means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

~~(34)~~(5) "Director" means the director of Ohio EPA, or the director's authorized representative.

~~(35)~~(6) "Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

~~(36)~~(7) "Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any hazardous waste into or on any land or water or air so that such hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters, except where such activity constitutes "storage" as defined in this rule or "treatment" as defined in this rule.

~~(37)~~(8) "Disposal facility" or "hazardous waste disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water or air, and at which waste will remain after closure. The term "disposal facility" does not include a corrective action management unit into which remediation wastes are placed.

~~(38)~~(9) "Drip pad" is an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials, and designed to convey preservative kick-back or drippage from treated wood, precipitation, and surface water runoff to an associated collection system at wood preserving plants.

(E)

(1) "Electronic import-export reporting compliance date" means the date that U.S. EPA announced in the Federal Register as December 31, 2017, on or after which exporters, importers, and receiving facilities are required to submit certain export and import related documents to U.S. EPA using U.S. EPA's waste import export tracking system (WIETS), or the WIETS's successor system.

(2) "Electronic manifest" or "e-manifest" means the electronic format of the hazardous waste manifest that is obtained from U.S. EPA's national e-manifest system and transmitted electronically to the system, and that is the legal equivalent of U.S. EPA forms 8700-22 (manifest) and 8700-22A (continuation sheet).

(3) "Electronic manifest system" or "e-manifest system" means U.S. EPA's national information technology system through which the electronic manifest may be obtained, completed, transmitted, and distributed to users of the electronic manifest and to regulatory agencies.

~~(39)~~(4) "Elementary neutralization unit" means a device which both:

- (a) Is used for neutralizing wastes that are hazardous only because the wastes exhibit the characteristic of corrosivity identified in rule 3745-51-22 of the Administrative Code, or the wastes are listed as a hazardous waste in rules 3745-51-30 to 3745-51-35 of the Administrative Code only for this reason.
- (b) Meets the definition of "tank," "tank system," "container," "transport vehicle," or "vessel" in this rule.
- ~~(40)~~(5) "EPA hazardous waste number" means the number assigned by U.S. EPA to each hazardous waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code and to each characteristic identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.
- ~~(41)~~(6) "Equivalent method" means any testing or analytical method approved by the administrator under 40 CFR 260.20 and 40 CFR 260.21.
- ~~(42)~~(7) "Existing hazardous waste management facility" or "existing facility" or "in existence" means a facility which was in operation or for which construction commenced on or before the effective date of statutory or regulatory changes under Chapter 3734. of the Revised Code which make the owner or operator of the facility subject to hazardous waste permitting requirements. The owner or operator has commenced construction of the facility if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction, and either of the following has occurred:
- (a) A continuous, on-site, physical construction program has begun.
- (b) The owner or operator has entered into contractual obligations- which cannot be cancelled or modified without substantial loss- for physical construction of the facility to be completed within a reasonable time.
- ~~(43)~~(8) "Existing portion" means that waste management unit into which wastes have been placed prior to final administrative disposition of the permit pursuant to the "Part B" permit requirements.
- ~~(44)~~(9) "Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986. 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 physical construction of the site or installation of the tank system and if either of the following has occurred:

- (a) A continuous on-site physical construction or installation program has begun.
- (b) The owner or operator has entered into contractual obligations, which cannot be cancelled or modified without substantial loss, for physical construction of the site or installation of the tank system to be completed within a reasonable time.

~~(45)~~(10) "Explosives or munitions emergency" means a situation involving the suspected or detected presence of unexploded ordnance, damaged or deteriorated explosives or munitions, an improvised explosive device (IED), other potentially explosive material or device, or other potentially harmful military chemical munitions or device, that creates an actual or potential imminent threat to human health, including safety, or the environment, including property, as determined by an explosives or munitions emergency response specialist. Such situations may require immediate and expeditious action by an explosives or munitions emergency response specialist to control, mitigate, or eliminate the threat.

~~(46)~~(11) "Explosives or munitions emergency response" means all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render-safe procedures, treatment, or destruction of the explosives or munitions, or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at hazardous waste facilities.

~~(47)~~(12) "Explosives or munitions emergency response specialist" means an individual trained in chemical or conventional munitions or explosives handling, transportation, render-safe procedures, or destruction techniques. "Explosives or munitions emergency response specialists" include department of defense (DOD) emergency explosive ordnance disposal (EOD), technical escort unit (TEU), and DOD-certified civilian or contractor personnel; and other federal, state, or local government, or civilian personnel similarly trained in explosives or munitions emergency responses.

(F)

~~(48)~~(1) "Facility" or "hazardous waste facility" means:

- (a) All contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of hazardous waste. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of these).
- (b) For the purpose of implementing corrective action under rule 3745-54-101 of the Administrative Code, all contiguous property under the control of the owner or operator seeking a permit under the hazardous waste rules. This definition also applies to facilities implementing corrective action under Section 3008(h) of RCRA or section 3734.20 of the Revised Code.
- (c) Notwithstanding subparagraph (b) of this definition, a remediation waste management site is not a facility that is subject to rule 3745-54-101 of the Administrative Code, but is subject to corrective action requirements if the site is located within such a facility.

~~(49)~~(2) "Federal agency" means any department, agency, or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation, and the government printing office.

~~(50)~~(3) "Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements in the hazardous waste rules so that hazardous waste management activities under Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code are no longer conducted at the facility unless subject to rule 3745-52-34 of the Administrative Code.

~~(51)~~(4) "Food-chain crops" means tobacco, crops grown for human consumption, and crops grown for feed for animals that produce products that are consumed by humans.

~~(52)~~(5) "Freeboard" means the vertical distance between the top of a tank or surface impoundment dike, and the surface of the waste contained therein.

~~(53)~~(6) "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure.

(G)

~~(54)~~(1) "Generator" means any person, by site, whose act or process produces hazardous waste identified or listed in Chapter 3745-51 of the Administrative Code or whose act first causes a hazardous waste to become subject to the hazardous waste rules.

~~(55)~~(2) "Ground water" means water below the land surface in a zone of saturation.

(H)

~~(56)~~(1) "Hazardous constituents" means those constituents listed in the appendix to rule 3745-51-11 of the Administrative Code.

~~(57)~~(2) "Hazardous waste" means a "hazardous waste" as defined in rule 3745-51-03 of the Administrative Code.

~~(58)~~(3) "Hazardous waste constituent" means a constituent that caused the director or the administrator to list the hazardous waste in rules 3745-51-30 to 3745-51-35 of the Administrative Code, or a constituent listed in the table in rule 3745-51-24 of the Administrative Code.

~~(59)~~(4) "Hazardous waste management unit" means a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and the associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which the containers are placed.

~~(60)~~(5) "Hazardous waste rules" means the rules in Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54, 3745-55, 3745-56, 3745-57, 3745-65, 3745-66, 3745-67, 3745-68, 3745-69, 3745-205, 3745-256, 3745-266, 3745-270, 3745-273, and 3745-279 of the Administrative Code.

(I)

~~(61)~~(1) "Inactive portion" means that portion of a facility which is not operated after April 15, 1981. (See also "active portion" and "closed portion.")

~~(62)~~(2) "Incinerator" means any enclosed device that either:

- (a) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace.

(b) Meets the definition of "infrared incinerator" or "plasma arc incinerator" in this rule.

~~(63)~~(3) "Incompatible waste" means a hazardous waste which is unsuitable for either:

(a) Placement in a particular device or facility because the waste may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls).

(b) Commingling with another waste or material under uncontrolled conditions because the commingling may produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes, or gases, or flammable fumes or gases. (See the appendix to rule 3745-55-99 and the appendix to rule 3745-66-99 of the Administrative Code for examples.)

~~(64)~~(4) "Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

~~(65)~~(5) "Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use thermal treatment to accomplish recovery of materials or energy:

(a) Cement kilns.

(b) Lime kilns.

(c) Aggregate kilns.

(d) Phosphate kilns.

(e) Coke ovens.

(f) Blast furnaces.

(g) Smelting, melting, and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces).

(h) Titanium dioxide chloride process oxidation reactors.

(i) Methane reforming furnaces.

- (j) Pulping liquor recovery furnaces.
- (k) Combustion devices used in the recovery of sulfur values from spent sulfuric acid.
- (l) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production facilities where the furnace is located on the site of a chemical production facility, the acid product has a halogen acid content of at least three per cent, the acid product is used in a manufacturing process, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of twenty per cent as-generated.
- (m) Such other devices as the administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:
 - (i) The design and use of the device primarily to accomplish recovery of material products.
 - (ii) The use of the device to burn or reduce raw materials to make a material product.
 - (iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials in processes using raw materials as principal feedstocks.
 - (iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial process to make a material product.
 - (v) The use of the device in common industrial practice to produce a material product.
 - (vi) Other factors as appropriate.

~~(66)~~(6) "Infrared incinerator" means any enclosed device that uses electric powered resistance heaters as a source of radiant heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

~~(67)~~(7) "Inground tank" means a device that meets the definition of "tank" in this rule, whereby a portion of a tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

~~(68)~~(8) "In operation" refers to a facility which is treating, storing, or disposing of hazardous waste.

~~(69)~~(9) "Injection well" means a well into which fluids are injected. (See also "underground injection.")

~~(70)~~(10) "Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

~~(71)~~(11) "Installation inspector" means a person who, by reason of that person's knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

~~(72)~~(12) "International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

(J) [Reserved.]

(K) [Reserved.]

(L)

~~(73)~~(1) "Lamp" or "universal waste lamp" means the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, and infra-red regions of the electromagnetic spectrum. Examples of common universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Lamps that have been used and are being discarded are "spent materials" as defined in rule 3745-51-01 of the Administrative Code.

~~(74)~~(2) "Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a corrective action management unit.

~~(75)~~(3) "Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells include, but are not limited to, trenches and pits.

- ~~(76)~~(4) "Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.
- (5) "Large quantity generator" is a generator who generates any of the following amounts in a calendar month:
- (a) Greater than or equal to one thousand kilograms (two thousand two hundred pounds) of non-acute hazardous waste.
 - (b) Greater than one kilogram (2.2 pounds) of acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.
 - (c) Greater than one hundred kilograms (two hundred twenty pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.
- ~~(77)~~(6) "Large quantity handler of universal waste" means a "universal waste handler" (as defined in this rule) who accumulates five thousand kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, lamps, aerosol containers, antifreeze, or paint or paint-related waste, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the five thousand kilogram limit is met or exceeded.
- ~~(78)~~(7) "Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.
- ~~(79)~~(8) "Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system shall employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.
- ~~(80)~~(9) "Liner" means a continuous layer of natural or man-made materials, beneath or on the sides of a surface impoundment, landfill, or landfill cell, which

restricts the downward or lateral escape of hazardous waste, hazardous waste constituents, or leachate.

(M)

~~(81)~~(1) "Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous waste.

~~(82)~~(2) "Manifest" means the shipping document U.S. EPA form 8700-22 and, if necessary, U.S. EPA form 8700-22A, originated and signed by the generator or offeror which contains the information required by ~~Chapter~~Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code.

~~(83)~~(3) "Manifest tracking number" means the alphanumeric identification number (i.e., a unique three letter suffix preceded by nine numerical digits), which is pre-printed in item 4 of the manifest by a registered source.

~~(84)~~(4) "Mercury-containing equipment" means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to the function of the equipment. Used mercury-containing equipment that is taken out of service is a "spent material" as defined in rule 3745-51-01 of the Administrative Code.

~~(85)~~(5) "Military munitions" means all ammunition products and components produced or used by or for the United States department of defense (DOD) or the United States armed services for national defense and security, including military munitions under the control of the department of defense, the United States coast guard, the United States department of energy (DOE), and national guard personnel.

(a) The term "military munitions" includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof.

(b) The term "military munitions" does not include: wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices,

and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954 have been completed.

~~(86)~~(6) "Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is removed to gain access to that deposit and is then used for reclamation of a surface mine.

~~(87)~~(7) "Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored, or disposed of and that is not a container, tank, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under Chapter 3745-34 of the Administrative Code, corrective action management unit, containment building, or unit eligible for a research, development, and demonstration permit under 40 CFR 270.65, or staging pile.

~~(88)~~(8) "Movement" means that hazardous waste transported to a facility in an individual vehicle.

(N)

~~(89)~~(1) "New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation has commenced after July 14, 1986; except, however, for purposes of paragraph (G)(2) of rule 3745-55-93 and paragraph (G)(2) of rule 3745-66-93 of the Administrative Code, a new tank system is one for which construction commences after July 14, 1986. (See also "existing tank system.")

~~(90)~~(2) "No free liquids," as used in paragraphs (A)(26) and (B)(18) of rule 3745-51-04 of the Administrative Code, means that "solvent-contaminated wipes" as defined in this rule may not contain free liquids as determined by method 9095B ("Paint Filter Liquids Test"), included in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" U.S. EPA publication SW-846, and that there is no free liquid in the container holding the "wipes" as defined in this rule.

(3) "Non-acute hazardous waste" means all hazardous wastes that are not acute hazardous waste, as defined in this rule.

(O)

~~(91)~~(1) "Ohio EPA" means the Ohio environmental protection agency.

~~(92)~~(2) "On ground tank" means a device that meets the definition of "tank" in this rule and that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surface so that the external tank bottom cannot be visually inspected.

~~(93)~~(3) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right-of-way. Non-contiguous properties owned by the same person but connected by a right-of-way which that person controls and to which the public does not have access are also considered on-site property.

~~(94)~~(4) "Open burning" means the combustion of any material without the following characteristics:

- (a) Control of combustion air to maintain adequate temperature for efficient combustion.
- (b) Containment of the combustion-reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion.
- (c) Control of emission of the gaseous combustion products. (See also "incineration" and "thermal treatment.")

~~(95)~~(5) "Operator" means the person responsible for the overall operation of a facility.

~~(96)~~(6) "Owner" means the person who owns a facility or part of a facility.

(P)

~~(97)~~(1) "Paint" means a pigmented or unpigmented powder coating, or a pigmented or unpigmented mixture of binder and suitable liquid, resulting from commercial, industrial, mining, agricultural, and post-consumer activities, that upon fusing or drying forms an adhering coating on the surface to which the paint is applied. Powder coating is any surface coating which is applied as a dry powder and is fused into a continuous coating film through the use of heat.

~~(98)~~(2) "Paint-related waste" means any material contaminated with paint that results from paint packaging, wholesale and retail operations, paint manufacturing, and paint application or removal activities, or a material derived from the reclamation of paint-related wastes that is recycled in a manner other than burning for energy recovery or used in a manner constituting disposal according to rules 3745-51-02 and 3745-266-20 of the Administrative Code.

~~(99)~~(3) "Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of Chapters 3745-54 to 3745-57 and 3745-205 or 3745-65 to 3745-69 and 3745-256 of the Administrative Code at a facility that contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including the associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile, or other hazardous waste management unit, while other units of the same facility continue to operate.

~~(100)~~(4) "Permit (as concerns hazardous waste)," "Ohio hazardous waste permit," or "hazardous waste permit" means a hazardous waste facility installation and operation permit issued under Chapter 3734. of the Revised Code and the rules adopted thereunder, or a renewal permit issued pursuant to section 3734.05 of the Revised Code.

~~(101)~~(5) "Permitted facility" means a facility that has possession of a current Ohio hazardous waste permit.

~~(102)~~(6) "Person" means an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, the state of Ohio or any state of the United States, municipality, commission, political subdivision of the state, or any interstate body.

~~(103)~~(7) "Personnel" or "facility personnel" means all persons who work at, or oversee the operations of, a hazardous waste facility, and whose actions or failure to act may result in noncompliance with Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code.

~~(104)~~(8) "Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant, or desiccant, other than any article that is one of the following:

- (a) A new animal drug under Section 201(v) of the Federal Food, Drug, and Cosmetic Act (FFDCA).
- (b) An animal drug that has been determined by regulation of the secretary of health and human services not to be a new animal drug.
- (c) An animal feed under Section 201(w) of the FFDCA that bears or contains any substances described by any portion of the definition of "pesticide" in this rule.

~~(105)~~(9) "Pile" means any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage and that is not a containment building.

~~(106)~~(10) "Plasma arc incinerator" means any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace.

~~(107)~~(11) "Point source" means any discernible, confined, and discrete conveyance, including, but is not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

~~(108)~~(12) "Publicly owned treatment works" or "POTW" means any device or system used in the treatment (including, but not limited to, recycling and reclamation of hazardous wastes) of municipal sewage or industrial wastes of a liquid nature which is owned by the state or a "municipality" [as defined in Section 502(4) of the Clean Water Act]. This definition includes sewers, pipes, or other conveyances only if such sewers, pipes, or other conveyances convey wastewater to a POTW providing treatment.

~~(109)~~(Q) "Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certifications, or completion of accredited university courses that enable that individual to make sound professional judgements regarding ground water monitoring and contaminant fate and transport.

(R)

(1) "Recognized trader" means a person domiciled in the United States, by site of business, who acts to arrange and facilitate transboundary movements of wastes destined for recovery or disposal operations, either by purchasing from and subsequently selling to United States and foreign facilities, or by acting under arrangements with a United States waste facility to arrange for the export or import of the wastes.

~~(110)~~(2) "Remediation waste" means all solid and hazardous wastes, and all media (including ground water, surface water, soils, and sediments) and debris, that are managed for implementing cleanup.

~~(H1)~~(3) "Remediation waste management site" means a facility where an owner or operator is or will be treating, storing, or disposing of hazardous remediation wastes. A remediation waste management site is not a facility that is subject to corrective action under rule 3745-54-101 of the Administrative Code, but is subject to corrective action requirements if the site is located in such a facility.

~~(H2)~~(4) "Replacement unit":

(a) Means a landfill, surface impoundment, or waste pile unit:

(i) From which all or substantially all of the waste is removed.

(ii) That is subsequently reused to treat, store, or dispose of hazardous waste.

(b) Does not apply to a unit from which waste is removed during closure, if the subsequent reuse solely involves the disposal of waste from that unit and other closing units or corrective action areas at the facility, in accordance with an approved closure plan or in accordance with a U.S. EPA or Ohio EPA approved corrective action.

~~(H3)~~(5) "Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, ground water) which can be expected to exhibit the average properties of the universe or whole.

~~(H4)~~(6) "Resource Conservation and Recovery Act," or "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended through the date specified in rule 3745-50-11 of the Administrative Code, 42 U.S.C. 6901.

~~(H5)~~(7) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

~~(H6)~~(8) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(S)

~~(H7)~~(1) "Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

~~(H8)~~(2) "Sludge" means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply

treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

~~(119)~~(3) "Sludge dryer" means any enclosed thermal treatment device that is used to dehydrate sludge and that has a maximum total thermal input, excluding the heating value of the sludge ~~itself~~, of two thousand five hundred British thermal units (Btu) per pound of sludge treated on a wet-weight basis.

~~(120)~~(4) "Small quantity generator" means a generator who generates any of the following amounts in a calendar month:~~less than one thousand kilograms of hazardous waste in a calendar month.~~

(a) Greater than one hundred kilograms (two hundred twenty pounds) but less than one thousand kilograms (two thousand two hundred pounds) of non-acute hazardous waste.

(b) Less than or equal to one kilogram (2.2 pounds) of acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

(c) Less than or equal to one hundred kilograms (two hundred twenty pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

~~(121)~~(5) "Small quantity handler of universal waste" means a "universal waste handler" (as defined in this rule) who does not accumulate five thousand kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, lamps, aerosol containers, antifreeze, or paint or paint-related waste, calculated collectively) at any time.

~~(122)~~(6) "Solid wastes" has the same meaning as in rule 3745-27-01 of the Administrative Code.

~~(123)~~(7) "Solvent-contaminated wipe" means:

(a) A "wipe" as defined in this rule that, after use or after cleaning up a spill, has one or more of the following features:

(i) Contains one or more of the F001 to F005 solvents listed in rule 3745-51-31 of the Administrative Code or the corresponding P-listed or U-listed solvents listed in rule 3745-51-33 of the Administrative Code.

- (ii) Exhibits a hazardous characteristic in rules 3745-51-20 to 3745-51-24 of the Administrative Code when that characteristic results from a solvent listed in Chapter 3745-51 of the Administrative Code.
 - (iii) Exhibits only the hazardous waste characteristic of ignitability in rule 3745-51-21 of the Administrative Code due to the presence of one or more solvents that are not listed in Chapter 3745-51 of the Administrative Code.
- (b) Solvent-contaminated wipes that contain listed hazardous waste other than solvents, or exhibit the characteristic of toxicity, characteristic of corrosivity, or characteristic of reactivity due to contaminants other than solvents, are not eligible for the exclusions in paragraphs (A)(26) and (B) (18) of rule 3745-51-04 of the Administrative Code.
- ~~(124)~~(8) "Sorbent" means a material that is used to soak up free liquids by either adsorption or absorption, or both. "Sorb" means to either adsorb or absorb, or both.
- ~~(125)~~(9) "Staging pile" means an accumulation of solid, non-flowing "remediation waste" (as defined in this rule) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles shall be designated by the director according to rule 3745-57-74 of the Administrative Code.
- ~~(126)~~(10) "State" means the state of Ohio.
- ~~(127)~~(11) "Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.
- ~~(128)~~(12) "Sump" means any pit or reservoir that meets the definition of "tank" in this rule and those troughs or trenches connected to such pit or reservoir that serve to collect hazardous waste for transport to hazardous waste storage, treatment, or disposal facilities; except that as used in the landfill, surface impoundment, and waste pile rules, "sump" means any lined pit or reservoir that serves to collect liquids drained from a leachate collection and removal system or leak detection and removal system for subsequent removal from the system.
- ~~(129)~~(13) "Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although the impoundment or surface impoundment may be lined with man-made materials), which is

designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an injection well. Surface impoundments include, but are not limited to, holding, storage, settling, and aeration pits, ponds, and lagoons.

(T)

~~(130)~~(1) "Tank" means a stationary device, designed to contain an accumulation of hazardous waste, which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) that provide structural support.

~~(131)~~(2) "Tank system" means a hazardous waste storage or treatment tank and the associated ancillary equipment and containment system.

~~(132)~~(3) "TEQ" means toxicity equivalence, the international method of relating the toxicity of various dioxin and furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

~~(133)~~(4) "Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical, or biological character or composition of the hazardous waste. Thermal treatment processes include, but are not limited to, incineration, molten salt, pyrolysis, calcination, wet air oxidation, and microwave discharge. (See also "incinerator" and "open burning.")

~~(134)~~(5) "Thermostat" means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element, and mercury-containing ampules that have been removed from these temperature control devices in compliance with paragraph (C)(2) of rule 3745-273-13 or paragraph (C)(2) of rule 3745-273-33 of the Administrative Code.

~~(135)~~(6) "Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example of such facility is a pipe in which waste acid is neutralized.

~~(136)~~(7) "Trade secrets" means any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using such information to fabricate, produce, or compound an article, trade, or service having commercial value, and which gives the user an

opportunity to obtain a business advantage over competitors who do not know or use ~~it~~ such information.

~~(137)~~(8) "Transfer facility" means any transportation-related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

~~(138)~~(9) "Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

~~(139)~~(10) "Transportation" means the movement of hazardous waste by air, rail, highway, or water.

~~(140)~~(11) "Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway, or water.

~~(141)~~(12) "Treatability study" means a study in which a hazardous waste is subjected to a treatment process to determine any of the following:

- (a) Whether the waste is amenable to the treatment process.
- (b) What pretreatment (if any) is required.
- (c) The optimal process conditions needed to achieve the desired treatment.
- (d) The efficiency of a treatment process for a specific waste or wastes.
- (e) The characteristics and volumes of residuals from a particular treatment process.

Also included in this definition for the purpose of the exemptions in paragraphs (E) and (F) of rule 3745-51-04 of the Administrative Code, are liner compatibility, corrosion, and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of hazardous waste.

~~(142)~~(13) "Treat" or "treatment" means any method, technique, or process designed to change the physical, chemical, or biological characteristics or composition of any hazardous waste; to neutralize the waste; to recover energy or material resources from the waste; to render the waste non-hazardous or less hazardous, safer to transport, store, or dispose of, or amenable for recovery, storage, further treatment, or disposal; or to reduce the volume of the waste.

~~(143)~~(14) "Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed, or immobilized.

(U)

~~(144)~~(1) "Underground injection" means the subsurface emplacement of fluids through a bored, drilled or driven well, or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well.")

~~(145)~~(2) "Underground source of drinking water" means:

(a) An aquifer or portion of the aquifer which either:

(i) Supplies any "public water system" as defined in Chapter 3745-81 of the Administrative Code.

(ii) Contains a sufficient quantity of ground water to supply a "public water system" as defined in Chapter 3745-81 of the Administrative Code, and one of the following:

(a) Currently supplies drinking water for human consumption.

(b) Contains fewer than ten thousand milligrams per liter total dissolved solids.

(b) Is not an exempted aquifer.

~~(146)~~(3) "Underground tank" means a device that meets the definition of "tank" in this rule in which the entire surface area is totally below the surface of and covered by the ground.

~~(147)~~(4) "Unfit for use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

~~(148)~~(5) "Universal waste" means any of the following hazardous wastes that are managed under the universal waste requirements of Chapter 3745-273 of the Administrative Code:

(a) Batteries as described in rule 3745-273-02 of the Administrative Code.

- (b) Pesticides as described in rule 3745-273-03 of the Administrative Code.
- (c) Mercury-containing equipment as described in rule 3745-273-04 of the Administrative Code.
- (d) Lamps as described in rule 3745-273-05 of the Administrative Code.
- (e) Ohio-specific universal wastes as described in rule 3745-273-89 of the Administrative Code.
 - (i) Aerosol container as described in paragraph (A) of rule 3745-273-89 of the Administrative Code.
 - (ii) Antifreeze as described in paragraph (B) of rule 3745-273-89 of the Administrative Code.
 - (iii) Paint and paint-related waste as described in paragraph (C) of rule 3745-273-89 of the Administrative Code.

~~(149)~~(6) "Universal waste handler":

- (a) Means either:
 - (i) A "generator" (as defined in this rule) of universal waste.
 - (ii) The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.
- (b) Does not mean either of the following:
 - (i) A person who treats [except under the provisions of paragraph (A) or (C) or (E), (F), or (G) of rule 3745-273-13 of the Administrative Code, or paragraph (A) or (C) or (E), (F), or (G) of rule 3745-273-33 of the Administrative Code], disposes of, or recycles universal waste.
 - (ii) A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

- ~~(150)~~(7) "Universal waste satellite accumulation area" means a container, cabinet, hopper, or other unit where universal waste aerosol containers are initially collected in the work area prior to being moved to the specified accumulation area for storage, puncturing, or preparation of the universal waste aerosol containers for shipment to another universal waste handler or destination facility.
- ~~(151)~~(8) "Universal waste transporter" means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.
- ~~(152)~~(9) "Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.
- ~~(153)~~(10) "United States" means the fifty states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of Northern Mariana Islands.
- ~~(154)~~(11) "Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.
- ~~(155)~~(12) "U.S. EPA" means United States environmental protection agency.
- ~~(156)~~(13) "U.S. EPA identification number" means the number assigned by U.S. EPA or by Ohio EPA to each hazardous waste generator; hazardous waste transporter; hazardous waste treatment, storage, or disposal facility; large quantity universal waste handler; universal waste destination facility; used oil transporter; used oil processor; used oil marketer; and off- specification used oil burner.
- ~~(157)~~(14) "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.
- (15) "User of the electronic manifest system" means a hazardous waste generator; a hazardous waste transporter; an owner or operator of a hazardous waste treatment, storage, recycling, or disposal facility; or any other person that conforms to the following:
- (a) Is required to use a manifest to comply with any of the following:
- (i) Any federal or state requirement to track the shipment, transportation, and receipt of hazardous waste or other waste material that is

shipped from the site of generation to an off-site facility for treatment, storage, recycling, or disposal.

(ii) Any federal or state requirement to track the shipment, transportation, and receipt of rejected wastes or regulated container residues that are shipped from a designated facility to an alternative facility, or returned to the generator.

(b) Elects to use the system to obtain, complete and transmit an electronic manifest format supplied by the U.S. EPA electronic manifest system.

(c) Elects to use the paper manifest form and submits to the system for data processing purposes a paper copy of the manifest (or data from such a paper copy), in accordance with paragraph (A)(2)(e) of rule 3745-54-71 or paragraph (A)(2)(e) of rule 3745-65-71 of the Administrative Code. These paper copies are submitted for data exchange purposes only and are not the official copies of record for legal purposes.

(V)

(1) "Very small quantity generator" means a generator who generates less than or equal to all of the following amounts in a calendar month:

(a) One hundred kilograms (two hundred and twenty pounds) of non-acute hazardous waste.

(b) One kilogram (2.2 pounds) of acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

(c) One hundred kilograms (two hundred and twenty pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in rules 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

~~(158)~~(2) "Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

(W)

~~(159)~~(1) "Waste" has the same meaning as in rule 3745-51-02 of the Administrative Code.

~~(160)~~(2) "Waste management unit" means any discernible unit at which "solid wastes," "hazardous waste," "infectious wastes," (as those terms are defined in Chapter 3734. of the Revised Code), "construction and demolition debris" (as defined in Chapter 3714. of the Revised Code), "industrial waste," or "other wastes" (as those terms are defined in Chapter 6111. of the Revised Code) have been placed at any time, irrespective of whether the unit was intended for the management of solid waste, hazardous waste, infectious waste, construction and demolition debris, industrial waste, or other waste. Such units include any area at a facility at which solid waste, hazardous waste, infectious waste, construction and demolition debris, industrial waste, or other waste has been routinely and systematically released.

~~(161)~~(3) "Wastewater treatment unit" means a device which does all of the following:

(a) Is part of a wastewater treatment facility that is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act.

(b) Receives and treats or stores an influent wastewater that is a "hazardous waste" as defined in rule 3745-51-03 of the Administrative Code, or that generates and accumulates a wastewater treatment sludge that is a "hazardous waste" as defined in rule 3745-51-03 of the Administrative Code, or treats or stores a wastewater treatment sludge which is a "hazardous waste" as defined in rule 3745-51-03 of the Administrative Code.

(c) Meets the definition of "tank" or "tank system" in this rule.

~~(162)~~(4) "Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board a vessel without containers or labels.

~~(163)~~(5) "Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

~~(164)~~(6) "Well injection": see "underground injection."

~~(165)~~(7) "Wipe" means a woven or non-woven shop towel, rag, pad, or swab made of wood pulp, fabric, cotton, polyester blends, or other material.

(X) [Reserved.]

(Y) [Reserved.]

~~(166)~~(Z) "Zone of engineering control" means an area under the control of the owner or operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to ground water or surface water.

~~(B)~~(AA) As used in the hazardous waste rules, unless the context otherwise requires, the time within which an act is required to be performed shall be computed pursuant to section 1.14 of the Revised 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: 10/5/2020
Five Year Review (FYR) Dates: 7/13/2020 and 10/05/2025

CERTIFIED ELECTRONICALLY

Certification

09/21/2020

Date

Promulgated Under: 119.03
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3745-50-11

Incorporated by reference.

When used in the hazardous waste rules, the following text or other materials are incorporated by reference. All references cited in this rule are those that existed and were available on July 1, ~~2014~~2019 unless a different edition or version date is specified in this rule.

(A) Code of Federal Regulations (~~CFR~~C.F.R.) references. These regulations can generally be found in public libraries, electronically at <http://www.gpo.gov/fdsys/browse/collectionCfraction?collectionCode=CFR> <http://www.ecfr.gov>, or can be purchased from "U.S. Government Printing, Superintendent of Documents, Mail Stop SSOP, Washington DC" 20402-9328. The regulations listed in this rule are those published in the July 1, ~~2014~~2019 C.F.R.

(1) ~~10~~10 ~~CFR~~C.F.R. Part 1.

(2) ~~10~~10 ~~CFR~~C.F.R. Part 20.

(3) ~~10~~10 ~~CFR~~C.F.R. Part 61.

(4) ~~10~~10 ~~CFR~~C.F.R. Part 71.

(5) 16 C.F.R. Part 1115.

(6) 21 C.F.R. Parts 7, 203, 312, and 1308.

~~(5)~~(7) ~~29~~29 ~~CFR~~C.F.R. Part 1910.

~~(6)~~(8) ~~33~~33 ~~CFR~~C.F.R. Part 153.

~~(7)~~(9) ~~33~~33 ~~CFR~~C.F.R. Parts 336 and 337.

(10) 40 C.F.R. Part 3.

~~(8)~~(11) ~~40~~40 ~~CFR~~C.F.R. Parts 51 and 52.

~~(9)~~(12) ~~40~~40 ~~CFR~~C.F.R. Parts 60, 61, 62, and 63, except as otherwise specifically described in the hazardous waste rules.

~~(10)~~(13) ~~40~~40 ~~CFR~~C.F.R. Part 112.

~~(11)~~(14) ~~40~~40 ~~CFR~~C.F.R. ~~Part~~ C.F.R. Parts 122 and 124.

~~(12)~~(15) ~~40~~40 ~~CFR~~C.F.R. Parts 144, 146, and 148.

~~(13)~~(16) ~~40~~40 ~~CFR~~C.F.R. Part 232.

~~(14)~~(17) 40 ~~CFRC.F.R.~~ Parts 257 and 258.

~~(15)~~(18) 40 ~~CFRC.F.R.~~ Parts 260 to 279.

~~(16)~~(19) 40 ~~CFRC.F.R.~~ Part 302.

(20) 40 C.F.R. Part 403.

~~(17)~~(21) 40 ~~CFRC.F.R.~~ Part 761.

~~(18)~~(22) 49 ~~CFRC.F.R.~~ Parts 100 to 185.

(B) Federal statute references. These laws can generally be found in public libraries, or electronically at <http://www.gpo.gov/fdsys> the "Library of Congress" at <https://www.loc.gov/> using the "Library Catalog" search selection. The federal laws listed in this rule are those versions of the laws amended through July 1, ~~2014~~2019.

(1) The Act of August 18, 1970, 84 Stat. 825, 16 U.S.C.A. 1a-5, ~~as amended through the date specified in paragraph (B) of this rule.~~

(2) Atomic Energy Act of 1954, 42 U.S.C. 2011.

(3) "Chemical and Biological Warfare Program, Destruction of Existing Stockpile of Lethal Chemical Agents and Munitions, 50 U.S.C. 1521."

(4) Clean Air Act, 42 U.S.C. 7401.

(5) Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601.

(6) Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 301.

(7) Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 136.

~~(8)~~ Federal Tax Code, 26 U.S.C. 501(c)(3).

~~(8)~~(9) Federal Water Pollution Control Act, Clean Water Act of 1977, or Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1251.

~~(9)~~(10) Investment Company Act of 1940, 15 U.S.C. 80a-1.

~~(10)~~(11) Marine Protection, Research, and Sanctuaries Act of 1972, 33 U.S.C. 1401.

~~(12)~~ Occupational Safety and Health Act of 1970, 29 U.S.C. 661.

~~(11)~~(13) Resource Conservation and Recovery Act of 1976 (RCRA) or Solid Waste Disposal Act, 42 U.S.C. 6901.

~~(12)~~(14) Safe Drinking Water Act, 42 U.S.C. 300f.

~~(13)~~(15) Toxic Substances Control Act, 15 U.S.C. 2601.

~~(14)~~(16) U.S.C. Title 11 (bankruptcy).

~~(15)~~(17) U.S. Constitution.

(C) Government literature. The availability of these documents is provided with each paragraph.

~~(1)~~ U.S. department of commerce documents: "Survey of Current Business," available at www.commerce.gov.

~~(2)~~(1) U.S. department of defense documents, available at www.dtic.mil.

(a) DD form 1348- requisition tracking form.

(b) DD form 1907- signature and tally record.

(c) DD form 626- motor vehicle inspection report.

(d) DD form 836- special instructions for motor vehicle drivers.

(e) DOD 6055.9-STD- ammunition and explosive safety standards.

~~(3)~~(2) U.S. department of transportation (DOT) shipping requirements are available at <http://hazmat.dot.gov/rules.htm> www.phmsa.dot.gov/phmsa-regulations.

~~(4)~~(3) U.S. department of the treasury document: "Circular 570" is published in the Federal Register annually on July first; interim changes in the circular are also published in the Federal Register. "Circular 570" is available on the treasury department's website at www.fms.treas.gov www.fiscal.treasury.gov/surety-bonds/circular-570.html.

~~(5)~~(4) U.S. EPA technical documents. These documents are generally available in libraries. Documents listed in this paragraph without an address can be ordered by calling 800/490-9198. These documents may also be obtained by writing to "U.S. EPA/NSCEP, P.O. Box 42419, Cincinnati, OH" 45242-0419. Documents listed in this paragraph with an address may also be obtained at that address. Many of these documents can also be obtained via online ordering at

www.epa.gov/nscep. Some documents listed in this paragraph may be available for purchase, not free of charge.

- (a) "APTI Course 415: Control of Gaseous Emissions," ~~EPA publication~~ EPA-450/2-81-005, December 1981.
- (b) "Field Evaluation of Carbon Monoxide and Hydrogen Sulfide Continuous Emission Monitors at an Oil Refinery," Ferguson, B.B., R.E. Lester, and W.J. Mitchell, August 1982, EPA-600/4-82-054, available at www.epa.gov/nscip.
- (c) U.S. EPA form 8700-22, part of the "Uniform Hazardous Waste Manifest" and ~~its~~ instructions, ~~is~~ are available in the appendix to 40 ~~CFR~~ C.F.R. Part 262 at www.epa.gov at the approved registered printers selection.
- (d) U.S. EPA form 8700-22A, part of the "Uniform Hazardous Waste Manifest" and ~~its~~ instructions, ~~is~~ are available in the appendix to 40 ~~CFR~~ C.F.R. Part 262 at www.epa.gov at the approved registered printers selection.
- (e) U.S. EPA form 8700-23, the "Part A" permit application form, is available at www.epa.gov/osw/inforesources/data/form8700/forms.htm.
- (f) "Gaseous Continuous Emissions Monitoring Systems-Performance Specification Guidelines for SO₂, NO_x, CO₂, O₂, and TRS," October 1982, EPA-450/3-82-026, available from www.epa.gov/nscep.
- (g) "Gasoline Vapor Emission Laboratory Evaluation-Part 2," August 1975, EMB report No. 76-GAS-6, available from "U.S. EPA OAQPS, Research Triangle Park, NC" 27711.
- (h) "Guidance ~~for~~ on Metals and Hydrogen Chloride Controls for Hazardous Waste Incinerators, Volume IV of the Hazardous Waste Incineration Guidance Series," August 1989, available from www.epa.gov/nscep.
- (i) "Guideline on Air Quality Models (revised)," July 1986, EPA-450/2-78-027R, available from www.epa.gov/nscep.
- (j) "Handbook: Continuous Air Pollution Source Monitoring Systems," Jahnke, James A. and G.J. Aldina, June 1979, EPA-625/6-79-005, available from www.epa.gov/nscep.
- (k) "Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and Dibenzofurans (CDDs

and CDFs)," March, 1989 update, EPA-625/3-89/016, available from www.epa.gov/nscep.

- (l) "U.S. EPA Manual for SEA (Special Environmental Area) Requirements."
- (m) "Measurement of Volatile Organic Compounds-Guideline Series," June 1978, EPA-450/2-78-041, available from www.epa.gov/nscep.
- (n) "Method 1664, n-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated n-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry," available from www.epa.gov.
 - (i) Revision A, EPA-821-R-98-002, February 1999.
 - (ii) Revision B, EPA-821-R-10-001, February 2010.
- (o) "Performance Test Results and Comparative Data for Designated Reference Methods for Carbon Monoxide," Michie, Raymond, M. Jr., et. al., September 1982, EPA-600/S4-83-013, available from www.epa.gov/nscep.
- (p) "Quality Assurance Handbook for Air Pollution Measurement Systems: Volume I. Principles," December 1984, EPA-600/9-76-006, available from www.epa.gov/nscep.
- (q) "Screening Procedures for Estimating the Air Quality Impact of Stationary Sources, Revised," October 1992, EPA-450/R-92-019, available from www.epa.gov.
- (r) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. EPA publication SW-846 [third edition (November 1986), as amended by "Update I" through "Update IV" is available from the "National Technical Information Service, U.S. Department of Commerce, 5301 Shawnee Road, Alexandria, VA," 22312 or at <http://www.epa.gov/waste/hazard/testmethods/sw846/index.htm> <https://www.epa.gov/hw-sw846/sw-846-compendium>.

The following methods as published in the test methods compendium known as "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846, and are available for purchase from the "National Technical Information Service, 5285 Port Royal Road, Springfield, VA" 22161. A suffix of "A" in the method number indicates revision one (the method has been revised once). A suffix of "B" in

the method number indicates revision two (the method has been revised twice). A suffix of "C" in the method number indicates revision three (the method has been revised three times). A suffix of "D" in the method number indicates revision four (the method has been revised four times):

- (i) Method 0010, dated September 1986 and in the basic manual.
- (ii) Method 0020, dated September 1986 and in the basic manual.
- (iii) Method 0030, dated September 1986 and in the basic manual.
- (iv) Method 1320, dated September 1986 and in the basic manual.
- (v) Method 1311, dated September 1992 and in "Update I."
- (vi) Method 1330A, dated July 1992 and in "Update I."
- (vii) Method 1312 dated September 1994 and in "Update II."
- (viii) Method 0011, dated December 1996 and in "Update III."
- (ix) Method 0023A, dated December 1996 and in "Update III."
- (x) Method 0031, dated December 1996 and in "Update III."
- (xi) Method 0040, dated December 1996 and in "Update III."
- (xii) Method 0050, dated December 1996 and in "Update III."
- (xiii) Method 0051, dated December 1996 and in "Update III."
- (xiv) Method 0060, dated December 1996 and in "Update III."
- (xv) Method 0061, dated December 1996 and in "Update III."
- (xvi) Method 9071B, dated April 1998 and in "Update IIIA."
- (xvii) Method 1010A, dated November 2004 and in "Update IIIB."
- (xviii) Method 1020B, dated November 2004 and in "Update IIIB."
- (xix) Method 1110A, dated November 2004 and in "Update IIIB."
- (xx) Method 1310B, dated November 2004 and in "Update IIIB."
- (xxi) Method 9010C, dated November 2004 and in "Update IIIB."

- (xxii) Method 9012B, dated November 2004 and in "Update IIIB."
- (xxiii) Method 9040C, dated November 2004 and in "Update IIIB."
- (xxiv) Method 9045D, dated November 2004 and in "Update IIIB."
- (xxv) Method 9060A, dated November 2004 and in "Update IIIB."
- (xxvi) Method 9070A, dated November 2004 and in "Update IIIB."
- (xxvii) Method 9095B, dated November 2004 and in "Update IIIB."

(s) "Traceability Protocol for Establishing True Concentrations of Gases Used for Calibration and Audits of Continuous Source Emission Monitors (Protocol No. 1)," June 1978, available from www.epa.gov/nscep.

~~(6)~~(5) U.S. natural resources conservation service information regarding soils and soil particle size is available at ~~<http://soils.usda.gov/procedures/ssm/main.htm>~~ <https://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/survey/class/>.

~~(7)~~(6) Occupational safety and health (OSHA) exposure levels to mercury are available at www.osha.gov/SLTC/mercury/standards.html.

~~(8)~~(7) Ohio EPA documents.

(a) These forms are portions of the hazardous waste biennial report, and are in the "Hazardous Waste Biennial Report Instructions" available at http://www.epa.ohio.gov/Portals/32/annualreport/HWAR_Instructions.pdf:

- (i) Ohio EPA form EPA 9027.
- (ii) Ohio EPA form EPA 9028.
- (iii) Ohio EPA form EPA 9029.

(b) This document is available at <http://www.epa.ohio.gov/ddagw>: "Technical Manual for Hydrogeologic Investigations and Ground Water Monitoring."

~~(9)~~(8) U.S. postal service (USPS) shipping requirements are available at <http://www.usps.com>.

~~(10)~~(9) GSA standard form 1103- government bill of lading. Federal employees can order this form at ~~www.gsa.gov/portal/found~~ www.gsa.gov/forms-library/u-s-government-bill-lading.

(D) Private publications. These publications are generally available at libraries.

- (1) "An Analysis of Variance Test for Normality (complete samples)," Shapiro, S.S. and Wilk, M.B. (1965), "Biometrika," 52, 591-611.
- (2) "Correlation of Land Use and Cover with Meteorological Anomalies," "Journal of Applied Meteorology," pp. 636-643, 1978.
- (3) "Fate of Metals in Waste Combustion Systems," Barton, R.G., W.D. Clark, and W.R. Seeker. (1990). "Combustion Science and Technology," 74, 1-6, p. 327.
- (4) "Statistical Concepts and Methods," Bhattacharyya, G.K. and R.A. Johnson (1977), John Wiley and sons, New York.
- (5) "The Partitioning of Metals in Rotary Kiln Incineration," Carroll, G.J., R.C. Thurnau, R.E. Maurnighan, L.R. Waterland, J.W. Lee, and D.J. Fournier. "Proceedings of the Third International Conference on New Frontiers for Hazardous Waste Management." NTIS document number EPA-600/9-89/072, p. 555 (1989).
- (6) Available from the "American National Standards Institute (ANSI), 25 West 43rd Street, New York, NY" 10036 or 212/642-4900, or www.ansi.org:
 - (a) "Petroleum Refining ~~Piping~~Piping System," ANSI standard B31.3.
 - (b) "Liquid Petroleum Transportation Piping System," ANSI standard B31.4.
- (7) Available for purchase from the "American Petroleum Institute (API), 1220 L Street, Northwest, Washington, DC" 20005 or <http://api-cp.api.org>/https://global.ihs.com/individual_standards.cfm?&rid=Z56&mid=5280:
 - (a) "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API publication 1632.
 - (b) "Evaporative Loss from External Floating-Roof Tanks," API publication 2517, third edition, February 1989.
 - (c) "Guide for Inspection of Refinery Equipment," 4th edition, 1981.
 - (d) "Installation of Underground Petroleum Storage Systems," API publication 1615, November 1979.
- (8) "American Society for Testing and Materials" (ASTM) methods referenced in the hazardous waste rules are generally available in public libraries or are

available from "ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA" 19428-2959, at 610/832-9555, or at ASTM.org.

(a) The following methods may be available for purchase at the ASTM web site. Some of the methods may be no longer available on the web site and may be found in libraries:

(i) "ASTM Standard Method for Analysis of Reformed Gas by Gas Chromatography," ASTM standard D1946-90(2011), approved in 1990 and reapproved in 2011.

(ii) "ASTM Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi," ASTM method G21-70(1984a)

~~(ii)~~(iii) "ASTM Standard Practice for Determining Resistance of Plastics to Bacteria," ASTM method G22-76(1996).

~~(iii)~~(iv) "ASTM Standard Practice for Packed Column Gas Chromatography," ASTM standard E260-96(2011, approved in 1996 and reapproved in 2011.)

~~(iv)~~(v) "ASTM Standard Practices for General Techniques of Infrared Quantitative Analysis," ASTM standard E-168-06, amended in 2006.

~~(v)~~(vi) "ASTM Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis," ASTM standard E169-04(2104), approved in 2004 and reapproved in 2014.

~~(vi)~~(vii) "ASTM Standard Test Method for Vapor Pressure- Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope," ASTM standard D2879-10, amended in 2010.

~~(vii)~~(viii) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," ASTM standard D-93-79 or D-93-80.

~~(viii)~~(ix) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Cup Tester," ASTM standard D-3278-78.

~~(ix)~~(x) "ASTM Standard Test Methods for Preparing Refuse-Derived Fuel (RDF) Samples for Analyses of Metals," ASTM standard D926-08(2013), approved in 2008 and reapproved in 2013, test method C-bomb, acid digestion method.

~~(x)~~(xi) Representative sampling methods for:

- (a) "Standard Guide for Representative Sampling for Management of Waste and Media," ASTM standard D6044-96(2009), approved in 1996 and reapproved in 2009.
- (b) "Practice for Sampling Soils and Contaminated Media with Hand Operated Bucket Auger," D6907-2005(2010), approved in 2005 and reapproved in 2010.
- (c) Extremely viscous liquid- ASTM standard D140/D140M-14, approved in 2014.
- (d) Crushed or powdered material- ASTM standard D346/D346M-11, approved in 2011.

(b) The following older approved equivalent methods are not available from the ASTM web site, but are available in libraries:

- ~~(i) "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester," ASTM standard D93-79 or D93-80.~~
- ~~(ii) "ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Cup Tester," ASTM standard D3278-78.~~
- (i) "ASTM Standard Test Method for Vapor Pressure of Petroleum Products," ASTM standard D-323.

~~(iii)~~(ii) Representative sampling methods for:

- (a) Soil or rock-like material- ASTM standard D420-69.
- (b) Fly ash-like material- ASTM standard D2234-76, approved in 1976.
- (c) Extremely viscous liquid- ASTM standard D140-70, approved in 1970.
- (d) Crushed or powdered material- ASTM Standard D346-75, approved in 1975.
- (e) Soil like material- ASTM Standard D1452-65, approved in 1965.

- (9) Available from the "National Association of Corrosion Engineers" (NACE) at www.nace.org:
- (a) "Recommended Practice (RP-02-85)- Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems."
 - (b) ~~NACE standard TM-01-69~~; [Reserved.]
- (10) Available for purchase from the "International Chamber of Commerce." "Uniform Customs and Practices for Documentary Credits" (also known as the "Uniform Commercial Code") at <https://2go.iccwbo.org/>.
- ~~(10)~~(11) Available for purchase from the "National Fire Protection Association (NFPA), 1 Batterymarch Park, P.O. Box 9101, Quincy, MA" 02269-9101; ~~"Flammable and Combustible Liquids Code" NFPA 30, (2012.)~~ or www.nfpa.org:
- (a) "Flammable and Combustible Liquids Code" NFPA 30 (2018).
 - (b) "Flammable and Combustible Liquids Code" NFPA 704 (2017).
- ~~(11)~~(12) Available for purchase from the "Organisation for Economic Co-operation and Development, Environment (OECD) Directorate, 2 rue Andre Pascal, 75775 Paris Cedex 16, France," or at <http://www.OECD.org>.
- ~~(a) Reserved.~~
 - ~~(b)~~(a) "OECD Green List of Wastes" (revised May 1994) as found in appendix 3 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."
 - ~~(c)~~(b) "OECD Amber List of Wastes" (revised May 1993) as found in appendix 4 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."
 - ~~(d)~~ "OECD Red List of Wastes" (revised May 1993) as found in appendix 5 to the "OECD Council Decision C(92)39/FINAL (Concerning the Control of Transfrontier Movements of Wastes Destined for Recovery Operations)."

~~(12)~~(13) Available from libraries: "STI Standard for Dual-Wall Underground Steel Storage Tanks."

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3745-50-28

Procedures for case-by-case regulation of hazardous waste recycling activities.

The director will use the following procedures when determining whether to regulate hazardous waste recycling activities described in paragraph (A)(2)(c) of rule 3745-51-06 of the Administrative Code (precious metal recycling) under paragraphs (B) and (C) of rule 3745-51-06 of the Administrative Code, rather than under rule 3745-266-70 of the Administrative Code.

- (A) If a generator is accumulating the waste, the director will issue a notice setting forth the factual basis for the decision and stating that the person shall comply with the applicable requirements for generators of hazardous waste in rules ~~3745-52-10~~3745-52-01 to ~~3745-52-12~~3745-52-18, 3745-52-30 to ~~3745-52-34~~3745-52-35 and, 3745-52-40 to 3745-52-44, ~~and 3745-52-50~~ of the Administrative Code. The notice will become final within thirty days, unless the person served requests a public hearing to challenge the decision. Upon receiving such a request, the director will hold a public hearing. The director will provide notice of the hearing to the public and allow public comment at the hearing. The director will issue a final order after the hearing stating whether or not compliance with Chapter 3745-52 of the Administrative Code is required. The order becomes effective thirty days after the decision unless the director specifies a later date. The order may be appealed to the environmental review appeals commission by any person who participated in the public hearing.
- (B) If the person is accumulating the recyclable material as a storage facility, the notice will state that the person shall obtain a permit in accordance with all applicable provisions ~~in rules 3745-50-40 to 3745-50-235~~of Chapter 3745-50 of the Administrative Code and Chapter 3734. of the Revised Code. The owner or operator of the facility shall apply for a permit within no less than sixty days and no more than six months after notice, as specified in the notice. If the owner or operator of the facility wishes to challenge the director's decision, the owner or operator may do so in the owner's or operator's permit application, in a public hearing held on the draft permit, or in comments filed on the draft permit or on the notice of intent to deny the permit. The fact sheet accompanying the permit will specify the reason for Ohio EPA's determination. The question of whether the director's decision was proper will remain open for consideration during the public comment period for the draft permit.

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3745-50-45

Special inclusions and exclusions for hazardous waste permits.

- (A) Scope of hazardous waste permit requirements. Chapter 3734. of the Revised Code requires a permit for the "treatment," "storage," or "disposal" of any hazardous waste as identified or listed in Chapter 3745-51 of the Administrative Code. The terms "treatment," "storage," "disposal," and "hazardous waste" are defined in rule 3745-50-10 of the Administrative Code. Owners and operators of hazardous waste management units shall have permits during the active life (including the closure period) of the unit. Owners or operators of surface impoundments, landfills, land treatment units, and waste pile units that received wastes after July 26, 1982, or that certified closure (according to rule 3745-66-15 of the Administrative Code) after January 26, 1983, shall have post-closure permits, unless the owner or operator demonstrates closure by removal or decontamination as provided under paragraphs (E) and (F) of this rule or obtain an enforceable document in lieu of a post-closure permit, as provided under paragraph (G) of this rule. If a post-closure permit is required, the permit shall address applicable ground water monitoring, unsaturated zone monitoring, corrective action, and post-closure care requirements under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code. The denial of a permit for the active life of a hazardous waste management facility or unit does not affect the requirement to obtain a post-closure permit under this rule.
- (B) Specific inclusions. Owners and operators of certain facilities require hazardous waste permits as well as permits under other environmental programs for certain aspects of the facility's operation. Hazardous waste permits are required for the treatment, storage, or disposal of hazardous waste at facilities requiring an Ohio national pollutant discharge elimination system permit or an Ohio underground injection control permit. The owner and operator of a publicly owned treatment work (POTW) receiving hazardous waste will be deemed to have a hazardous waste permit for that waste if the POTW is in compliance with rule 3745-50-46 of the Administrative Code.
- (C) Specific exclusions and exemptions. The following persons are among those who are not required to obtain a hazardous waste permit:
- (1) Generators who accumulate or conduct treatment of hazardous waste that is generated on-site ~~as provided for in rule 3745-52-34~~ in compliance with all of the conditions for exemption in rules 3745-52-14, 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code.
 - (2) Farmers who dispose of hazardous waste pesticides from the farmers' own use as provided for in rule 3745-52-70 of the Administrative Code.
 - (3) Persons who own or operate facilities solely for the treatment, storage, or disposal of hazardous waste excluded from regulation under rule 3745-51-04 or 3745-52-14 of the Administrative Code.

- (4) Owners or operators of "totally enclosed treatment facilities" as defined in rule 3745-50-10 of the Administrative Code.
- (5) Owners and operators of "elementary neutralization units" or "wastewater treatment units" as defined in rule 3745-50-10 of the Administrative Code.
- (6) Transporters storing manifested shipments of hazardous waste in containers meeting the requirements of rule 3745-52-30 of the Administrative Code at a transfer facility for a period of ten days or less.
- (7) Persons adding sorbent material to waste in a "container" as defined in rule 3745-50-10 of the Administrative Code, and persons adding waste to sorbent material in a container, provided that these actions occur at the time waste is first placed in the container, and paragraph (B) of rule 3745-54-17 and rules 3745-55-71 and 3745-55-72 of the Administrative Code are complied with.
- (8) "Universal waste handlers" and "universal waste transporters" as defined in rule 3745-50-10 of the Administrative Code managing the wastes listed in paragraphs (C)(8)(a) to (C)(8)(c) of this rule. These handlers are subject to regulation under Chapter 3745-273 of the Administrative Code when managing the following universal wastes:
 - (a) Batteries as described in rule 3745-273-02 of the Administrative Code.
 - (b) Pesticides as described in rule 3745-273-03 of the Administrative Code.
 - (c) Mercury-containing equipment as described in rule 3745-273-04 of the Administrative Code.
 - (d) Lamps as described in rule 3745-273-05 of the Administrative Code.
 - (e) Ohio-specific universal waste, which include the following:
 - (i) Aerosol containers as described in paragraph (A) of rule 3745-273-89 of the Administrative Code.
 - (ii) Antifreeze as described in paragraph (B) of rule 3745-273-89 of the Administrative Code.
 - (iii) Paint and paint-related wastes as described in paragraph (C) of rule 3745-273-89 of the Administrative Code.
- (9) Reverse distributors accumulating "potentially creditable hazardous waste pharmaceuticals" and "evaluated hazardous waste pharmaceuticals" as defined

in rule 3745-266-500 of the Administrative Code. Reverse distributors are subject to regulation under rules 3745-266-500 to 3745-266-510 of the Administrative Code for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

(D) Further exclusions.

- (1) A person is not required to obtain a hazardous waste permit for treatment or containment activities taken during immediate response to any of the following situations:
 - (a) A discharge of a hazardous waste.
 - (b) An imminent and substantial threat of a discharge of hazardous waste.
 - (c) A discharge of a material which, when discharged, becomes a hazardous waste.
 - (d) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an "explosive or munitions emergency response specialist" as defined in rule 3745-50-10 of the Administrative Code.
 - (2) Any person who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of rules 3745-50-40 to 3745-50-235 of the Administrative Code for those activities.
 - (3) In the case of emergency responses involving military munitions, the responding explosives or munitions emergency response specialist's organizational unit shall retain records for three years identifying the dates of the response, the names of the responsible persons responding, the type and description of material addressed, and the disposition of such material.
- (E) Closure by removal. Owners or operators of surface impoundments, land treatment units, ~~or~~ and waste piles closing by removal or decontamination under Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code shall obtain a post-closure permit unless the owner or operator demonstrates to the director that the closure met the standards for closure by removal or decontamination in rule 3745-56-28, paragraph (E) of rule 3745-56-80, or rule 3745-56-58 of the Administrative Code. The demonstration may be made in the following ways:

- (1) If the owner or operator has submitted a "Part B" application for a post-closure permit, the owner or operator may request a determination, based on information ~~contained~~ in the application, that the closure by removal standards in ~~Chapter 3745-56~~ Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code were met and that no post-closure permit is required.
- (2) If the owner or operator has not submitted a "Part B" application for a post-closure permit, the owner or operator may petition the director for a determination that a post-closure permit is not required because the closure met the applicable closure standards in ~~Chapter 3745-56~~ Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code. The petition shall include data demonstrating that closure by removal or decontamination standards were met, or the petition shall demonstrate that the unit closed under state requirements that met or exceeded the applicable closure by removal standards in ~~Chapter 3745-56~~ Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.
- (3) The director will approve or deny the request or petition in accordance with paragraph (F) of this rule.

(F) Procedures for closure equivalency determination.

- (1) If a facility owner or operator submits an equivalency demonstration under paragraph (E) of this rule, the director will provide the public, through a newspaper notice, the opportunity to submit written comments, within thirty days after the date of the notice, on the information submitted by the owner or operator. The director will also, in response to a request or at the director's own discretion, hold a public hearing ~~whenever~~ when such a hearing might clarify one or more issues concerning the equivalency demonstration. The director will give public notice of the hearing at least thirty days before the hearing occurs. Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments, and the two notices may be combined.
- (2) The director will make a determination, within ninety days after the close of the public comment period specified in paragraph (F)(1) of this rule, as to whether the closure under Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code met the requirements for closure by removal or decontamination under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code. If the director finds that the closure did not meet the applicable standards under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code, the director will provide the owner or operator with a

written statement of the reasons why the closure failed to meet the standards under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.

- (3) Within thirty days after receipt of the director's determination pursuant to paragraph (F)(2) of this rule, the owner or operator may submit additional information in support of the equivalency demonstration.
 - (4) If additional information is submitted by the owner or operator pursuant to paragraph (F)(3) of this rule, the director will review the additional information submitted and, within sixty days after receipt of the additional information, will make a final determination as to whether the closure under Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code met the requirements for closure by removal or decontamination under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.
 - (5) If the director determines that the facility did not close in accordance with the closure by removal standards in Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code, the facility is subject to post-closure permitting requirements.
- (G) Enforceable documents for post-closure care. At the discretion of the director, an owner or operator may obtain, in lieu of a post-closure permit, an enforceable document imposing the requirements of rule 3745-66-21 of the Administrative Code. "Enforceable document" means an order, a plan, or other document issued by Ohio EPA including, but not limited to, a corrective action order issued by Ohio EPA under sections 3734.13, 3734.20, and 6111.03 of the Revised Code, or a closure or post-closure plan.

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3745-51-01 **Purpose and scope of Chapter 3745-51 of the Administrative Code.**

(A) Chapter 3745-51 of the Administrative Code identifies those wastes which are subject to regulation as hazardous wastes under Chapters ~~3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-270, rules 3745-50-40 to 3745-50-235~~ of the Administrative Code, and which are subject to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity. Chapter 3745-51 of the Administrative Code includes the following:

- (1) Rules 3745-51-01 to 3745-51-09 of the Administrative Code define the terms "waste" and "hazardous waste," identify those wastes which are excluded from regulation under Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, 3745-270, and rules 374-50-40 to 3745-50-235 of the Administrative Code, and establishes special management requirements for hazardous waste produced by ~~conditionally exempt~~ very small quantity generators and hazardous waste which is recycled.
- (2) Rules 3745-51-10 to 3745-51-11 of the Administrative Code provide the criteria used to identify characteristics of hazardous waste and to list particular hazardous wastes.
- (3) Rules 3745-51-20 to 3745-51-24 of the Administrative Code identify characteristics of hazardous waste.
- (4) Rules 3745-51-30 to 3745-51-33 of the Administrative Code list particular hazardous wastes. Rule 3745-51-35 of the Administrative Code lists certain hazardous wastes which are deleted from the list following equipment cleaning and replacement.

(B) Scope of Chapter 3745-51 of the Administrative Code.

- (1) The definition of "waste" in Chapter 3745-51 of the Administrative Code applies only to wastes that are also hazardous for purposes of the regulations adopted pursuant to section 3734.12 of the Revised Code. For example, the definition does not apply to materials (such as non-hazardous scrap, paper, textiles, or rubber) that are not otherwise hazardous wastes and that are recycled.
- (2) A material which is not defined as a "waste" in Chapter 3745-51 of the Administrative Code, or is not a hazardous waste identified or listed in Chapter 3745-51 of the Administrative Code, may still be construction and demolitions debris, solid waste, infectious waste, hazardous waste, industrial waste, or other waste for purposes of Chapters 3714., 3734., and 6111. of the Revised Code if:

(a) In the case of Chapters 3714., 3734. and 6111. of the Revised Code, the director has reason to believe that the material may be "construction and demolition debris" as defined in section 3714.01 of the Revised Code, "solid waste" or "hazardous waste" as defined in section 3734.01 of the Revised Code, or "industrial waste" or "other waste" as defined in section 6111.01 of the Revised Code.

(b) [Reserved.]

(C) For purposes of rules 3745-51-02 and 3745-51-06 of the Administrative Code:

(1) A "spent material" is any material that has been used and as a result of contamination can no longer serve the purpose for which the material was produced without processing.

(2) "Sludge" has the same meaning as in rule 3745-50-10 of the Administrative Code.

(3) A "by-product" is a material that is not one of the primary products of a production process and is not solely or separately produced by the production process. Examples are process residues such as slags or distillation column bottoms. By-product does not include a co-product that is produced for the general public's use and is ordinarily used in the form the co-product is produced by the process.

(4) A material is "reclaimed" if the material is processed to recover a usable product, or if the material is regenerated. Examples are recovery of lead values from spent batteries and regeneration of spent solvents.

;

(5) A material is used or reused if the material is either of the following:

(a) Employed as an ingredient (including use as an intermediate) in an industrial process to make a product (for example, distillation bottoms from one process used as feedstock in another process). However, a material shall not satisfy this condition if distinct components of the material are recovered as separate end products (as when metals are recovered from metal-containing secondary materials).

(b) Employed in a particular function or application as an effective substitute for a commercial product (for example, spent pickle liquor used as phosphorous precipitant and sludge conditioner in wastewater treatment).

(6) "Scrap metal" is bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering

(e.g., radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled.

- (7) A material is "recycled" if the material is used, reused, or reclaimed.
- (8) A material is "accumulated speculatively" if the material is accumulated before being recycled. A material is not accumulated speculatively if the person accumulating the material can show that the material is potentially recyclable and has a feasible means of being recycled; and that during the calendar year commencing January first, the amount of material that is recycled, or transferred to a different site for recycling, equals at least seventy-five per cent by weight or volume of the amount of that material accumulated at the beginning of the calendar year. In calculating the percentage of turnover, the seventy-five per cent requirement is to be applied to materials of the same type (e.g., slags from a single smelting process) that is recycled in the same way (i.e., from which the same material is recovered or that is used in the same way). Materials accumulated in units that would be exempt from regulation under paragraph (C) of rule 3745-51-04 of the Administrative Code shall not be included in the calculation. Materials that are already defined as "wastes" also shall not be included in making the calculation. Materials are no longer in this category once the materials are removed from accumulation for recycling.
- (9) "Excluded scrap metal" is processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal.
- (10) "Processed scrap metal" is scrap metal which has been manually or physically altered either to separate the scrap metal into distinct materials to enhance economic value, or to improve the handling of materials. Processed scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (i.e., sorted), and fines, drosses, and related materials which have been agglomerated.
- [Comment: Shredded circuit boards being sent for recycling are not considered processed scrap metal. Such materials are covered under the exclusion from the definition of "waste" for shredded circuit boards being recycled in paragraph (A)(14) of rule 3745-51-04 of the Administrative Code.]
- (11) "Home scrap metal" is scrap metal as generated by steel mills, foundries, and refineries, such as turnings, cuttings, punchings, and borings.
- (12) "Prompt scrap metal" is scrap metal as generated by the metal working or metal fabrication industries, and includes such scrap metal as turnings, cuttings,

punchings, and borings. Prompt scrap is also known as industrial or new scrap metal.

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3745-51-04

Exclusions.

(A) Materials which are not wastes. The following materials are not wastes for the purpose of Chapter 3745-51 of the Administrative Code:

(1) Domestic sewage:

(a) Any mixture of domestic sewage and other wastes that passes through a sewer system to a publicly owned treatment works (POTW) for treatment, except as prohibited by rule 3745-266-505 of the Administrative Code and Clean Water Act requirements in paragraph (B)(1) of rule 3745-3-04 of the Administrative Code.

(b) As used in Chapter 3745-51 of the Administrative Code, "domestic sewage" means untreated sanitary wastes that pass through a sewer system.

(2) Industrial wastewater discharges that are point source discharges subject to regulation under Section 402 of the Clean Water Act, ~~as amended through the date specified in rule 3745-50-11 of the Administrative Code.~~

[Comment: This exclusion applies only to the actual point source discharge. ~~It~~The exclusion does not exclude industrial wastewaters while ~~they~~the industrial wastewaters are being collected, stored, or treated before discharge, nor does ~~it~~the exclusion exclude sludges that are generated by industrial wastewater treatment.]

(3) Irrigation return flows.

(4) "Source material," "special nuclear material," or "by-product material" as defined by the Atomic Energy Act of 1954, as amended through the date specified in rule 3745-50-11 of the Administrative Code, 42 U.S.C. 2011.

(5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.

(6) Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless ~~it is~~the pulping liquors are "accumulated speculatively" as described in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code.

(7) Spent sulfuric acid used to produce virgin sulfuric acid, ~~unless it is~~provided the spent sulfuric acid is not "accumulated speculatively" as described in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code.

- (8) Secondary materials that are reclaimed and returned to the original process or processes in which ~~they~~the secondary materials were generated where ~~they~~the secondary materials are reused in the production process provided that all of the following:
- (a) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance.
 - (b) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces, or incinerators).
 - (c) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed.
 - (d) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner constituting disposal.
- (9) Wood preserving.
- (a) Spent wood preserving solutions that have been reclaimed and are reused for the original intended purpose.
 - (b) Wastewaters from the wood preserving process that have been reclaimed and are reused to treat wood.
 - (c) Prior to reuse, the wood preserving wastewaters and spent wood preserving solutions described in paragraphs (A)(9)(a) and (A)(9)(b) of this rule, so long as ~~they~~the wood preserving wastewaters and spent wood preserving solutions meet all of the following conditions:
 - (i) The wood preserving wastewaters and spent wood preserving solutions are reused on-site at water borne plants in the production process for the original intended purpose.
 - (ii) Prior to reuse, the wastewaters and spent wood preserving solutions are managed to prevent release to either land or ground water or both.
 - (iii) Any unit used to manage wastewaters or spent wood preserving solutions prior to reuse can be visually or otherwise determined to prevent such releases.

- (iv) Any drip pad used to manage the wastewaters or spent wood preserving solutions prior to reuse complies with ~~the standards in~~ rules 3745-69-40 to 3745-69-45 of the Administrative Code, regardless of whether the plantowner or operator generates a total of less than one hundred kilograms of hazardous waste per month.
- (v) Prior to operating pursuant to this exclusion, the ~~plant~~-owner or operator prepares one-time notification stating that the plantowner or operator intends to claim the exclusion, giving the date on which the plantowner or operator intends to begin operating under the exclusion, and containing the following language:

"I have read rule 3745-51-04 of the Administrative Code establishing an exclusion for wood preserving wastewaters and spent wood preserving solutions and understand ~~rule 3745-51-04 of the Administrative Code~~ requires me to comply at all times with the conditions set out in the rule."

The plantowner or operator shall maintain a copy of that document in ~~its~~the facility's on-site records until closure of the facility. The exclusion applies so long as the plantowner or operator meets all of the conditions. If the plantowner or operator goes out of compliance with any condition, ~~it~~the owner or operator may apply to the director for reinstatement. The director may reinstate the exclusion upon finding that the plantowner or operator has returned to compliance with all conditions, and that the violations are not likely to recur.

- (10) EPA hazardous waste numbers K060, K087, K141, K142, K143, K144, K145, K147, and K148, and any wastes from the coke by-products processes that are hazardous only because ~~they~~such wastes and by-products exhibit the toxicity characteristic specified in rule 3745-51-24 of the Administrative Code when, subsequent to generation, these materials are recycled to coke ovens, to the tar recovery process as a feedstock to produce coal tar, or mixed with coal tar prior to the tar's sale or refining. This exclusion is conditioned on there being no land disposal of the wastes from the point ~~they~~the wastes are generated to the point ~~they~~the wastes are recycled to coke ovens or tar recovery or refining processes, or mixed with coal tar.
- (11) Nonwastewater splash condenser dross residue from the treatment of K061 in high temperature metals recovery units, provided ~~it~~such residue is shipped in drums (if shipped) and not land disposed before recovery.

(12) Oil-bearing secondary materials and recovered oil.

(a) Oil-bearing hazardous secondary materials (i.e., sludges, by-products, or spent materials) that are generated at a petroleum refinery (SIC code 2911) and are inserted into the petroleum refining process [SIC code 2911 - including, but not limited to, distillation, catalytic cracking, fractionation, or thermal cracking units (i.e., cokers)] unless the material is placed on the land, or accumulated speculatively before being so recycled. Materials inserted into thermal cracking units are excluded under this paragraph, provided that the coke product also does not exhibit a characteristic of hazardous waste. Oil-bearing hazardous secondary materials may be inserted into the same petroleum refinery where ~~they~~the oil-bearing hazardous secondary materials are generated, or sent directly to another petroleum refinery, and still be excluded under this provision. Except as provided in paragraph (A)(12)(b) of this rule, oil-bearing hazardous secondary materials generated elsewhere in the petroleum industry (i.e., from sources other than petroleum refineries) are not excluded under this rule. Residuals generated from processing or recycling materials excluded under this paragraph, where such materials as generated would have otherwise met a listing under rules 3745-51-30 to 3745-51-35 of the Administrative Code, are designated as F037 listed wastes when disposed of or intended for disposal.

(b) Recovered oil that is recycled in the same manner and with the same conditions as described in paragraph (A)(12)(a) of this rule. Recovered oil is oil that has been reclaimed from secondary materials (including wastewater) generated from normal petroleum industry practices, including refining, exploration and production, bulk storage, and transportation incident thereto (SIC codes 1311, 1321, 1381, 1382, 1389, 2911, 4612, 4613, 4922, 4923, 4789, 5171, and 5172). Recovered oil does not include oil-bearing hazardous wastes listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code; however, oil recovered from such wastes may be considered recovered oil. Recovered oil does not include "used oil" as defined in rule 3745-279-01 of the Administrative Code.

(13) Excluded scrap metal (processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal) being recycled.

(14) Shredded circuit boards being recycled provided that ~~they~~the shredded circuit boards are both:

- (a) Stored in containers sufficient to prevent a release to the environment prior to recovery.
 - (b) Free of mercury switches, mercury relays, nickel-cadmium batteries, and lithium batteries.
- (15) Condensates derived from the overhead gases from kraft mill steam strippers that are used to comply with 40 ~~CFR~~C.F.R. 63.446(e). The exemption applies only to combustion at the mill generating the condensates.
- (16) [Reserved.]
- (17) "Spent materials," (as defined in rule 3745-51-01 of the Administrative Code) (other than hazardous wastes listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code), generated within the primary mineral processing industry from which minerals, acids, cyanide, water, or other values are recovered by mineral processing or by beneficiation, provided that all of the following:
- (a) The spent material is legitimately recycled to recover minerals, acids, cyanide, water, or other values.
 - (b) The spent material is not accumulated speculatively.
 - (c) Except as provided in paragraph (A)(17)(d) of this rule, the spent material is stored in tanks, containers, or buildings that meet all of the following minimum integrity standards:
 - (i) A building shall be an engineered structure with a floor, walls, and a roof, all of which are made of non-earthen materials providing structural support (except smelter buildings may have partially earthen floors provided the secondary material is stored on the non-earthen portion), and have a roof suitable for diverting rainwater away from the foundation.
 - (ii) A tank shall be free standing, shall not be a "surface impoundment" (as defined in rule 3745-50-10 of the Administrative Code), and shall be manufactured of a material suitable for containment of ~~its~~the contents.
 - (iii) A container shall be free standing and be manufactured of a material suitable for containment of ~~its~~the contents.

- (iv) If tanks or containers contain any particulate which may be subject to wind dispersal, the owner or operator shall operate these units in a manner which controls fugitive dust.
 - (v) Tanks, containers, and buildings shall be designed, constructed, and operated to prevent significant releases to the environment of these materials.
- (d) The director may make a site-specific determination, after public review and comment, that only solid mineral processing spent material may be placed on pads, rather than in tanks, containers, or buildings. Solid mineral processing spent materials do not contain any free liquid. The director shall affirm that pads are designed, constructed, and operated to prevent significant releases of the spent material into the environment. Pads shall provide the same degree of containment afforded by the non-RCRA tanks, containers, and buildings eligible for exclusion.
- (i) The director also shall consider if storage on pads poses the potential for significant releases via ground water, surface water, and air exposure pathways. Factors to be considered for assessing the ground water, surface water, air exposure pathways are: the volume and physical and chemical properties of the spent material, including ~~its~~the potential for migration off the pad; the potential for human or environmental exposure to hazardous constituents migrating from the pad via each exposure pathway; and the possibility and extent of harm to human and environmental receptors via each exposure pathway.
 - (ii) Pads shall meet all of the following minimum standards:
 - (a) Be designed of non-earthen material that is compatible with the chemical nature of the mineral processing spent material.
 - (b) Be capable of withstanding physical stresses associated with placement and removal.
 - (c) Have run-on and run-off controls.
 - (d) Be operated in a manner which controls fugitive dust.
 - (e) Have integrity assurance through inspections and maintenance programs.

- (iii) Before making a determination under ~~paragraph~~paragraph (A)(17) ~~to (A)(17)(f)~~ of this rule, the director shall provide notice and the opportunity for comment to all persons potentially interested in the determination. This may be accomplished by placing notice of this action in major local newspapers, or by broadcasting notice over local radio stations.
 - (e) The owner or operator provides a notice to the director, providing all of the following information:
 - (i) The types of materials to be recycled.
 - (ii) The type and location of the storage units and recycling processes.
 - (iii) The annual quantities expected to be placed in land-based units.
 - (iv) This notification shall be updated when there is a change in the type of materials recycled or the location of the recycling process.
 - (f) For purposes of paragraph (B)(7) of this rule, mineral processing spent materials shall be the result of mineral processing and may not include any listed hazardous wastes. Listed hazardous wastes and characteristic hazardous wastes generated by non-mineral processing industries are not eligible for the conditional exclusion from the definition of "waste."
- (18) Petrochemical recovered oil from an associated organic chemical manufacturing facility, where the oil is to be inserted into the petroleum refining process (SIC code 2911) along with normal petroleum refinery process streams, provided that both:
 - (a) The oil is hazardous only because ~~it~~the oil exhibits the characteristic of ignitability (as identified in rule 3745-51-21 of the Administrative Code) or the characteristic of toxicity for benzene (waste code D018 in rule 3745-51-24 of the Administrative Code).
 - (b) The oil generated by the organic chemical manufacturing facility is not placed on the land, or accumulated speculatively before being recycled into the petroleum refining process. An "associated organic chemical manufacturing facility" is a facility where the primary SIC code is 2869, but where operations may also include SIC codes 2821, 2822, and 2865; and is physically co-located with a petroleum refinery; and where the petroleum refinery to which the oil being recycled is returned also provides hydrocarbon feedstocks to the organic chemical manufacturing facility. "Petrochemical recovered oil" is oil that has been reclaimed

from secondary materials (i.e., sludges, by-products, or spent materials, including wastewater) from normal organic chemical manufacturing operations, as well as oil recovered from organic chemical manufacturing processes.

- (19) Spent caustic solutions from petroleum refining liquid treating processes used as a feedstock to produce cresylic or naphthenic acid unless the material is placed on the land, or "accumulated speculatively" as defined in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code.
- (20) Hazardous secondary materials used to make zinc fertilizers, provided that all of the following conditions are satisfied:
- (a) Hazardous secondary materials used to make zinc micronutrient fertilizers shall not be "accumulated speculatively," as defined in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code.
 - (b) Generators and intermediate handlers of zinc-bearing hazardous secondary materials that are to be incorporated into zinc fertilizers shall:
 - (i) Submit a one-time notice to the director, which contains the name, address, and U.S. EPA identification number of the generator or intermediate handler facility, provides a brief description of the secondary material that ~~will~~shall be subject to the exclusion, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in ~~paragraphs~~paragraph (A)(20) to (A)(20)(e) of this rule.
 - (ii) Store the excluded secondary material in tanks, containers, or buildings that are constructed and maintained in a way that prevents releases of the secondary materials into the environment. At a minimum, any building used for this purpose shall be an engineered structure made of non-earthen materials that provide structural support, and shall have a floor, walls, and a roof that prevent wind dispersal and contact with rainwater. Tanks used for this purpose shall be structurally sound and, if outdoors, shall have roofs or covers that prevent contact with wind and rain. Containers used for this purpose shall be kept closed except when it is necessary to add or remove material, and shall be in sound condition. Containers that are stored outdoors shall be managed within storage areas that accomplish all of the following:

- (a) Have containment structures or systems sufficiently impervious to contain leaks, spills and accumulated precipitation.
 - (b) Provide for effective drainage and removal of leaks, spills, and accumulated precipitation.
 - (c) Prevent run-on into the containment system.
- (iii) With each off-site shipment of excluded hazardous secondary materials, provide written notice to the receiving facility that the material is subject to the conditions of ~~paragraphs~~paragraph (A)(20) ~~to (A)(20)(e)~~ of this rule.
 - (iv) Maintain at the generator's or intermediate handler's facility for no less than three years records of all shipments of excluded hazardous secondary materials. For each shipment, these records shall at a minimum contain all of the following information:
 - (a) Name of the transporter and date of the shipment.
 - (b) Name and address of the facility that received the excluded material, and documentation confirming receipt of the shipment.
 - (c) Type and quantity of excluded secondary material in each shipment.
- (c) Manufacturers of zinc fertilizers or zinc fertilizer ingredients made from excluded hazardous secondary materials shall do all of the following:
 - (i) Store excluded hazardous secondary materials in accordance with the storage requirements for generators and intermediate handlers, as specified in paragraph (A)(20)(b)(ii) of this rule.
 - (ii) Submit a one-time notification to the director that, at a minimum, specifies the name, address and U.S. EPA identification number of the manufacturing facility, and identifies when the manufacturer intends to begin managing excluded, zinc-bearing hazardous secondary materials under the conditions specified in ~~paragraphs~~paragraph (A)(20) ~~to (A)(20)(e)~~ of this rule.
 - (iii) Maintain for a minimum of three years records of all shipments of excluded hazardous secondary materials received by the manufacturer, which shall at a minimum identify for each shipment

the name and address of the generating facility, name of transporter and date the materials were received, the quantity received, and a brief description of the industrial process that generated the material.

- (iv) Submit to the director an annual report that identifies the total quantities of all excluded hazardous secondary materials that were used to manufacture zinc fertilizers or zinc fertilizer ingredients in the previous year, the name and address of each generating facility, and the industrial processes from which ~~they~~ excluded hazardous secondary materials were generated.
- (d) Nothing in this rule preempts, overrides, or otherwise negates rule 3745-52-11 of the Administrative Code, which requires any person who generates a waste to determine if that waste is a hazardous waste.
- (e) Permitted storage units that have been used to store only zinc-bearing hazardous wastes prior to the submittal of the one-time notice described in paragraph (A)(20)(b)(i) of this rule, and that afterward ~~will~~ shall be used only to store hazardous secondary materials excluded under ~~paragraphs~~ paragraph (A)(20) ~~to (A)(20)(e)~~ of this rule, are not subject to the closure requirements of Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, or 3745-256 of the Administrative Code.
- (21) Zinc fertilizers made from hazardous wastes, or hazardous secondary materials that are excluded under ~~paragraphs~~ paragraph (A)(20) ~~to (A)(20)(e)~~ of this rule, provided that all of the following:
- (a) The fertilizers meet the following contaminant limits:

- (i) For metal contaminants:

Constituent	Maximum Allowable Total Concentration in Fertilizer, Per Unit (1%) of Zinc (ppm)
Arsenic	0.3
Cadmium	1.4
Chromium	0.6
Lead	2.8
Mercury	0.3

- (ii) For dioxin contaminants the fertilizer shall contain no more than eight parts per trillion of dioxin, measured as toxic equivalent (TEQ).
- (b) The manufacturer performs sampling and analysis of the fertilizer product to determine compliance with the contaminant limits for metals no less than every six months, and for dioxins no less than every twelve months. Testing also shall be performed whenever changes occur to manufacturing processes or ingredients that could significantly affect the amounts of contaminants in the fertilizer product. The manufacturer may use any reliable analytical method to demonstrate that no constituent of concern is present in the product at concentrations above the applicable limits. ~~It is~~ The manufacturer has the responsibility ~~of the manufacturer~~ to ensure that the sampling and analysis are unbiased, precise, and representative of the products introduced into commerce.
- (c) The manufacturer maintains for no less than three years records of all sampling and analyses performed ~~for purposes of determining to~~ determine compliance with paragraph (A)(21)(b) of this rule. ~~Such~~ At a minimum, such records shall ~~at a minimum~~ include all of the following:
 - (i) The dates and times product samples were taken, and the dates the samples were analyzed.
 - (ii) The names and qualifications of the persons taking the samples.
 - (iii) A description of the methods and equipment used to take the samples.
 - (iv) The name and address of the laboratory facility at which analyses of the samples were performed.
 - (v) A description of the analytical methods used, including any cleanup and sample preparation methods.
 - (vi) All laboratory analytical results used to determine compliance with the contaminant limits specified in ~~paragraphs~~ paragraph (A)(21) to (A)(21)(e)(iv) of this rule.
- (22) Used cathode ray tubes (CRTs).
 - (a) Used, intact "CRTs" as defined in rule 3745-50-10 of the Administrative Code are not wastes within the United States unless ~~they~~ the used, intact CRTs are disposed, or ~~unless they are~~ "accumulated speculatively" as defined in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code by CRT collectors or glass processors.

- (b) Used, intact "CRTs" as defined in rule 3745-50-10 of the Administrative Code are not wastes when exported for recycling provided that they~~the~~ used, intact CRTs comply with rule 3745-51-40 of the Administrative Code.
 - (c) Used, broken "CRTs" as defined in rule 3745-50-10 of the Administrative Code are not wastes provided that ~~they~~the used, intact CRTs comply with rule 3745-51-39 of the Administrative Code.
 - (d) Glass removed from CRTs is not a waste provided that ~~it~~such glass complies with paragraph (C) of rule 3745-51-39 of the Administrative Code.
- (23) [Reserved.]
- (24) [Reserved.]
- (25) [Reserved.]
- (26) "Solvent-contaminated wipes," as defined in rule 3745-50-10 of the Administrative Code, that are sent for cleaning and reuse are not wastes from the point of generation, provided that all of the following:
- (a) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when ~~it is~~ necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions.
 - (b) The solvent-contaminated wipes may be accumulated by the generator for up to one hundred eighty days ~~from~~after the start date of accumulation for each container prior to being sent for cleaning.
 - (c) At the point of being sent for cleaning on-site or at the point of being transported off-site for cleaning, the solvent-contaminated wipes shall contain "no free liquids" as defined in rule 3745-50-10 of the Administrative Code.

- (d) Free liquids removed from the solvent-contaminated wipes or from the container holding the "wipes," as defined in rule 3745-50-10 of the Administrative Code, shall be managed according to the applicable rules in Chapters 3745-50 to 3745-273 of the Administrative Code.
- (e) Generators shall maintain at the site all of the following documentation.
 - (i) Name and address of the laundry or dry cleaner that is receiving the solvent-contaminated wipes.
 - (ii) Documentation that the one hundred eighty-day accumulation time limit in paragraph (A)(26)(b) of this rule is being met.
 - (iii) Description of the process the generator is using to ensure the solvent-contaminated wipes contain no free liquids at the point of being laundered or dry cleaned on-site or at the point of being transported off-site for laundering or dry cleaning.
- (f) The solvent-contaminated wipes are sent to a laundry or dry cleaner whose discharge, if any, is regulated under Section 301 and Section 402 or Section 307 of the Clean Water Act.

(B) Wastes which are not hazardous wastes. The following wastes are not hazardous wastes:

- (1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel), or reused. As used in Chapter 3745-51 of the Administrative Code, "household waste" means any waste material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). A resource recovery facility managing municipal waste shall not be deemed to be treating, storing, disposing of, or otherwise managing hazardous wastes for the purposes of regulation under the hazardous waste rules, if such facility:
 - (a) Receives and burns only:
 - (i) Household waste (from single and multiple dwellings, hotels, motels, and other residential sources); ~~and,~~
 - (ii) Waste from commercial or industrial sources that does not contain hazardous waste; ~~and,~~

- (b) ~~Such facility does~~ Does not accept hazardous wastes and the owner or operator of such facility has established contractual requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
- (2) Wastes generated by any of the following and which are returned to the soils as fertilizers:
- (a) The growing and harvesting of agricultural crops.
 - (b) The raising of animals, including animal manures.
- (3) Mining overburden returned to the mine site.
- (4) Coal and fossil fuels combustion residuals.
- ~~(4)(a)~~ Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste; generated primarily from the combustion of coal or other fossil fuels, except as provided by rule 3745-266-112 of the Administrative Code for facilities that burn or process hazardous waste.
 - (b) The following wastes generated primarily from processes that support the combustion of coal or other fossil fuels that are co-disposed with the wastes in paragraph (B)(4)(a) of this rule, except as provided by 3745-266-112 of the Administrative Code for facilities that burn or process hazardous waste:
 - (i) "Coal pile run-off" means any precipitation that drains off coal piles.
 - (ii) "Boiler cleaning solutions" means water solutions and chemical solutions used to clean the fire-side and water-side of the boiler.
 - (iii) "Boiler blowdown" means water purged from boilers used to generate steam.
 - (iv) "Process water treatment and demineralizer regeneration wastes" means sludges, rinses, and spent resins generated from processes to remove dissolved gases, suspended solids, and dissolved chemical salts from combustion system process water.
 - (v) "Cooling tower blowdown" means water purged from a closed cycle cooling system. Closed cycle cooling systems include cooling towers, cooling ponds, or spray canals.

(vi) "Air heater and precipitator washes" means wastes from cleaning air preheaters and electrostatic precipitators.

(vii) "Effluents from floor and yard drains and sumps" means wastewaters, such as wash water, collected by or from floor drains, equipment drains, and sumps located inside the power plant building; and wastewaters, such as rain runoff, collected by yard drains and sumps located outside the power plant building.

(viii) "Wastewater treatment sludges" means sludges generated from the treatment of wastewaters specified in paragraphs (B)(4)(b)(i) to (B)(4)(b)(vi) of this rule.

(5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.

(6) Chromium hazardous waste exclusion.

(a) Wastes which fail the test for the toxicity characteristic because chromium is present or are listed as a hazardous waste in rules 3745-51-30 to 3745-51-35 of the Administrative Code due to the presence of chromium, which do not fail the test for the toxicity characteristic for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if ~~it is shown by~~ a waste generator or ~~by~~ waste generators show that all of the following:

(i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; ~~and.~~

(ii) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; ~~and.~~

(iii) The waste is typically and frequently managed in non-oxidizing environments.

(b) Specific wastes which meet the standards in paragraphs (B)(6)(a)(i), (B)(6)(a)(ii), and (B)(6)(a)(iii) of this rule (so long as ~~they~~ the specific wastes do not fail the test for the toxicity characteristic for any other constituent, and do not exhibit any other characteristic) are:

(i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/

retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.

- (ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - (iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue.
 - (iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - (v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - (vi) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.
 - (vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
 - (viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.
- (7) Waste from the extraction, beneficiation, and processing of ores and minerals (including coal, phosphate rock, and overburden from the mining of uranium ore), except as provided by rule 3745-266-112 of the Administrative Code for facilities that burn or process hazardous waste.

- (a) For the purposes of ~~paragraph~~paragraph (B)(7) ~~to (B)(7)(c)(ii)~~ of this rule, beneficiation of ores and minerals is restricted to any of the following activities:
- (i) Crushing_;
 - (ii) Grinding_;
 - (iii) Washing_;
 - (iv) Dissolution_;
 - (v) Crystallization_;
 - (vi) Filtration_;
 - (vii) Sorting_;
 - (viii) Sizing_;
 - (ix) Drying_;
 - (x) Sintering_;
 - (xi) Pelletizing_;
 - (xii) Briquetting.
 - (xiii) Calcining to remove water or carbon dioxide_;
 - (xiv) Roasting, autoclaving, or chlorination in preparation for leaching [except where the roasting (or autoclaving or chlorination) and leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing]_;
 - (xv) Gravity concentration_;
 - (xvi) Magnetic separation_;
 - (xvii) Electrostatic separation_;
 - (xviii) Flotation_;
 - (xix) Ion exchange_;

- (xx) Solvent extraction~~;~~
 - (xxi) Electrowinning~~;~~
 - (xxii) Precipitation~~;~~
 - (xxiii) Amalgamation~~;~~~~and.~~
 - (xxiv) Heap, dump, vat, tank, and in situ leaching.
- (b) For the purposes of ~~paragraph~~paragraph (B)(7) ~~to (B)(7)(e)(ii)~~ of this rule, waste from the processing of ores and minerals includes only the following wastes as generated:
- (i) Slag from primary copper processing~~;~~
 - (ii) Slag from primary lead processing~~;~~
 - (iii) Red and brown muds from bauxite refining~~;~~
 - (iv) Phosphogypsum from phosphoric acid production~~;~~
 - (v) Slag from elemental phosphorus production~~;~~
 - (vi) Gasifier ash from coal gasification~~;~~
 - (vii) Process wastewater from coal gasification~~;~~
 - (viii) Calcium sulfate wastewater treatment plant sludge from primary copper processing~~;~~
 - (ix) Slag tailings from primary copper processing~~;~~
 - (x) Fluorogypsum from hydrofluoric acid production~~;~~
 - (xi) Process wastewater from hydrofluoric acid production~~;~~
 - (xii) Air pollution control dust or sludge from iron blast furnaces~~;~~
 - (xiii) Iron blast furnace slag~~;~~
 - (xiv) Treated residue from roasting or leaching of chrome ore~~;~~
 - (xv) Process wastewater from primary magnesium processing by the anhydrous process~~;~~

- (xvi) Process wastewater from phosphoric acid production;~~;~~
 - (xvii) Basic oxygen furnace and open hearth furnace air pollution control dust or sludge from carbon steel production;~~;~~
 - (xviii) Basic oxygen furnace and open hearth furnace slag from carbon steel production;~~;~~
 - (xix) Chloride process waste solids from titanium tetrachloride production;~~and.~~
 - (xx) Slag from primary zinc processing.
- (c) A residue derived from co-processing mineral processing secondary materials with normal beneficiation raw materials or with normal mineral processing raw materials remains excluded under ~~paragraphs~~paragraph (B) ~~to (B)(15)(e)~~ of this rule if the owner or operator does both of the following:
- (i) Processes at least fifty per cent by weight normal beneficiation raw materials or normal mineral processing raw materials;~~and.~~
 - (ii) Legitimately reclaims the secondary mineral processing materials.
- (8) Cement kiln dust waste, except as provided by rule 3745-266-112 of the Administrative Code for facilities that burn or process hazardous waste.
- (9) Waste which consists of discarded arsenical-treated wood or wood products which fails the test for the toxicity characteristic for EPA hazardous waste numbers D004 to D017 and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- (10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of rule 3745-51-24 of the Administrative Code (EPA hazardous waste numbers D018 to D043 only) and are subject to the corrective action regulations under Chapter 1301:7-9 of the Administrative Code.
- (11) Injected ground water that is hazardous only because ~~it~~the injected ground water exhibits the toxicity characteristic (EPA hazardous waste numbers D018 to D043 only) in rule 3745-51-24 of the Administrative Code that is reinjected through an underground injection well pursuant to free phase hydrocarbon recovery operations undertaken at petroleum refineries, petroleum marketing terminals, petroleum bulk plants, petroleum pipelines, and petroleum

transportation spill sites until January 25, 1993. This extension applies to recovery operations in existence, or for which contracts have been issued, on or before March 25, 1991. For ground water returned through infiltration galleries from such operations at petroleum refineries, marketing terminals, and bulk plants, this extension applies until October 2, 1991. New operations involving injection wells (beginning after March 25, 1991) ~~will~~shall qualify for this compliance date extension (until January 25, 1993) only if both of the following:

- (a) Operations are performed pursuant to a written state agreement or order that includes a provision to assess the ground water and the need for further remediation once the free phase recovery is completed; ~~and~~.
 - (b) A copy of the written agreement or order has been submitted to "Ohio EPA, ~~Division of Materials and Waste Management~~Hazardous Waste Management Program, P.O. Box 1049, Columbus, OH" 43216-1049.
- (12) Used chlorofluorocarbon refrigerants from totally enclosed heat transfer equipment, including mobile air conditioning systems, mobile refrigeration, and commercial and industrial air conditioning and refrigeration systems that use chlorofluorocarbons as the heat transfer fluid in a refrigeration cycle, provided the refrigerant is reclaimed for further use.
- (13) Non-terne plated used oil filters that are not mixed with waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code if these oil filters have been gravity hot-drained using one of the following methods:
- (a) Puncturing the filter anti-drain back valve or the filter dome end and hot-draining; ~~;~~
 - (b) Hot-draining and crushing; ~~;~~
 - (c) Dismantling and hot-draining; ~~or~~.
 - (d) Any other equivalent hot-draining method which ~~will remove~~removes used oil.
- (14) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products.
- (15) Leachate or gas condensate collected from landfills where certain wastes have been disposed, provided that:

- (a) The wastes disposed would meet one or more of the listing descriptions for the following:
- (i) EPA hazardous waste numbers K169, K170, K171, and K172 if these wastes had been generated after February 8, 1999~~;~~
 - (ii) EPA hazardous waste numbers K174, K175, K176, K177, and K178, if these wastes had been generated after May 20, 2002~~;~~
 - (iii) EPA hazardous waste number K181 if these wastes had been generated after August 23, 2005~~;~~
- (b) The wastes described in any of the following:
- (i) Paragraph (B)(15)(a)(i) of this rule were disposed prior to February 8, 1999~~;~~
 - (ii) Paragraph (B)(15)(a)(ii) of this rule were disposed prior to May 20, 2002~~;~~
 - (iii) Paragraph (B)(15)(a)(iii) of this rule were disposed prior to August 23, 2005~~;~~
- (c) The leachate or gas condensate do not exhibit any characteristic of hazardous waste nor are derived from any other listed hazardous waste.
- (d) Discharge of the leachate or gas condensate, including leachate or gas condensate transferred from the landfill to a POTW by truck, rail, or dedicated pipe, is subject to regulation under Section 307(b) or Section 402 of the Clean Water Act.
- (e) As of February 13, 2001, leachate or gas condensate derived from K169 to K172 is no longer exempt if such leachate or gas condensate is stored or managed in a surface impoundment prior to discharge. After February 26, 2007, leachate or gas condensate derived from K181 ~~will~~shall no longer be exempt if such leachate or gas condensate is stored or managed in a surface impoundment prior to discharge. After November 21, 2003, leachate or gas condensate derived from K176, K177, and K178 will no longer be exempt if such leachate or gas condensate is stored or managed in a surface impoundment prior to discharge. There is one exception: If the surface impoundment is used to temporarily store leachate or gas condensate in response to an emergency situation (e.g., shutdown of wastewater treatment system), provided the impoundment has a double liner, and provided the leachate or gas condensate is removed from

the impoundment and continues to be managed in compliance with the conditions of this paragraph after the emergency ends.

(16) [Reserved.]

(17) [Reserved.]

(18) "Solvent-contaminated wipes," except for "wipes" (both terms are defined in rule 3745-50-10 of the Administrative Code) that are hazardous waste due to the presence of trichloroethylene, that are sent for disposal are not hazardous wastes from the point of generation provided that all of the following:

- (a) The solvent-contaminated wipes, when accumulated, stored, and transported, are contained in non-leaking, closed containers that are labeled "Excluded Solvent-Contaminated Wipes." The containers shall be able to contain free liquids, should free liquids occur. During accumulation, a container is considered closed when there is complete contact between the fitted lid and the rim, except when ~~it is~~ necessary to add or remove solvent-contaminated wipes. When the container is full, or when the solvent-contaminated wipes are no longer being accumulated, or when the container is being transported, the container shall be sealed with all lids properly and securely affixed to the container and all openings tightly bound or closed sufficiently to prevent leaks and emissions.
- (b) The solvent-contaminated wipes may be accumulated by the generator for up to one hundred eighty days ~~from~~after the start date of accumulation for each container prior to being sent for disposal.
- (c) At the point of being transported for disposal, the solvent-contaminated wipes shall contain "no free liquids" as defined in rule 3745-50-10 of the Administrative Code.
- (d) Free liquids removed from the solvent-contaminated wipes or from the container holding the wipes shall be managed according to the applicable rules in Chapters 3745-50 to 3745-273 of the Administrative Code.
- (e) Generators shall maintain at the site all of the following documentation:
 - (i) Name and address of the landfill or combustor that is receiving the solvent-contaminated wipes.
 - (ii) Documentation that the one hundred eighty-day accumulation time limit in paragraph (B)(18)(b) of this rule is being met.

- (iii) Description of the process the generator is using to ensure solvent-contaminated wipes contain no free liquids at the point of being transported for disposal.
 - (f) The solvent-contaminated wipes are sent directly according to any of the following:
 - (i) For disposal to a sanitary landfill regulated under Chapter 3745-27 of the Administrative code and that complies with rule 3745-27-08 of the Administrative code and is permitted, licensed, or otherwise authorized by Ohio, or is permitted, licensed, or otherwise authorized by another state that that allows the disposal of contaminated wipes in such landfill.
 - (ii) For disposal to a permitted hazardous waste landfill unit regulated under Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code, including rule 3745-57-03 of the Administrative Code, or is an authorized hazardous waste landfill in another authorized state.
 - (iii) To a municipal waste combustor or other combustion facility regulated under Section 129 of the Clean Air Act or to a hazardous waste combustor, boiler, or industrial furnace regulated under Chapters 3745-54 to 3745-57 and 3745-205, or Chapters 3745-65 to 3745-69 and 3745-256, or rules 3745-266-100 to 3745-266-112 of the Administrative Code.
- (C) Hazardous wastes which are exempted from certain rules. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment-manufacturing unit, is not subject to regulation under Chapters 3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256 or, and 3745-270 or rules 3745-50-40 to 3745-50-235 of the Administrative Code, or to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, until ~~it~~ the hazardous waste exits the unit in which ~~it~~ the hazardous waste was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than ninety days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.
- (D) Samples.

- (1) Except as provided in ~~paragraph~~paragraphs (D)(2) and (D)(4) of this rule, a sample of waste or a sample of water, soil, or air, which is collected for the sole purpose of testing to determine ~~its~~the characteristics or composition of such sample, is not subject to Chapters ~~3745-51~~3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 ~~or rules 3745-50-40 to 3745-50-235~~ of the Administrative Code or to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, when any of the following occurs:
- (a) The sample is being transported to a laboratory for the purpose of testing; ~~or.~~
 - (b) The sample is being transported back to the sample collector after testing; ~~or.~~
 - (c) The sample is being stored by the sample collector before transport to a laboratory for testing; ~~or.~~
 - (d) The sample is being stored in a laboratory before testing; ~~or.~~
 - (e) The sample is being stored in a laboratory after testing but before ~~it~~the sample is returned to the sample collector; ~~or.~~
 - (f) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
- (2) In order to qualify for the exemption in paragraphs (D)(1)(a) and (D)(1)(b) of this rule, a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector shall do one of the following:
- (a) Comply with U.S. department of transportation (DOT) requirements, ~~U.S. United States~~ postal service (USPS), or any other applicable shipping requirements; ~~or.~~
 - (b) ~~Both~~Comply with both of the following requirements if the sample collector determines that DOT, USPS, or other shipping requirements do not apply to the shipment of the sample:
 - (i) Assure that all of the following information accompanies the sample:
 - (a) The sample collector's name, mailing address, and telephone number; ~~.~~
 - (b) The laboratory's name, mailing address, and telephone number; ~~.~~

(c) The quantity of the sample;

(d) The date of shipment; ~~and~~

(e) A description of the sample.

(ii) Package the sample so that ~~it~~the sample does not leak, spill, or vaporize from ~~its~~the packaging.

(3) This exemption does not apply if the laboratory determines that the waste is hazardous, but the laboratory is no longer meeting any of the conditions stated in paragraph (D)(1) of this rule.

(4) In order to qualify for the exemption in paragraphs (D)(1)(a) and (D)(1)(b) of this rule, the mass of a sample that will be exported to a foreign laboratory or that will be imported to a United States laboratory from a foreign source shall additionally not exceed twenty-five kilograms.

(E) Treatability study samples.

(1) Except as provided in ~~paragraph~~paragraphs (E)(2) and (E)(4) of this rule, persons who generate or collect samples for the purpose of conducting "treatability studies" as defined in rule 3745-50-10 of the Administrative Code, are not subject to Chapters 3745-51 to 3745-53 of the Administrative Code or to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, nor are such samples included in the quantity determinations of ~~paragraph (D) of rule 3745-52-34 and rule 3745-51-05~~3745-52-13 of the Administrative Code when one of the following occurs:

(a) The sample is being collected and prepared for transportation by the generator or sample collector; ~~or~~

(b) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; ~~or~~

(c) The sample is being transported to the laboratory or testing facility for the purpose of conducting a treatability study.

(2) The exemption in paragraph (E)(1) of this rule is applicable to samples of hazardous waste being collected and shipped for the purpose of conducting treatability studies provided that all of the following:

(a) The generator or sample collector uses (in "treatability studies") no more than ten thousand kilograms of media contaminated with non-acute

hazardous waste, one thousand kilograms of non-acute hazardous waste other than contaminated media, one kilogram of acute hazardous waste, two thousand five hundred kilograms of media contaminated with acute hazardous waste for each process being evaluated for each generated waste stream;~~and.~~

- (b) The mass of each sample shipment does not exceed ten thousand kilograms; the ten thousand kilograms quantity may be all media contaminated with non-acute hazardous waste, or may include two thousand five hundred kilograms of media contaminated with acute hazardous waste, one thousand kilograms of hazardous waste, and one kilogram of acute hazardous waste;~~and.~~
- (c) The sample shall be packaged so that ~~it will~~the sample shall not leak, spill, or vaporize from ~~its~~the sample's packaging during shipment and the requirements of paragraph (E)(2)(c)(i) or (E)(2)(c)(ii) of this rule are met.
 - (i) The transportation of each sample shipment complies with DOT, USPS, or any other applicable shipping requirements;~~or.~~
 - (ii) If the DOT, USPS, or other shipping requirements do not apply to the shipment of the sample, all of the following information shall accompany the sample:
 - (a) The name, mailing address, and telephone number of the originator of the sample;~~.~~
 - (b) The name, address, and telephone number of the facility that will perform the treatability study;~~.~~
 - (c) The quantity of the sample;~~.~~
 - (d) The date of shipment;~~and.~~
 - (e) A description of the sample, including ~~its~~the sample's EPA hazardous waste number.
- (d) The sample is shipped to a laboratory or testing facility which is exempt under paragraph (F) of this rule or has an appropriate RCRA permit or interim status or, in Ohio, is operating under an Ohio hazardous waste permit or permit by rule.
- (e) The generator or sample collector maintains all of the following records for a period ending three years after completion of the treatability study:

- (i) Copies of the shipping documents;
 - (ii) A copy of the contract with the facility conducting the treatability study;
 - (iii) Documentation showing all of the following:
 - (a) The amount of waste shipped under this exemption;
 - (b) The name, address, and U.S. EPA identification number of the laboratory or testing facility that received the waste;
 - (c) The date the shipment was made; ~~and~~
 - (d) Whether or not unused samples and residues were returned to the generator.
 - (f) The generator reports the information required under paragraph (E)(2)(e)(iii) of this rule in ~~its~~ the generator's biennial report (as required by rule 3745-52-41 of the Administrative Code).
- (3) The director may grant requests, on a case-by-case basis, for up to an additional two years for treatability studies involving bioremediation. The director may grant requests on a case-by-case basis for quantity limits in excess of those specified in paragraphs (E)(2)(a) and (E)(2)(b) and (F)(4) of this rule, for up to an additional five thousand kilograms of media contaminated with non-acute hazardous waste, five hundred kilograms of non-acute hazardous waste, two thousand five hundred kilograms of media contaminated with acute hazardous waste, and one kilogram of acute hazardous waste:
- (a) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities in advance of commencing treatability studies. Factors to be considered in reviewing such requests include the nature of the technology, the type of process (e.g., batch versus continuous), size of the unit undergoing testing (particularly in relation to scale-up considerations), the time or quantity of material required to reach steady state operating conditions, or test design considerations such as mass balance calculations.
 - (b) In response to requests for authorization to ship, store, and conduct treatability studies on additional quantities after initiation or completion of initial treatability studies, when any of the following circumstances apply:

- (i) There has been an equipment or mechanical failure during the conduct of a treatability study~~;~~.
 - (ii) There is a need to verify the results of a previously conducted treatability study~~;~~.
 - (iii) There is a need to study and analyze alternative techniques within a previously evaluated treatment process~~;~~~~or~~.
 - (iv) There is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment.
- (c) The additional quantities and timeframes allowed in paragraphs (E)(3)(a) and (E)(3)(b) of this rule are subject to all the provisions in paragraphs (E)(1) and (E)(2)(c) to (E)(2)(f) of this rule. The generator or sample collector shall apply to the director in writing and shall provide in writing all of the following information:
- (i) The reason why the generator or sample collector requires additional time or quantity of sample for treatability study evaluation, and the additional time or quantity needed~~;~~.
 - (ii) Documentation accounting for all samples of hazardous waste from the waste stream which have been sent for or undergone treatability studies including the date each previous sample from the waste stream was shipped, the quantity of each previous shipment, the laboratory or testing facility to which ~~it~~ each sample was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study~~;~~.
 - (iii) A description of the technical modifications or change in specifications which ~~will~~ shall be evaluated and the expected results~~;~~.
 - (iv) If such further study is being required due to equipment or mechanical failure, the applicant shall include information regarding the reason for the failure or breakdown and also include what procedures or equipment improvements have been made to protect against further breakdowns~~;~~ ~~and~~.
 - (v) Such other information that the director considers necessary.

(4) In order to qualify for the exemption in paragraph (E)(1)(a) of this rule, the mass of a sample that will be exported to a foreign laboratory or testing facility, or

that will be imported to a United States laboratory or testing facility from a foreign source shall additionally not exceed twenty-five kilograms.

- (F) Samples undergoing treatability studies at laboratories and testing facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to hazardous waste requirements) are not subject to Chapters ~~3745-51~~3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 or rules ~~3745-50-40 to 3745-50-235~~ of the Administrative Code or to requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided that the conditions of paragraphs (F)(1) to (F)(11) of this rule are met. A mobile treatment unit (MTU) may qualify as a testing facility subject to paragraphs (F)(1) to (F)(11) of this rule. Where a group of MTUs are located at the same site, the limitations specified in paragraphs (F)(1) to (F)(11) of this rule apply to the entire group of MTUs collectively as if the group were one MTU.
- (1) No less than forty-five days before conducting treatability studies, the owner or operator of the laboratory or testing facility notifies the director in writing that ~~it~~the owner or operator of the laboratory or testing facility intends to conduct treatability studies under ~~paragraphs~~paragraph (F) to (F)(11) of this rule.
 - (2) The laboratory or testing facility conducting the treatability study has a U.S. EPA identification number.
 - (3) No more than a total of ten thousand kilograms of "as received" media contaminated with non-acute hazardous waste, two thousand five hundred kilograms of media contaminated with acute hazardous waste, or two hundred fifty kilograms of other "as received" hazardous waste is subject to initiation of treatment in all treatability studies in any single day. "As received" waste refers to the waste as received in the shipment from the generator or sample collector.
 - (4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed ten thousand kilograms, the total of which can include ten thousand kilograms of media contaminated with non-acute hazardous waste, two thousand five hundred kilograms of media contaminated with acute hazardous waste, one thousand kilograms of non-acute hazardous wastes other than contaminated media, and one kilogram of acute hazardous waste. This quantity limitation does not include treatment materials (including nonhazardous waste) added to "as received" hazardous waste.
 - (5) No more than ninety days have elapsed since the treatability study for the sample was completed, or no more than one year (two years for treatability studies involving bioremediation) have elapsed since the generator or sample collector

shipped the sample to the laboratory or testing facility, whichever date first occurs. Up to five hundred kilograms of treated material from a particular waste stream from treatability studies may be archived for future evaluation up to five years ~~from~~after the date of initial receipt. Quantities of materials archived are counted against the total storage limit for the facility.

- (6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- (7) The facility maintains records for three years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. ~~The~~All of the following specific information shall be included for each treatability study conducted:
 - (a) The name, address, and U.S. EPA identification number of the generator or sample collector of each waste sample~~;~~;
 - (b) The date the shipment was received~~;~~;
 - (c) The quantity of waste accepted~~;~~;
 - (d) The quantity of "as received" waste in storage each day~~;~~;
 - (e) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day~~;~~;
 - (f) The date the treatability study was concluded~~;~~;~~and~~;
 - (g) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the U.S. EPA identification number.
- (8) The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending three years ~~from~~after the completion date of each treatability study.
- (9) The facility prepares and submits a report to the director by March fifteenth of each year includes all of the following information for the previous calendar year:
 - (a) The name, address, and U.S. EPA identification number of the facility conducting the treatability studies~~;~~;

- (b) The types (by process) of treatability studies conducted;
 - (c) The names and addresses of persons for whom studies have been conducted (including the U.S. EPA identification numbers);
 - (d) The total quantity of waste in storage each day;
 - (e) The quantity and types of waste subjected to treatability studies;
 - (f) When each treatability study was conducted; ~~and~~
 - (g) The final disposition of residues and unused sample from each treatability study.
- (10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under rule 3745-51-03 of the Administrative Code and, if so, are subject to Chapters 3745-51 to 3745-270 and rules 3745-50-40 to 3745-50-235 of the Administrative Code, unless the residues and unused samples are returned to the sample originator under the exemption in paragraph (E) of this rule.
- (11) The facility notifies the director by letter when the facility is no longer planning to conduct any treatability studies at the site.
- (G) Dredged material that is not a hazardous waste. Dredged material that is subject to a permit that has been issued under Section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344) or Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413) is not a hazardous waste. For ~~paragraphs~~ paragraph (G) to ~~(G)(2)(c)~~ of this rule, the following definitions apply:
- (1) The term "dredged material" has the same meaning as in 40 ~~CFR~~ C.F.R. 232.2.
 - (2) The term "permit" means one of the following:
 - (a) A permit issued by the ~~U.S.~~ United States army corps of engineers (corps) or an approved state under Section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344).
 - (b) A permit issued by the corps under Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413).
 - (c) In the case of corps civil works projects, the administrative equivalent of the permits referred to in paragraphs (G)(2)(a) and (G)(2)(b) of this rule, as

provided for in corps regulations (for example, see 33 CFR.F.R. 336.1, 336.2, and 337.6).

(H) Carbon dioxide stream injected for geologic sequestration. Carbon dioxide streams that are captured and transported for purposes of injection into an underground injection well subject to the requirements for "Class VI" underground injection control wells, including the requirements in 40 CFR.F.R. Part 144 and 40 CFR.F.R. Part 146 of the underground injection control program of the Safe Drinking Water Act, are not a hazardous waste, provided the conditions in 40 CFR.F.R. 261.4(h) are met.

(I) [Reserved.]

(J) Airbag waste.

(1) Airbag waste at the airbag waste handler or during transport to an airbag waste collection facility or designated facility is not subject to regulation under Chapters 3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, and is not subject to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity provided that all of the following are met:

(a) The airbag waste is accumulated in a quantity of no more than two hundred fifty airbag modules or airbag inflators, for no longer than one hundred eighty days.

(b) The airbag waste is packaged in a container designed to address the risk posed by the airbag waste and labeled "Airbag Waste - Do Not Reuse."

(c) The airbag waste is sent directly to either of the following:

(i) An airbag waste collection facility in the United States under the control of a vehicle manufacturer or the authorized representative of the vehicle manufacturer, or under the control of an authorized party administering a remedy program in response to a recall under the national highway traffic safety administration.

(ii) A "designated facility" as defined in rule 3745-50-10 of the Administrative Code.

(d) The transport of the airbag waste complies with all applicable U.S. department of transportation regulations in 49 C.F.R. Parts 171 to 180 during transit.

- (e) The airbag waste handler maintains at the handler facility for no less than three years records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility. For each shipment, these records, at a minimum, shall contain the name of the transporter and date of the shipment, name and address of receiving facility, and the type and quantity of airbag waste (i.e., airbag modules or airbag inflators) in the shipment. Confirmations of receipt shall include the name and address of the receiving facility, the type and quantity of the airbag waste (i.e., airbag modules and airbag inflators) received, and the date which the airbag waste was received. Shipping records and confirmations of receipt shall be made available for inspection and may be satisfied by routine business records (e.g., electronic or paper financial records, bills of lading, copies of DOT shipping papers, or electronic confirmations of receipt).
- (2) Once the airbag waste arrives at an airbag waste collection facility or designated facility, the airbag waste becomes subject to all applicable hazardous waste rules, and the facility receiving airbag waste is considered the hazardous waste generator for the purposes of the hazardous waste rules and shall comply with Chapter 3745-52 of the Administrative Code.
- (3) Reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the national highway traffic safety administration is considered sham recycling and is prohibited under 40 C.F.R. 261.2(g).

[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: 10/5/2020
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Certification

09/21/2020

Date

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TO BE RESCINDED

3745-51-05 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

- (A) A generator is a conditionally exempt small quantity generator in a calendar month if he generates no more than one hundred kilograms of hazardous waste in that month.
- (B) Except for those wastes identified in paragraphs (E), (F), (G), and (J) of this rule, a conditionally exempt small quantity generator's hazardous wastes are not subject to regulation under Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, or 3745-270 or rules 3745-50-40 to 3745-50-235 of the Administrative Code or the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided the generator complies with paragraphs (F), (G), and (J) of this rule.
- (C) When making the quantity determinations of Chapters 3745-51 and 3745-52 of the Administrative Code, the generator shall include all hazardous waste that it generates, except hazardous waste that:
- (1) Is exempt from regulation under paragraphs (C) to (F) of rule 3745-51-04, paragraph (A)(3) of rule 3745-51-06, paragraph (A)(1) of rule 3745-51-07, or rule 3745-51-08 of the Administrative Code; or
 - (2) Is managed immediately upon generation only in "on-site elementary neutralization units," "wastewater treatment units," or "totally enclosed treatment facilities" as defined in rule 3745-50-10 of the Administrative Code; or
 - (3) Is recycled, without prior storage or accumulation, only in an on-site process subject to paragraph (C)(2) of rule 3745-51-06 of the Administrative Code; or
 - (4) Is used oil managed under paragraph (A)(4) of rule 3745-51-06 and Chapter 3745-279 of the Administrative Code; or
 - (5) Is spent lead-acid batteries managed under rule 3745-266-80 of the Administrative Code; or
 - (6) Is universal waste managed under rule 3745-51-09 and Chapter 3745-273 of the Administrative Code;
 - (7) Is a hazardous waste that is an unused commercial chemical product (listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code or exhibiting one or more characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code) that is generated solely as a result of a laboratory clean-

out conducted at an eligible academic entity pursuant to rule 3745-52-213 of the Administrative Code. For purposes of this paragraph, the term "eligible academic entity" has the meaning as in rule 3745-52-200 of the Administrative Code.

(D) In determining the quantity of hazardous waste generated, a generator need not include:

- (1) Hazardous waste when it is removed from on-site storage; or
- (2) Hazardous waste produced by on-site treatment (including reclamation) of his hazardous waste, in accordance with paragraphs (F)(3) and (G)(3) of this rule, so long as the hazardous waste that is treated was counted once; or
- (3) Spent materials that are generated, reclaimed, and subsequently reused on-site, so long as such spent materials have been counted once.

(E) If a generator generates acute hazardous waste in a calendar month in quantities greater than those in paragraphs (E)(1) and (E)(2) of this rule, all quantities of that acute hazardous waste are subject to full regulation under Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 and rules 3745-50-40 to 3745-50-235 of the Administrative Code, and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity:

- (1) A total of one kilogram of acute hazardous wastes listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.
- (2) A total of one hundred kilograms of any residue or contaminated soil, waste, or other debris resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

[Comment: "Full regulation" means those rules applicable to generators of one thousand kilograms or greater of hazardous waste in a calendar month.]

(F) In order for acute hazardous wastes generated by a generator of acute hazardous wastes in quantities equal to or less than those in paragraph (E)(1) or (E)(2) of this rule to be excluded from full regulation under this rule, the generator shall comply with the following requirements:

- (1) Rule 3745-52-11 of the Administrative Code.
- (2) The generator may accumulate acute hazardous waste on-site. If he accumulates at any time acute hazardous wastes in quantities greater than those in paragraph (E)(1) or (E)(2) of this rule, all of those accumulated wastes are subject to regulation under Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270, and rules 3745-50-40 to 3745-50-235 of the Administrative Code, and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity. The time period of paragraph (A) of rule 3745-52-34 of the Administrative Code for accumulation of wastes on-site begins when the accumulated wastes exceed the applicable exclusion limit in paragraph (E)(1) or (E)(2) of this rule; and
- (3) A conditionally exempt small quantity generator may either treat or dispose of his acute hazardous waste in an on-site facility or ensure delivery to an off-site storage, treatment, or disposal facility, either of which, if located in the U.S., is:
 - (a) Permitted under rules 3745-50-40 to 3745-50-235 of the Administrative Code; or
 - (b) Operating under a permit by rule as described in paragraph (C) of rule 3745-50-40 of the Administrative Code; or
 - (c) Authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271; or
 - (d) Permitted, licensed, or registered by a state other than Ohio to manage municipal solid waste and, if managed in a municipal solid waste landfill, is subject to 40 CFR Part 258 and applicable state law; or
 - (e) Permitted, licensed, or registered by a state other than Ohio to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, is subject to 40 CFR 257.5 to 40 CFR 257.30 and applicable state law; or
 - (f) A facility which is operating under paragraph (C)(2) of rule 3745-51-06 of the Administrative Code; or

- (g) For universal waste managed under Chapter 3745-273 of the Administrative Code, a universal waste handler or destination facility subject to Chapter 3745-273 of the Administrative Code.
- (G) In order for hazardous waste generated by a conditionally exempt small quantity generator in quantities of one hundred kilograms or less of hazardous waste during a calendar month to be excluded from full regulation under this rule, the generator shall comply with the following:
- (1) Rule 3745-52-11 of the Administrative Code;
 - (2) The conditionally exempt small quantity generator may accumulate hazardous waste on-site. If he accumulates at any time one thousand kilograms or greater of his hazardous wastes, all of those accumulated wastes are subject to regulation under the special provisions of Chapter 3745-52 of the Administrative Code applicable to generators of greater than one hundred kilograms and less than one thousand kilograms of hazardous waste in a calendar month, as well as Chapters 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 and rules 3745-50-40 to 3745-50-235 of the Administrative Code, and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity. The time period of paragraph (D) of rule 3745-52-34 of the Administrative Code for accumulation of wastes on-site begins for a conditionally exempt small quantity generator when the accumulated wastes equal or exceed one thousand kilograms;
 - (3) A conditionally exempt small quantity generator may either treat or dispose of his hazardous waste in an on-site facility, or ensure delivery to an off-site storage, treatment, or disposal facility, either of which, if located in the U.S., is:
 - (a) Permitted under rules 3745-50-40 to 3745-50-235 of the Administrative Code; or
 - (b) Operating under a permit by rule as described in paragraph (C) of rule 3745-50-40 of the Administrative Code; or
 - (c) Authorized to manage hazardous waste by a state with a hazardous waste management program approved under 40 CFR Part 271; or
 - (d) Permitted, licensed, or registered by a state other than Ohio to manage municipal solid waste and, if managed in a municipal solid waste landfill, is subject to 40 CFR Part 258 and applicable state law; or
 - (e) Permitted, licensed, or registered by a state other than Ohio to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-

hazardous waste disposal unit, is subject to 40 CFR 257.5 to 40 CFR 257.30 and applicable state law; or

(f) A facility which is operating under paragraph (C)(2) of rule 3745-51-06 of the Administrative Code; or

(g) For universal waste managed under Chapter 3745-273 of the Administrative Code, a universal waste handler or destination facility subject to Chapter 3745-273 of the Administrative Code.

(H) Hazardous waste subject to the reduced requirements of this rule may be mixed with non-hazardous waste and remain subject to these reduced requirements even though the resultant mixture exceeds the quantity limitations identified in this rule, unless the mixture meets any of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(I) If any person mixes a waste with a hazardous waste that exceeds a quantity exclusion level of this rule, the mixture is subject to full regulation.

(J) If a conditionally exempt small quantity generator's wastes are mixed with used oil, the mixture is subject to Chapter 3745-279 of the Administrative Code. Any material produced from such a mixture by processing, blending, or other treatment is also so regulated.

[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."]

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3745-51-06

Requirements for recyclable materials.

(A) Recyclable materials.

- (1) Hazardous wastes that are recycled are subject to the requirements for generators, transporters, and storage facilities of paragraphs (B) and (C) of this rule, except for the materials listed in paragraphs (A)(2), (A)(3), and (A)(4) of this rule. Hazardous wastes that are recycled shall be known as "recyclable materials."
- (2) The following recyclable materials are not subject to the requirements of this rule but are regulated under Chapter 3745-266 of the Administrative Code and all applicable provisions of ~~Chapter~~Chapters 3745-50 and 3745-270 ~~and rules 3745-50-40 to 3745-50-235~~ of the Administrative Code:
 - (a) Recyclable materials used in a manner ~~constituting~~that constitutes disposal (rules 3745-266-20 to 3745-266-23 of the Administrative Code).
 - (b) Hazardous wastes burned [as "burn" is defined in paragraph (A) of rule 3745-266-100 of the Administrative Code] for energy recovery in boilers and industrial furnaces that are not regulated under rules 3745-57-40 to 3745-57-51 or 3745-68-40 to 3745-68-52 of the Administrative Code (rules 3745-266-100 to 3745-266-112 of the Administrative Code).
 - (c) Recyclable materials from which precious metals are reclaimed (rule 3745-266-70 of the Administrative Code).
 - (d) Spent lead-acid batteries that are being reclaimed (rule 3745-266-80 of the Administrative Code).
- (3) The following recyclable materials are not subject to regulation under rules 3745-50-40 to 3745-50-235 or Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, and are not subject to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity:
 - (a) Industrial ethyl alcohol that is reclaimed except that exports and imports of such recyclable materials shall comply with 40 ~~CFR~~C.F.R. Part 262, subpart H:
 - (i) A person ~~initiating~~who initiates a shipment for reclamation in a foreign country shall comply with 40 ~~CFR~~C.F.R. Part 262 subpart H.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states.]

Therefore, the importation and exportation of hazardous waste into and out of the U.S. is solely regulated by the federal government.]

- (ii) A transporter ~~transporting who transports~~ a shipment for export shall not accept a shipment if the transporter knows the shipment does not conform to the "EPA Acknowledgement of Consent." A transporter ~~transporting who transports~~ a shipment for export shall ensure that a copy of the "EPA Acknowledgement of Consent" accompanies the shipment and shall ensure that the shipment is delivered to the facility designated by the person ~~initiating who~~ initiates the shipment.
- (b) Scrap metal that is not excluded under paragraph (A)(13) of rule 3745-51-04 of the Administrative Code.
- (c) Fuels produced from the refining of oil-bearing hazardous waste along with normal process streams at a petroleum refining facility, if such wastes result from normal petroleum refining, production, and transportation practices, ~~[this This~~ exemption does not apply to fuels produced from oil recovered from oil-bearing hazardous waste, where such recovered oil is already excluded under paragraph (A)(12)(b) of rule 3745-51-04 of the Administrative Code.]-
- (d) Oil and fuel produced from oil-bearing hazardous wastes.
- (i) Hazardous waste fuel produced from oil-bearing hazardous wastes from petroleum refining, production, or transportation practices, or produced from oil reclaimed from such hazardous wastes, where such hazardous wastes are reintroduced into a process that does not use distillation or does not produce products from crude oil so long as the resulting fuel meets the used oil specification under rule 3745-279-11 of the Administrative Code and so long as no other hazardous wastes are used to produce the hazardous waste fuel.
 - (ii) Hazardous waste fuel produced from oil-bearing hazardous waste from petroleum refining production and transportation practices, where such hazardous wastes are reintroduced into a refining process after a point at which contaminants are removed, so long as the fuel meets the used oil fuel specification under rule 3745-279-11 of the Administrative Code.
 - (iii) Oil reclaimed from oil-bearing hazardous wastes from petroleum refining, production, and transportation practices, which reclaimed

oil is burned as a fuel without reintroduction to a refining process, so long as the reclaimed oil meets the used oil specification under rule 3745-279-11 of the Administrative Code.

- (e) Contaminated wipes and apparel that are intended to be laundered and reused. Contaminated wipes and apparel including but not limited to rags, mops, drop cloths, and apparel (e.g., gloves, uniforms, smocks, and coveralls) made of woven or unwoven, natural or synthetic materials (e.g., fabric, leather, or ~~rubberlike~~rubber-like material) that exhibit a characteristic of hazardous waste or are otherwise contaminated with hazardous waste as ~~defined~~described in rule 3745-51-03 of the Administrative Code, are intended to be cleaned on-site or to be sent to a laundry or other cleaning facility for cleaning to be cleaned, provided all the following conditions are met:
- (i) Contaminated wipes and apparel, when accumulated, stored, and transported, are contained in non-leaking, closed containers. The containers shall be able to contain free liquids, should free liquids occur.
 - (ii) Contaminated wipes and apparel are not burned for energy recovery, used to produce a fuel, contained in fuels, used in a manner ~~constituting that constitutes~~ disposal, or used to produce products that are applied to the land according to rules 3745-51-02 and 3745-266-20 of the Administrative Code.
 - (iii) Contaminated wipes and apparel are not otherwise exempt under paragraph (A)(26) of rule 3745-51-04 of the Administrative Code.
 - (iv) Hazardous waste shall not be mixed with the contaminated wipes and apparel.
 - (v) The generator of the contaminated wipes and apparel shall do one of the following:
 - (a) Ensure the contaminated wipes and apparel or the container contain no "free liquids" as defined in rule 3745-50-10 of the Administrative Code at the point the wipes and apparel are sent on-site to be cleaned or transported off-site ~~for cleaning to be cleaned~~to be cleaned.
 - (b) Develop and implement a written procedure to ensure that the wipes and apparel contain no free liquids when placed in the

container and that no free liquids are added to the container at any time.

(c) Maintain a written explanation as to why no free liquids will occur in the container.

(vi) Contaminated wipes and apparel are not contaminated with acute hazardous waste as ~~defined~~described in rule 3745-51-30 and listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code.

(vii) Contaminated wipes and apparel that are ~~only~~ contaminated only with used oil shall contain no visible free flowing used oil, in accordance with paragraph (C)(1) of rule 3745-279-10 of the Administrative Code.

[Comment: Items ~~containing~~that contain free flowing used oil are subject to Chapter 3745-279 of the Administrative Code.

(viii) Contaminated wipes and apparel are cleaned on-site or sent to an off-site laundry or cleaning facility that is subject to regulation under Section 402 or Section 307(b) of the Clean Water Act for discharge to a publicly owned treatment works or for discharge directly to the waters of the state.

[Comment: The operator of the on-site or off-site laundry or cleaning facility shall evaluate, in accordance with rule 3745-52-11 of the Administrative Code, all wastes generated at such facilities, including all contaminated wipes and apparel that are discarded.]

(4) Used oil that is recycled and is also a hazardous waste solely because the used oil exhibits a hazardous characteristic is not subject to Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, but is regulated under Chapter 3745-279 of the Administrative Code. Used oil that is recycled includes any used oil which is reused, following the used oil's original use, for any purpose (including the purpose for which the oil was originally used). Such term includes, but is not limited to, oil which is re-refined, reclaimed, burned for energy recovery, or reprocessed.

(5) Hazardous waste that is exported or imported for purpose of recovery is subject to the requirements of 40 ~~CFR~~C.F.R. Part 262; subpart H.

- (B) Generators and transporters of recyclable materials are subject to the applicable requirements of Chapters 3745-52 and 3745-53 of the Administrative Code; and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, except as provided in paragraph (A) of this rule.
- (C) Recyclable materials that are stored before being recycled, recycled without storage, or entered into a recycling process within seventy-two hours.
- (1) Owners or operators of facilities that store recyclable materials before the materials are recycled shall obtain a hazardous waste installation and operation permit in accordance with Chapter 3734. of the Revised Code, except as provided in paragraph (C)(3)(a) of this rule, and are regulated under all applicable provisions of Chapters 3745-54, 3745-55, 3745-65, 3745-66, 3745-266, and 3745-270, and rules 3745-50-40 to 3745-50-235, 3745-56-20 to 3745-56-31, 3745-56-50 to 3745-56-59, 3745-67-20 to 3745-67-30, and 3745-67-50 to 3745-67-60 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, except as provided in paragraph (A) of this rule. (The recycling process itself is exempt from regulation.)
- (2) Owners or operators of facilities that recycle recyclable materials without storing ~~them~~the recyclable materials before ~~they are recycled~~recycling are subject to all of the following requirements, except as provided in paragraph (A) of this rule:
- (a) The requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.
- (b) Rules 3745-65-71 and 3745-65-72 of the Administrative Code (~~dealing with~~the use of the manifest and manifest discrepancies).
- (c) [Reserved.]
- (d) Rule 3745-65-75 of the Administrative Code, biennial reporting requirements.
- (3) Limited storage prior to recycling.
- (a) Owners or operators of facilities that enter recyclable materials into a recycling process within seventy-two hours after arrival at the facility, except as provided in paragraph (A)(2) of this rule, may store recyclable materials in containers, tanks, or containment buildings without an Ohio hazardous waste permit, provided that all of the following requirements are met:

- (i) The notification and U.S. EPA identification number requirements of rule 3745-65-11 of the Administrative Code. A description of the recycling process shall be provided in the comments section of the notification form. The owner or operator shall renotify when there is a change in the recycling process or when the recycling operations cease.
- (ii) The requirements for container management of rules 3745-66-71 to 3745-66-77 of the Administrative Code.
- (iii) The requirements for tank management of rules 3745-66-90 to 3745-66-96, 3745-66-98, 3745-66-99, and paragraphs (A) and (B) of rule 3745-66-97 of the Administrative Code.
- (iv) The requirements for containment buildings of rules 3745-256-100 to 3745-256-101 of the Administrative Code.
- (v) The security requirements of rule 3745-65-14 of the Administrative Code.
- (vi) The inspection requirements of rule 3745-65-15 of the Administrative Code.
- (vii) The personnel training requirements of rule 3745-65-16 of the Administrative Code.
- (viii) The requirements for ignitable wastes, reactive wastes, or incompatible wastes of rule 3745-65-17 of the Administrative Code.
- (ix) The preparedness and prevention requirements of rules 3745-65-30 to 3745-65-37 of the Administrative Code.
- (x) The contingency plan and emergency procedures requirements of rules 3745-65-50 to 3745-65-56 of the Administrative Code.
- (xi) The manifest system, recordkeeping, and reporting requirements of rules 3745-65-70 to 3745-65-72 of the Administrative Code.
- (xii) The operating record requirements of paragraphs (A) and (B)(3) to (B)(14) of rule 3745-65-73 of the Administrative Code.
- (xiii) Maintain an inventory log in the operating record ~~containing that~~ contain this information for three years:

- (a) The date and time when the recyclable material arrived at the facility.
 - (b) The quantity and type of material received.
 - (c) The name and address of the facility where the recyclable materials shipment originated.
 - (d) The date and time that the recyclable material was placed into the recycling process.
- (xiv) The availability, retention, and disposition of records requirements of rule 3745-65-74 of the Administrative Code.
- (xv) The biennial report requirements of rule 3745-65-75 of the Administrative Code.
- (xvi) The unmanifested waste report requirements of rule 3745-65-76 of the Administrative Code.
- (xvii) The additional reports requirements of rule 3745-65-77 of the Administrative Code.
- (xviii) The closure requirements of paragraphs (A) and (B) of rule 3745-66-11 and rule 3745-66-14 of the Administrative Code.
- (xix) The financial assurance requirements of rule 3745-51-100 of the Administrative Code.
- (xx) The owner or operator shall give advance notice to the director of any anticipated noncompliance with the seventy-two hour time limit for storage. This notice shall contain all of the following:
 - (a) The cause of the anticipated noncompliance.
 - (b) The name, address, and telephone number of the owner or operator.
 - (c) The name, address, and telephone number of the facility.
 - (d) The date and time of the anticipated noncompliance.
 - (e) The name and quantity of materials involved.
 - (f) The estimated time frame for noncompliance.

- (b) Owners or operators of facilities that do not enter recyclable materials into a recycling process within seventy-two hours after arrival at the facility, except as provided in paragraph (A)(2) of this rule, are subject to the requirements of paragraph (C)(1) of this rule.

(D) [Reserved.]

[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."]

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3745-51-07

Residues of hazardous waste in empty containers.**(A) Hazardous waste remaining in a container.**

- (1) Any hazardous waste remaining in either an empty container or an inner liner removed from an empty container, as described in paragraph (B) of this rule, is not subject to regulation under rules 3745-50-40 to 3745-50-235 or Chapters 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, or 3745-270 of the Administrative Code or to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.
- (2) Any hazardous waste in either a container that is not empty or an inner liner removed from a container that is not empty, as described in paragraph (B) of this rule, is subject to regulation under ~~rules 3745-50-40 to 3745-50-235 and~~ Chapters ~~3745-50,~~ 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code and to the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.

(B) A container that has held any hazardous waste is empty when the following criteria are met:

- (1) A container or an inner liner removed from a container that has held any hazardous waste, except a waste that is a compressed gas or that is identified as an acute hazardous waste in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code, is empty if:
 - (a) All wastes have been removed that can be removed using the practices commonly employed to remove materials from that type of container, e.g., pouring, pumping, and aspirating; and
 - (b) No more than 2.5 centimeters (one inch) of residue remain on the bottom of the container or inner liner; or
 - (c) Considering the capacity of the container, the following is met:
 - (i) No more than three per cent by weight of the total capacity of the container remains in the container or inner liner if the container is less than or equal to one hundred nineteen gallons in size; or
 - (ii) No more than 0.3 per cent by weight of the total capacity of the container remains in the container or inner liner if the container is greater than one hundred nineteen gallons in size.

- (2) A container that has held a hazardous waste that is a compressed gas is empty when the pressure in the container approaches atmospheric.
- (3) A container or an inner liner removed from a container that has held an acute hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code is empty if one of the following is met:
 - (a) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate.
 - (b) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal.
 - (c) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container, has been removed.

(C) Containers of hazardous waste pharmaceuticals are subject to rule 3745-266-507 of the Administrative Code to determine when the containers are considered empty, in lieu of this rule, except as provided by paragraphs (C) and (D) of rule 3745-266-507 of the Administrative Code.

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3745-51-11

Criteria for listing hazardous waste.

(A) The director ~~will~~shall list a waste as a hazardous waste only upon determining that the waste meets one of the following criteria:

- (1) The waste exhibits any of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.
- (2) The waste has been found to be fatal to humans in low doses or, in the absence of data on human toxicity, the waste has been shown in studies to have an oral LD50 toxicity (rat) of less than fifty milligrams per kilogram, an inhalation LC50 toxicity (rat) of less than two milligrams per liter, or a dermal LD50 toxicity (rabbit) of less than two hundred milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible illness. (Wastes listed in accordance with these criteria ~~will~~shall be designated acute hazardous wastes.)

[Comment: As used in this paragraph, LD (lethal dosage) and LC (lethal concentration) are standard measures of toxicity. A LD50 dosage, and a LC50 concentration, are fatal to fifty per cent of the test subjects.]

- (3) The waste contains any of the toxic constituents listed in the appendix to this rule and, after considering the following factors, the director concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed:
 - (a) The nature of the toxicity presented by the constituent.
 - (b) The concentration of the constituent in the waste.
 - (c) The potential of the constituent or any toxic degradation product of the constituent to migrate from the waste into the environment under the types of improper management considered in paragraph (A)(3)(g) of this rule.
 - (d) The persistence of the constituent or any toxic degradation product of the constituent.

- (e) The potential for the constituent or any toxic degradation product of the constituent to degrade into nonharmful constituents and the rate of degradation.
 - (f) The degree to which the constituent or any degradation product of the constituent bioaccumulates in ecosystems.
 - (g) The plausible types of improper management to which the waste could be subjected.
 - (h) The quantities of the waste generated at individual generation sites or on a regional or national basis.
 - (i) The nature and severity of the human health and environmental damage that has occurred as a result of the improper management of wastes containing the constituent.
 - (j) Action taken by other governmental agencies or regulatory programs based on the health or environmental hazard posed by the waste or waste constituent.
 - (k) Such other factors as may be appropriate. Substances ~~will~~shall be listed in the appendix to this rule only if those substances have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. (Wastes listed in accordance with these criteria ~~will~~shall be designated toxic wastes.)
- (B) The director may list classes or types of waste as hazardous waste if the director has reason to believe that individual wastes, within the class or type of waste, typically or frequently are hazardous under the definition of "hazardous waste" in Section 1004(5) of the Resource Conservation and Recovery Act.
- (C) The director ~~will~~shall use the criteria for listing specified in this rule to establish the exclusion limits referred to in rule ~~3745-51-05~~3745-52-13 of the Administrative Code.
- (D) The director shall not list any waste that the administrator delisted or excluded by an amendment to the federal regulations, any waste that the administrator declined to list by publishing a denial of a rulemaking petition or by withdrawal of a proposed listing in the Federal Register after May 18, 1980, or any waste oil or polychlorinated biphenyl not listed by the administrator.

[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."]

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Appendix to rule 3745-51-11 of the Administrative Code

HAZARDOUS CONSTITUENTS

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
A2213	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester	30558-43-1	U394
Acetonitrile	Same	75-05-8	U003
Acetophenone	Ethanone, 1-phenyl-	98-86-2	U004
2-Acetylaminefluorone	Acetamide, N-9H-fluoren-2-yl-	53-96-3	U005
Acetyl chloride	Same	75-36-5	U006
1-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamamide	79-06-1	U007
Acrylonitrile	2-Propenenitrile	107-13-1	U009
Aflatoxins	Same	1402-68-2	----
Aldicarb	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl] oxime	116-06-3	P070
Aldicarb sulfone	Propanal, 2-methyl-2-(methylsulfonyl)-, O-[(methylamino)carbonyl] oxime	1646-88-4	P203
Alrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
Allyl chloride	1-Propane, 3-chloro	107-05-1	----
Aluminum phosphide	Same	20859-73-8	P006
4-Aminobiphenyl	[1,1'-Biphenyl]-4-amine	92-67-1	----
5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4	P007
4-Aminopyridine	4-Pyridinamine	504-24-5	P008
Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5	U011

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6	P119
Aniline	Benzenamine	62-53-3	U012
o-Anisidine (2-methoxyaniline)	Benzenamine, 2-Methoxy-	90-04-0	----
Antimony	Same	7440-36-0	----
Antimony compounds, N.O.S.*	-----	-----	----
Aramite	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	----
Arsenic	Same	7440-38-2	----
Arsenic compounds, N.O.S.*	-----	-----	----
Arsenic acid	Arsenic acid H_3AsO_4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3	P012
Auramine	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl	492-80-8	U014
Azaserine	L-Serine, diazoacetate (ester)	115-02-6	U015
Barban	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester	101-27-9	U280
Barium	Same	7440-39-3	----
Barium compounds, N.O.S.*	-----	-----	----
Barium cyanide	Same	542-62-1	P013
Bendiocarb	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate	22781-23-3	U278
Bendiocarb phenol	1,3-Benzodioxol-4-ol, 2,2-dimethyl-	22961-82-6	U364

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Benomyl	Carbamic acid, [1-[(butylamino)carbonyl]-1Hbenzimidazol-2-yl]-, methyl ester	17804-35-2	U271
Benz[c]acridine	Same	225-51-4	U016
Benz[a]anthracene	Same	56-55-3	U018
Benzal chloride	Benzene, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U019
Benzene arsonic acid	Arsonic acid, phenyl-	98-05-5	----
Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5	U021
Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2	----
Benzo[j]fluoranthene	Same	205-82-3	----
Benzo(k)fluoranthene	Same	207-08-9	----
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
Benzyl chloride	Benzene, (chloromethyl)-	100-44-7	P028
Beryllium powder	Same	7440-41-7	P015
Beryllium compounds, N.O.S.*	-----	-----	----
Bis(pentamethylene)-thiuram tetrasulfide	Piperidine, 1,1'-(tetrathiodicarbonothioyl)-bis-	120-54-7	----
Butylate	Carbamothioic acid, bis(2-methylpropyl)-, S-ethyl ester	2008-41-5	----
Bromoacetone	2-Propanone, 1-bromo-	598-31-2	P017
Bromoform	Methane, tribromo-	75-25-2	U225
4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3	U030
Brucine	Strychnidin-10-one, 2,3-dimethoxy-	357-57-3	P018

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7	----
Cacodylic acid	Arsinic acid, dimethyl-	75-60-5	U136
Cadmium	Same	7440-43-9	----
Cadmium compounds, N.O.S.*	-----	-----	----
Calcium chromate	Chromic acid H ₂ CrO ₄ , calcium salt	13765-19-0	U032
Calcium cyanide	Calcium cyanide Ca(CN) ₂	592-01-8	P021
Carbaryl	1-Naphthalenol, methylcarbamate	63-25-2	U279
Carbendazim	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester	10605-21-7	U372
Carbofuran	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate	1563-66-2	P127
Carbofuran phenol	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-	1563-38-8	U367
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Carbosulfan	Carbamic acid, [(dibutylamino)thio] methyl-, 2,3-dihydro-2,2-dimethyl-7-benzofuranyl ester	55285-14-8	P189
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-	305-03-3	U035
Chlordane	1,2,4,5,6,7,8,8-Octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methano-1H-indene	57-74-9	U036
Chlordane (alpha and gamma isomers)	-----	-----	U036
Chlorinated benzenes, N.O.S.*	-----	-----	----

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Chlorinated ethane, N.O.S.*	-----	-----	----
Chlorinated fluorocarbons, N.O.S.*	-----	-----	----
Chlorinated naphthalene, N.O.S.*	-----	-----	----
Chlorinated phenol, N.O.S.*	-----	-----	----
Chlornaphazin	Naphthalenamine, N,N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0	P023
Chloroalkyl ethers, N.O.S.*	-----	-----	----
p-Chloroaniline	Benzenamine, 4- chloro-	106-47-8	P024
Chlorobenzene	Benzene, chloro-	108-90-7	U037
Chlorobenzilate	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester	510-15-6	U038
p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7	U039
2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8	U042
Chloroform	Methane, trichloro-	67-66-3	U044
Chloromethyl methyl ether	Methane, chloromethoxy-	107-30-2	U046
beta-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7	U047
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl) thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
Chloroprene	1,3-Butadiene, 2-chloro-	126-99-8	----
3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7	P027
Chromium	Same	7440-47-3	----

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Chromium compounds, N.O.S.*	-----	-----	----
Chrysene	Same	218-01-9	U050
Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8	----
Coal tar creosote	Same	8007-45-2	----
Copper cyanide	Copper cyanide CuCN	544-92-3	P029
Copper dimethyldithiocarbamate	Copper, bis(dimethylcarbamo-dithioato-S,S')-	137-29-1	----
Creosote	Same	-----	U051
p-Cresidine	2-Methoxy-5-methylbenzenamine	120-71-8	----
Cresol (Cresylic acid)	Phenol, methyl-	1319-77-3	U052
Crotonaldehyde	2-Butenal	4170-30-3	U053
m-Cumenyl methylcarbamate	Phenol, 3-(methylethyl)-, methyl carbamate	64-00-6	P202
Cyanides (soluble salts and complexes) N.O.S.*	-----	-----	P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	beta-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7	----
Cycloate	Carbamothioic acid, cyclohexylethyl-, S-ethyl ester	1134-23-2	----
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
2,4-D, salts, esters	-----	-----	U240
Daunomycin	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy-alpha-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-	20830-81-3	U059
Dazomet	2H-1,3,5-thiadiazine-2-thione, tetrahydro-3,5-dimethyl	533-74-4	----
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1,1'-(dichloroethenylidene)bis[4-chloro-	72-55-9	----
DDT	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, -(2,3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	----
Dibenz[a,j]acridine	Same	224-42-0	----
Dibenz[a,h]anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g]carbazole	Same	194-59-2	----
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	----
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	----
Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.*	Benzene, dichloro-	25321-22-6	----

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
3,3'-Dichlorobenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.*	Dichloroethylene	25323-30-2	----
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'oxybis[2-chloro-	111-44-4	U025
Dichloroisopropyl ether	Propane, 2,2'-oxybis[2-chloro-	108-60-1	U027
Dichloromethoxy ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1	U024
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6	P036
Dichloropropane, N.O.S.*	Propane, dichloro-	26638-19-7	----
Dichloropropanol, N.O.S.*	Propanol, dichloro-	26545-73-3	----
Dichloropropene, N.O.S.*	1-Propene, dichloro-	26952-23-8	----
1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6	U084
Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7, 7a-octahydro-, (1aalpha,2beta,2aalpha, 3beta,6beta,6aalpha,7beta,7aalpha)-	60-57-1	P037
1,2:3,4-Diepoxybutane	2,2'-Bioxirane	1464-53-5	U085
Diethylarsine	Arsine, diethyl-	692-42-2	P038
Diethylene glycol, dicarbamate	Ethanol, 2,2'-oxybis-, dicarbamate	5952-26-1	U395
1,4-Diethyleneoxide	1,4-Dioxane	123-91-1	U108

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Diethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7	U028
N,N'-Diethylhydrazine	Hydrazine, 1,2-diethyl-	1615-80-1	U086
O,O-Diethyl S-methyldithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2	P040
Diethylstilbesterol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-(E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluoro phosphate (DFP)	Phosphorofluoridic acid bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7	U093
2,4-Dimethylaniline (2,4-xylidine)	Benzenamine, 2,4-dimethyl-	95-68-1	----
7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7	U097
1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7	U098
1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8	U099

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
alpha,alpha-Dimethyl phenethylamine	Benzeneethanamine, alpha,alpha-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethyl phthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	U103
Dimetilan	Carbamic acid, dimethyl-, 1-[(dimethylamino)carbonyl]-5-methyl-1-H-pyrazol-3-yl ester	644-64-4	P191
Dinitrobenzene, N.O.S.*	Benzene, dinitro-	25154-54-5	----
4,6-Dinitro-o-cresol	Phenol, 2-methyl-4,6-dinitro-	534-52-1	P047
4,6-Dinitro-o-cresol salts	-----	-----	P047
2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5	P048
2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U017
Diphenylamine	Benzenamine, N-phenyl-	122-39-4	----
1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7	U109
Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7	U111
Disulfiram	Thioperoxydicarbonic diamide, tetraethyl	97-77-8	----
Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH	541-53-7	P049
Endosulfan	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide	115-29-7	P050

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Endothall	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid	145-73-3	P088
Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-	72-20-8	P051
Endrin metabolites	-----	-----	P051
Epichlorohydrin	Oxirane, (chloromethyl)-	106-89-8	U041
Epinephrine	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-	51-43-4	P042
EPTC	Carbamothioic acid, dipropyl-, S-ethyl ester	759-94-4	----
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethyl ziram	Zinc, bis(diethylcarbamodithioato-S,S')-	14324-55-1	----
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethanediylbis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters	-----	-----	U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2	U077
Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy-	110-80-5	U359
Ethyleneimine	Aziridine	151-56-4	P054
Ethylene oxide	Oxirane	75-21-8	U115
Ethylenethiourea	2-Imidazolidinethione	96-45-7	U116
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	52-85-7	P097
Ferbam	Iron, tris(dimethylcarbamo-dithioat-S,S')-,	14484-64-1	----
Fluoranthene	Same	206-44-0	U120
Fluorine	Same	7782-41-4	P056
Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7	P057
Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8	P058
Formaldehyde	Same	50-00-0	U122
Formetanate hydrochloride	Methanimidamide, N,N-dimethyl-N'- [3-[(methylamino)carbonyl] oxy]phenyl]-, monohydrochloride	23422-53-9	P198
Formic acid	Same	64-18-6	U123
Formparanate	Methanimidamide, N,N-dimethyl-N'- [2-methyl-4-[(methylamino)carbonyl] oxy]phenyl]-	17702-57-7	P197
Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4	U126
Halomethanes, N.O.S.*	-----	-----	----
Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8- heptachloro-3a,4,7,7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a- hexahydro-, (1aalpha,1bbeta,2alpha, 5alpha,5abeta,6beta,6aalpha)-	1024-57-3	----
Heptachlor epoxide (alpha, beta, and gamma isomers)	-----	-----	----
Heptachlorodibenzofurans	-----	-----	----
Heptachlorodibenzo-p-dioxins	-----	-----	----
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclopentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins	-----	-----	----
Hexachlorodibenzofurans	-----	-----	----
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethyl ester	757-58-4	P062
Hydrazine	Same	302-01-2	U133
Hydrogen cyanide	Hydrocyanic acid	74-90-8	P063
Hydrogen fluoride	Hydrofluoric acid	7664-39-3	U134
Hydrogen sulfide	Hydrogen sulfide H ₂ S	7783-06-4	U135
Indeno[1,2,3-cd]pyrene	Same	193-39-5	U137
3-Iodo-2-propynyl n-butylcarbamate	Carbamic acid, butyl-, 3-iodo-2-propynyl ester	55406-53-6	----
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	U140
Isodrin	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-	465-73-6	P060
Isolan	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester	119-38-0	P192
Isosafrole	1,3-Benzodioxole, 5-(1-propenyl)-	120-58-1	U141
Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0	U142

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Lasiocarpine	2-Butenoic acid, 2-methyl-,7- [[2,3-dihydroxy-2-(1-methoxyethyl)-3- methyl-1-oxobutoxy]methyl]-2,3,5,7a- tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1alpha(Z),7-(2S*,3R*),7aalpha]]-	303-34-4	U143
Lead	Same	7439-92-1	----
Lead compounds, N.O.S.*	-----	-----	----
Lead acetate	Acetic acid, lead(2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead(2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)-tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha, 6beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Manganese dimethyldithiocarbamate	Manganese, bis(dimethylcarbomodithioato-S,S')-	15339-36-3	P196
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)aminol]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
Mercury compounds, N.O.S.*	-----	-----	----
Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4	P065
Metam sodium	Carbamodithioic acid, methyl-, monosodium salt	137-42-8	----
Methacrylonitrile	2-Propenenitrile, 2-methyl-	126-98-7	U152
Methapyrilene	1,2-Ethanediamine, N,N-dimethyl- N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155
Methiocarb	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate	2032-65-7	P199

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Methomyl	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methyl chlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis (2-chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
Methylene chloride	Methane, dichloro-	75-09-2	U080
Methyl ethyl ketone (MEK)	2-Butanone	78-93-3	U159
Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methylacetonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methylmethanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	----
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071
Methylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Metolcarb	Carbamic acid, methyl-, 3-methylphenyl ester	1129-41-5	P190
Mexacarbate	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)	315-18-4	P128
Mitomycin C	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione,6-amino-8-[[aminocarbonyl]oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha,8beta,8aalpha,8balph)]-	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Molinate	1H-Azepine-1-carbothioic acid, hexahydro-, S-ethyl ester	2212-67-1	----
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2	----
Naphthalene	Same	91-20-3	U165
1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4	U166
alpha-Naphthylamine	1-Naphthalenamine	134-32-7	U167
beta-Naphthylamine	2-Naphthalenamine	91-59-8	U168
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
Nickel	Same	7440-02-0	----
Nickel compounds, N.O.S.*	-----	-----	----
Nickel carbonyl	Nickel carbonyl Ni(CO) ₄ , (T-4)-	13463-39-3	P073
Nickel cyanide	Nickel cyanide Ni(CN) ₂	557-19-7	P074
Nicotine	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-,(S)-	54-11-5	P075
Nicotine salts	-----	-----	P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	U169

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Nitrogen dioxide	Nitrogen oxide NO ₂	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	----
Nitrogen mustard, hydrochloride salt	-----	-----	----
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)- N-methyl-, N-oxide	126-85-2	----
Nitrogen mustard, n-oxide, hydrochloride salt	-----	-----	----
Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0	P081
p-Nitrophenol	Phenol, 4-nitro-	100-02-7	U170
2-Nitropropane	Propane, 2-nitro-	79-46-9	U171
Nitrosamines, N.O.S.*	-----	35576-91-1	----
N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamin e	Ethanamine, N-methyl-N-nitroso-	10595-95-6	----
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N- methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamin e	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	----
N-Nitrosornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-,(S)-	16543-55-8	----
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	----
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	3268-87-9	----
Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran	39001-02-0	----
Octamethylpyro phosphoramidate	Diphosphoramidate, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO ₄ , (T-4)-1,3,5-	20816-12-0	P087
Oxamyl	Ethanimidothioic acid, 2-(dimethylamino)- N-[[[(methylamino)carbonyl]oxy]-2-oxo-, methyl ester	23135-22-0	P194
Paraldehyde	Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pebulate	Carbamothioic acid, butylethyl-, S-propyl ester	1114-71-2	----
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins	-----	-----	----
Pentachlorodibenzofurans	-----	-----	----
Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	----

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
1,2-Phenylenediamine	1,2-Benzenediamine	95-54-5	----
1,3-Phenylenediamine	1,3-Benzenediamine	108-45-2	----
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S.*	-----	-----	----
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
Physostigmine	Pyrrolo[2,3-b]indol-5-01, 1,2,3,3a,8,8a-hexahydro- 1,3a,8-trimethyl-, methylcarbamate (ester),)3aS-cis)-	57-47-6	P204
Physostigmine salicylate	Benzoic acid, 2-hydroxy-, compd. with (3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo[2,3-b]indol-5-yl methylcarbamate ester (1:1)	57-64-7	P188
2-Picoline	Pyridine, 2-methyl-	109-06-8	U191
Polychlorinated biphenyls, N.O.S.*	-----	-----	----
Potassium cyanide	Potassium cyanide K(CN)	151-50-8	P098
Potassium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl, potassium salt	128-03-0	----
Potassium n-hydroxymethyl-n- methyl-dithiocarbamate	Carbamodithioic acid, (hydroxymethyl)methyl-, monopotassium salt	51026-28-9	----
Potassium n-methyldithiocarbamate	Carbamodithioic acid, methyl-monopotassium salt	137-41-7	----
Potassium pentachlorophenate	Pentachlorophenol, potassium salt	7778736	None

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Potassium silver cyanide	Argentate(1-), bis(cyano-C)-, potassium	506-61-6	P099
Promecarb	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate	2631-37-0	P201
Pronamide	Benzamide,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
Propham	Carbamic acid, phenyl-, 1-methylethyl ester	122-42-9	U373
Propoxur	Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	U411
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	----
Prosulfocarb	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester	52888-80-9	U387
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 1,17-dimethoxy- 18-[(3,4,5-trimethoxybenzoyl)oxy]-,methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7	U203
Selenium	Same	7782-49-2	----
Selenium compounds, N.O.S.*	-----	-----	----
Selenium dioxide	Selenious acid	7783-00-8	U204
Selenium sulfide	Selenium sulfide SeS ₂	7488-56-4	U205

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Selenium, tetrakis (dimethyl-dithiocarbamate)	Carbamodithioic acid, dimethyl-, tetraanhydrosulfide with orthothioselenious acid	144-34-3	----
Selenourea	Same	630-10-4	P103
Silver	Same	7440-22-4	----
Silver compounds, N.O.S.*	-----	-----	----
Silver cyanide	Silver cyanide Ag(CN)	506-64-9	P104
Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide Na(CN)	143-33-9	P106
Sodium dibutyldithiocarbamate	Carbamodithioic acid, dibutyl-, sodium salt	136-30-1	----
Sodium diethyldithiocarbamate	Carbamodithioic acid, diethyl-, sodium salt	148-18-5	----
Sodium dimethyldithiocarbamate	Carbamodithioic acid, dimethyl-, sodium salt	128-04-1	----
Sodium pentachlorophenate	Pentachlorophenol, sodium salt	131522	None
Streptozotocin	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts	-----	-----	P108
Sulfallate	Carbamodithioic acid, diethyl-, 2-chloro-2-propenyl ester	95-06-7	----
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6	----
Tetrabutylthiuram disulfide	Thioperoxydicarbonic diamide, tetrabutyl	1634-02-2	----
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins	-----	-----	----
Tetrachlorodibenzofurans	-----	-----	----

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Tetrachloroethane, N.O.S.*	Ethane, tetrachloro-, N.O.S.	25322-20-7	----
1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6	U208
1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210
2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
2,3,4,6-Tetrachlorophenol, potassium salt	Same	53535276	None
2,3,4,6-Tetrachlorophenol, sodium salt	Same	25567559	None
Tetraethyldithiopyro phosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5	P109
Tetraethyl lead	Plumbane, tetraethyl-	78-00-2	P110
Tetraethyl pyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3	P111
Tetramethylthiuram monosulfide	Bis(dimethylthiocarbamoyl) sulfide	97-74-5	----
Tetranitromethane	Methane, tetranitro-	509-14-8	P112
Thallium	Same	7440-28-0	----
Thallium compounds, N.O.S.*	-----	-----	----
Thallic oxide	Thallium oxide Tl_2O_3	1314-32-5	P113
Thallium(I) acetate	Acetic acid, thallium(1+) salt	563-68-8	U214
Thallium(I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9	U215
Thallium(I) chloride	Thallium chloride $TlCl$	7791-12-0	U216
Thallium(I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1	U217
Thallium selenite	Selenious acid, dithallium(1+) salt	12039-52-0	P114
Thallium(I) sulfate	Sulfuric acid, dithallium(1+) salt	7446-18-6	P115
Thioacetamide	Ethanethioamide	62-55-5	U218

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Thiodicarb	Ethanimidothioic acid, N,N'-[thiobis [(methylimino)carbonyloxy]]bis-, dimethyl ester	59669-26-0	U410
Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-, 0-[(methylamino)carbonyl] oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophanate-methyl	Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester	23564-05-8	U409
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	U219
Thiram	Thioperoxydicarbonicdiamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-	137-26-8	U244
Tirpate	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)carbonyl] oxime	26419-73-8	P185
Toluene	Benzene, methyl-	108-88-3	U220
Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8	U221
Toluene-2,4-diamine	1,3-Benzenediamine, 4-methyl-	95-80-7	----
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	----
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	----
Toluenediisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
Toxaphene	Same	8001-35-2	P123
Triallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester	2303-17-5	U389

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1	----
1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromono fluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.*	-----	25735-29-9	----
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	----
Triethylamine	Ethanamine, N,N-diethyl	121-44-8	U404
O,O,O-Triethyl phosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1	----
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(1-aziridinyl) phosphine sulfide	Aziridine, 1,1',1''-phosphinothioylidynetris-	52-24-4	----
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl] -4,4'-diyl)bis(azo)]- bis[5-amino-4-hydroxy-, tetrasoidum salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V ₂ O ₅	1314-62-1	P120
Vernolate	Carbamothioic acid, dipropyl-, S-propyl ester	1929-77-7	----
Vinyl chloride	Ethene, chloro-	75-01-4	U043

Common Name	Chemical Abstracts Name	Chemical Abstracts No.	EPA Haz. Waste No.
Warfarin	2H-1-Benzopyran-2-one,4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one,4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%	81-81-2	P001
Warfarin salts,	when present at concentrations less than 0.3%	-----	U248
Warfarin salts,	when present at concentrations greater than 0.3%	-----	P001
Zinc cyanide	Zinc cyanide $Zn(CN)_2$	557-21-1	P121
Zinc phosphide	Zinc phosphide Zn_3P_2 , when present at concentrations of 10% or less	1314-84-7	U249
Zinc phosphide	Zinc phosphide Zn_3P_2 , when present at concentrations of greater than 10%	1314-84-7	P122
Ziram	Zinc, bis(dimethylcarbamo-dithioato-S,S')-, (T-4)-	137-30-4	P205
* The abbreviation N.O.S. (not otherwise specified) signifies those members of the general class not specifically listed by name in this appendix.			

~~[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."]~~

3745-51-30

Lists of hazardous wastes - general.

(A) A waste is a hazardous waste if ~~it~~the waste is listed as such in rules 3745-51-30 to 3745-51-35 of the Administrative Code, unless ~~it~~the waste has been excluded under 40 ~~CFR~~C.F.R. 260.20 and 40 ~~CFR~~C.F.R. 260.22.

~~[Comment: See paragraph (E) of this rule for wastes generated in Ohio that have been excluded from listing as hazardous waste under rules 3745-51-30 to 3745-51-35 of the Administrative Code.]~~

(B) The administrator ~~will~~shall indicate ~~his~~the basis for listing the classes or types of wastes listed by employing one or more of the following hazard codes:

Ignitable waste	(I)
Corrosive waste	(C)
Reactive waste	(R)
Toxicity characteristic waste	(E)
Acute hazardous waste	(H)
Toxic waste	(T)

The appendix to this rule identifies the constituents which caused the administrator to list the waste as a toxicity characteristic waste (E) or toxic waste (T) as shown in rules 3745-51-31 and 3745-51-32 of the Administrative Code.

(C) Each hazardous waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code is assigned an EPA hazardous waste number which precedes the name of the waste. This number ~~must~~shall be used in complying with the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity and certain recordkeeping and reporting requirements under Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-270, and rules 3745-50-40 to 3745-50-235 of the Administrative Code.

(D) The following hazardous wastes listed in rule 3745-51-31 of the Administrative Code are subject to the exclusion limits for acutely hazardous wastes established in rule ~~3745-51-05~~3745-52-13 of the Administrative Code: EPA hazardous waste numbers F020, F021, F022, F023, F026, and F027.

[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: 10/5/2020
Five Year Review (FYR) Dates: 7/13/2020 and 10/05/2025

CERTIFIED ELECTRONICALLY

Certification

09/21/2020

Date

Promulgated Under: 119.03
Statutory Authority: 3734.12
Rule Amplifies: 3734.12
Prior Effective Dates: 04/15/1981, 05/22/1981 (Emer.), 08/26/1981 (Emer.),
12/02/1981, 01/07/1983, 05/29/1985 (Emer.),
08/29/1985, 01/30/1986, 11/13/1987, 02/23/1989,
12/30/1989, 02/11/1992, 04/15/1993, 09/02/1997,
12/07/2000, 12/07/2004, 02/16/2009, 03/17/2012

Appendix to rule 3745-51-30 of the Administrative Code

Basis for Listing Hazardous Waste

EPA hazardous waste No. <u>number</u>	Hazardous constituents for which listed
F001	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
F002	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane.
F003	N.A.
F004	Cresols and cresylic acid, nitrobenzene.
F005	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane.
F006	Cadmium, hexavalent chromium, nickel, cyanide (complexed).
F007	Cyanide (salts).
F008	Cyanide (salts).
F009	Cyanide (salts).
F010	Cyanide (salts).
F011	Cyanide (salts).
F012	Cyanide (complexed).
F019	Hexavalent chromium, cyanide (complexed).
F020	Tetra- and pentachlorodibenzo-p-dioxins; tetra and pentachlorodi-benzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F021	Penta- and hexachlorodibenzo-p-dioxins; penta- and hexachlorodibenzofurans; pentachlorophenol and its derivatives.
F022	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F023	Tetra-, and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.

AMENDED APPENDIX

EPA hazardous waste <u>№-number</u>	Hazardous constituents for which listed
F024	Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 1,1,1,2-tetra-chloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethylene, pentachloroethane, hexachloroethane, allyl chloride (3-chloropropene), dichloropropane, dichloropropene, 2-chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzene, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
F025	Chloromethane; dichloromethane; trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene; pentachloroethane; hexachloroethane; allyl chloride (3-chloropropene); dichloropropane; dichloropropene; 2-chloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene.
F026	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
F027	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F028	Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
F032	Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)-anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans.
F034	Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic, chromium.

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EPA hazardous waste No. number	Hazardous constituents for which listed
F035	Arsenic, chromium, lead.
F037	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F038	Benzene, benzo(a)pyrene, chrysene, lead, chromium.
F039	All constituents for which treatment standards are specified for multi-source leachate (wastewaters and nonwastewaters) under the table in rule 3745-270-40 of the Administrative Code.
K001	Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenyl, 2,4-dinitrophenol, trichlorophenols, tetrachlorophenols, 2,4-dinitrophenol, creosote, chrysene, naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene, acenaphthalene.
K002	Hexavalent chromium, lead
K003	Hexavalent chromium, lead.
K004	Hexavalent chromium.
K005	Hexavalent chromium, lead.
K006	Hexavalent chromium.
K007	Cyanide (complexed), hexavalent chromium.
K008	Hexavalent chromium.
K009	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
K010	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
K011	Acrylonitrile, acetonitrile, hydrocyanic acid.
K013	Hydrocyanic acid, acrylonitrile, acetonitrile.
K014	Acetonitrile, acrylamide.
K015	Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016	Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.

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EPA hazardous waste <u>№-number</u>	Hazardous constituents for which listed
K017	Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis(2-chloroethyl) ethers], trichloropropane, dichloropropanols.
K018	1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.
K019	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020	Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K021	Antimony, carbon tetrachloride, chloroform.
K022	Phenol, tars (polycyclic aromatic hydrocarbons).
K023	Phthalic anhydride, maleic anhydride.
K024	Phthalic anhydride, 1,4-naphthoquinone.
K025	Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026	Paraldehyde, pyridines, 2-picoline.
K027	Toluene diisocyanate, toluene-2, 4-diamine.
K028	1,1,1-trichloroethane, vinyl chloride.
K029	1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene chloride, chloroform.
K030	Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031	Arsenic.
K032	Hexachlorocyclopentadiene.
K033	Hexachlorocyclopentadiene.
K034	Hexachlorocyclopentadiene.

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EPA hazardous waste No. number	Hazardous constituents for which listed
K035	Creosote, chrysene, naphthalene, fluoranthene benzo(b) fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
K036	Toluene, phosphorodithioic and phosphorothioic acid esters.
K037	Toluene, phosphorodithioic and phosphorothioic acid esters.
K038	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K039	Phosphorodithioic and phosphorothioic acid esters.
K040	Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
K041	Toxaphene.
K042	Hexachlorobenzene, ortho-dichlorobenzene.
K043	2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K044	N.A.
K045	N.A.
K046	Lead.
K047	N.A.
K048	Hexavalent chromium, lead.
K049	Hexavalent chromium, lead.
K050	Hexavalent chromium.
K051	Hexavalent chromium, lead.
K052	Lead.
K060	Cyanide, naphthalene, phenolic compounds, arsenic.
K061	Hexavalent chromium, lead, cadmium.
K062	Hexavalent chromium, lead.
K069	Hexavalent chromium, lead, cadmium.
K071	Mercury.
K073	Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane, tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.

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EPA hazardous waste No. number	Hazardous constituents for which listed
K083	Aniline, diphenylamine, nitrobenzene, phenylenediamine.
K084	Arsenic.
K085	Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086	Lead, hexavalent chromium.
K087	Phenol, naphthalene.
K088	Cyanide (complexes).
K093	Phthalic anhydride, maleic anhydride.
K094	Phthalic anhydride.
K095	1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane.
K096	1,2-dichloroethane, 1,1,1-trichloroethane, 1,1,2-trichloroethane.
K097	Chlordane, heptachlor.
K098	Toxaphene.
K099	2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100	Hexavalent chromium, lead, cadmium.
K101	Arsenic.
K102	Arsenic.
K103	Aniline, nitrobenzene, phenylenediamine.
K104	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine.
K105	Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichlorophenol.
K106	Mercury.
K107	1,1-Dimethylhydrazine (UDMH).
K108	1,1-Dimethylhydrazine (UDMH).
K109	1,1-Dimethylhydrazine (UDMH).
K110	1,1-Dimethylhydrazine (UDMH).
K111	2,4-Dinitrotoluene.

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EPA hazardous waste No. number	Hazardous constituents for which listed
K112	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K113	2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114	2,4-Toluenediamine, o-toluidine, p-toluidine.
K115	2,4-Toluenediamine.
K116	Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K117	Ethylene dibromide.
K118	Ethylene dibromide.
K123	Ethylene thiourea.
K124	Ethylene thiourea.
K125	Ethylene thiourea.
K126	Ethylene thiourea.
K131	Dimethyl sulfate, methyl bromide.
K132	Methyl bromide.
K136	Ethylene dibromide.
K141	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indenol(1,2,3-cd)pyrene.
K142	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indenol(1,2,3-cd)pyrene.
K143	Benzene, benz(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene.
K144	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene.
K145	Benzene, benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, naphthalene.
K147	Benzene, benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indenol(1,2,3-cd)pyrene.
K148	Benz(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, indenol(1,2,3-cd)pyrene.

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EPA hazardous waste No. number	Hazardous constituents for which listed
K149	Benzotrichloride, benzyl chloride, chloroform, chloromethane, chlorobenzene, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, toluene.
K150	Carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene, hexachlorobenzene, pentachlorobenzene, 1,2,4,5-tetrachlorobenzene, 1,1,2,2-tetrachloroethane, tetrachloroethylene, 1,2,4-trichlorobenzene.
K151	Benzene, carbon tetrachloride, chloroform, hexachlorobenzene, pentachlorobenzene, toluene, 1,2,4,5-tetrachlorobenzene, tetrachloroethylene.
K156	Benomyl, carbaryl, carbendazim, carbofuran, carbosulfan, formaldehyde, methylene chloride, triethylamine.
K157	Carbon tetrachloride, formaldehyde, methyl chloride, methylene chloride, pyridine, triethylamine.
K158	Benomyl, carbendazim, carbofuran, carbosulfan, chloroform, methylene chloride.
K159	Benzene, butylate eptc, molinate, pebulate, vernaolate.
K161	Antimony, arsenic, metam-sodium, ziram.
K169	Benzene.
K170	Benzo(a)pyrene, dibenz(a,h)anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, 3-methylcholanthrene, 7,12-dimethylbenz(a)anthracene.
K171	Benzene, arsenic.
K172	Benzene, arsenic.
K174	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (1,2,3,4,6,7,8-HpCDD), 1,2,3,4,6,7,8-heptachlorodibenzofuran (1,2,3,4,6,7,8-HpCDF), 1,2,3,4,7,8,9-heptachlorodibenzofuran (1,2,3,6,7,8,9-HpCDF), HxCDDs (all hexachlorodibenzo-p-dioxins), HxCDFs (all hexachlorodibenzofurans), PeCDDs (all pentachlorodibenzo-p-dioxins), OCDD (1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin), OCDF (1,2,3,4,6,7,8,9-octachlorodibenzofuran), PeCDFs (all pentachlorodibenzofurans), TCDDs (all tetrachlorodibenzo-p-dioxins), TCDFs (all tetrachlorodibenzofurans).
K175	Mercury.

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EPA hazardous waste № <u>number</u>	Hazardous constituents for which listed
K176	Arsenic, lead.
K177	Antimony.
K178	Thallium.
K181	Aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, 1,3-phenylenediamine
N.A.	Waste is hazardous because it <u>the waste</u> fails the test for the characteristic of ignitability, <u>characteristic of</u> corrosivity, or <u>characteristic of</u> reactivity.

[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."]

3745-51-33

Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

The following materials or items are hazardous wastes if and when the materials or items are discarded or intended to be discarded as described in paragraph (A)(2)(a) of rule 3745-51-02 of the Administrative Code, when the materials or items are mixed with waste oil or used oil or other material and applied to the land for dust suppression or road treatment, when the materials or items are otherwise applied to the land in lieu of the original intended use or when the materials or items are contained in products that are applied to the land in lieu of the original intended use, or when, in lieu of the original intended use, the materials ~~or~~ items are produced for use as (or as a component of) a fuel, distributed for use as a fuel, or burned as a fuel.

- (A) Any commercial chemical product, or manufacturing chemical intermediate, having the generic name listed in paragraph (E) or (F) of this rule.
- (B) Any off-specification commercial chemical product or manufacturing chemical intermediate which, if ~~it met~~ specifications are met, would have the generic name listed in paragraph (E) or (F) of this rule.
- (C) Any residue remaining in a container or in an inner liner removed from a container that has held any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (E) or (F) of this rule, unless the container is "empty" as described in paragraph (B) of rule 3745-51-07 or rule 3745-266-507 of the Administrative Code.

[Comment: Unless the residue is being beneficially used or reused, or legitimately recycled or reclaimed, or being accumulated, stored, transported, or treated prior to such use, re-use, recycling, or reclamation, Ohio EPA considers the residue to be intended for discard, and thus, a hazardous waste. An example of a legitimate re-use of the residue would be where the residue remains in the container and the container is used to hold the same commercial chemical product or manufacturing chemical intermediate the container previously held. An example of the discard of the residue would be where the drum is sent to a drum reconditioner who reconditions the drum but discards the residue.]

- (D) Any residue or contaminated soil, water or other debris resulting from the cleanup of a spill, into or on any land or water, of any commercial chemical product or manufacturing chemical intermediate having the generic name listed in paragraph (E) or (F) of this rule, or any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any off-specification chemical product and manufacturing chemical intermediate which, if ~~it met~~ specifications are met, would have the generic name listed in paragraph (E) or (F) of this rule.

[Comment: As used in this rule, the phrase "commercial chemical products or manufacturing chemical intermediates having the generic name listed in ..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. That term does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraph (E) or (F) of this rule. Where a manufacturing process waste is deemed to be a hazardous waste because such waste contains a substance listed in paragraph (E) or (F) of this rule, such waste shall be listed in either rule 3745-51-31 or 3745-51-32 of the Administrative Code, or shall be identified as a hazardous waste by the characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.]

- (E) The commercial chemical products, manufacturing chemical intermediates or off-specification commercial chemical products or manufacturing chemical intermediates referred to in paragraphs (A) to (D) of this rule are identified as acute hazardous wastes (H) ~~and are subject to the small quantity exclusion described in paragraph (E) of rule 3745-51-05 of the Administrative Code.~~

[Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (toxicity), and R (reactivity). Absence of a letter indicates that the compound ~~only~~ is listed only for acute toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by EPA hazardous waste number.]

These wastes and their corresponding EPA hazardous waste numbers are:

(E) Alphabetical List

EPA Hazardous Waste Number	CAS #	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea

P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone
P004	309-00-2	Aldrin
P005	107-18-6	Allyl alcohol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P008	504-24-5	4-Aminopyridine
P009	131-74-8	Ammonium picrate (R)
P119	7803-55-6	Ammonium vanadate
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P010	7778-39-4	Arsenic acid H_3AsO_4
P012	1327-53-3	Arsenic oxide As_2O_3
P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic trioxide
P038	692-42-2	Arsine, diethyl-
P036	696-28-6	Arsonous dichloride, phenyl-
P054	151-56-4	Aziridine
P067	75-55-8	Aziridine, 2-methyl-
P013	542-62-1	Barium cyanide
P024	106-47-8	Benzenamine, 4-chloro-
P077	100-01-6	Benzenamine, 4-nitro-

P028	100-44-7	Benzene, (chloromethyl)-
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P014	108-98-5	Benzenethiol
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P188	57-64-7	Benzoic acid, 2hydroxy-, compd. with 3aS-cis)-1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5yl methylcarbamate ester (1:1)
P001	81-81-2 *	2H-1-Benzopyran-2-one, -hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3 per cent
P028	100-44-7	Benzyl chloride
P015	7440-41-7	Beryllium powder
P017	598-31-2	Bromoacetone
P018	357-57-3	Brucine
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, - [(methylamino)carbonyl] oxime
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $\text{Ca}(\text{CN})_2$
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7benzofuranyl ester
P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino) carbonyl]-5-methyl-1H-pyrazol-3yl ester
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P127	1563-66-2	Carbofuran

P022	75-15-0	Carbon disulfide
P095	75-44-5	Carbonic dichloride
P189	55285-14-8	Carbosulfan
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	p-Chloroaniline
P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P027	542-76-7	3-Chloropropionitrile
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P202	64-00-6	m-Cumenyl methylcarbamate
P030	-----	Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P016	542-88-1	Dichloromethyl ether
P036	696-28-6	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P038	692-42-2	Diethylarsine
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P043	55-91-4	Diisopropylfluorophosphate (DFP)

P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro1, 4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P037	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-
P051	72-20-8 *	2,7:3,6-Dimethanonaphth [2,3-b]oxirene,3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta, 2abeta,3alpha,6alpha,6abeta,7beta,7aalpha)-, and metabolites
P044	60-51-5	Dimethoate
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P191	644-64-4	Dimetilan
P047	534-52-1 *	4,6-Dinitro-o-cresol, and salts
P048	51-28-5	2,4-Dinitrophenol
P020	88-85-7	Dinoseb
P085	152-16-9	Diphosphoramidate, octamethyl-
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P039	298-04-4	Disulfoton
P049	541-53-7	Dithiobiuret
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime
P050	115-29-7	Endosulfan
P088	145-73-3	Endothall
P051	72-20-8	Endrin

P051	72-20-8	Endrin, and metabolites
P042	51-43-4	Epinephrine
P031	460-19-5	Ethanedinitrile
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N-[[methylamino]carbonyl]oxy]-2-oxo-, methyl ester
P066	16752-77-5	Ethanimidothioic acid, N-[[methylamino]carbonyl]oxy]-, methyl ester
P101	107-12-0	Ethyl cyanide
P054	151-56-4	Ethyleneimine
P097	52-85-7	Famphur
P056	7782-41-4	Fluorine
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Fluoroacetic acid, sodium salt
P198	23422-53-9	Formetanate hydrochloride
P197	17702-57-7	Formparanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P059	76-44-8	Heptachlor
P062	757-58-4	Hexaethyl tetraphosphate
P116	79-19-6	Hydrazinecarbothioamide
P068	60-34-4	Hydrazine, methyl-
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P096	7803-51-2	Hydrogen phosphide
P060	465-73-6	Isodrin

P192	119-38-0	Isolan
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P196	15339-36-3	Manganese, bis(dimethylcarbamodithioata-S,S')-,
P196	15339-36-3	Manganese, dimethyldithiocarbamate
P092	62-38-4	Mercury, (acetato-O)phenyl-
P065	628-86-4	Mercury fulminate (R,T)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P064	624-80-9	Methane, isocyanato-
P016	542-88-1	Methane, oxybis[chloro-
P112	509-14-8	Methane, tetranitro- (R)
P118	75-70-7	Methanethiol, trichloro-
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3-[[[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P197	17702-57-7	Methanimidamide, N-dimethyl-N'- [2-methyl-4-[[[(methylamino) carbonyl]oxy]phenyl]-
P199	2032-65-7	Methiocarb
P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P066	16752-77-5	Methomyl
P068	60-34-4	Methyl hydrazine
P064	624-83-9	Methyl isocyanate
P069	75-86-5	2-Methylactonitrile

P071	298-00-0	Methyl parathion
P190	1129-41-5	Metolcarb
P128	315-18-4	Mexacarbate
P072	86-88-4	alpha-Naphthylthiourea
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	557-19-7	Nickel cyanide
P074	557-19-7	Nickel cyanide Ni(CN) ₂
P075	54-11-5 *	Nicotine, and salts <u>(this listing does not include patches, gums and lozenges that are "FDA-approved" over-the-counter nicotine replacement therapies)</u>
P076	10102-43-9	Nitric oxide
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P076	100-01-6	Nitrogen oxide NO
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P085	152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P194	23135-22-0	Oxamyl

P089	56-38-2	Parathion
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P048	51-28-5	Phenol, 2,4-dinitro-
P047	534-52-1 *	Phenol, 2-methyl-4,6-dinitro-, and salts
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P204	57-47-6	Physostigmine
P188	57-64-7	Physostigmine salicylate
P094	298-02-2	Phorate
P095	75-44-5	Phosgene
P096	7803-51-2	Phosphine
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester

P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P110	78-00-2	Plumbane, tetraethyl-
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Potassium silver cyanide
P201	2631-37-0	Promecarb
P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O-[(methylamino)carbonyl] oxime
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, -[(methylamino)carbonyl]oxime
P101	107-12-0	Propanenitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P017	598-31-2	2-Propanone, 1-bromo-
P102	107-19-7	Propargyl alcohol
P003	107-02-8	2-Propenal
P005	107-18-6	2-Propen-1-ol
P067	75-55-8	1,2-Propylenimine
P102	107-19-7	2-Propyn-1-ol
P008	504-24-5	4-Pyridinamine

P075	54-11-5 *	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, and salts (<u>this listing does not include patches, gums and lozenges that are "FDA-approved" over-the-counter nicotine replacement therapies</u>)
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro- 1,3a,8-thrimethyl-, methylcarbamate (ester), (3aS-cis)-
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide
P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	57-24-9 *	Strychnidin-10-one, and salts
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P108	57-24-9 *	Strychnine, and salts
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P109	3689-24-5	Tetraethyldithiopyrophosphate
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Tetranitromethane (R)
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl ₂ O ₃
P114	12039-52-0	Thallium(I) selenite

P115	7446-18-6	Thallium(I) sulfate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P045	39196-18-4	Thiofanox
P049	541-53-7	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH
P014	108-98-5	Thiophenol
P116	79-19-6	Thiosemicarbazide
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P072	86-88-4	Thiourea, 1-naphthalenyl-
P093	103-85-5	Thiourea, phenyl-
P185	26419-73-8	Tirpate
P123	8001-35-2	Toxaphene
P118	75-70-7	Trichloromethanethiol
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P001	81-81-2 *	Warfarin, and salts, when present at concentrations greater than 0.3 per cent
P205	137-30-4	Zinc, bis(dimethylcarbamodithioato-S,S')-
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10 per cent (R,T)
P205	137-30-4	Ziram

* CAS number given for parent compound only.

(E) Numerical List

P001	81-81-2 *	2H-1-Benzopyran-2-one, -hydroxy-3-(3-oxo-1-phenylbutyl)-, and salts, when present at concentrations greater than 0.3 per cent
P001	81-81-2 *	Warfarin, and salts, when present at concentrations greater than 0.3 per cent
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P003	107-02-8	2-Propenal
P004	309-00-2	Aldrin
P004	309-00-2	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha,4alpha,4abeta,5alpha,8alpha,8abeta)-
P005	107-18-6	Allyl alcohol
P005	107-18-6	2-Propen-1-ol
P006	20859-73-8	Aluminum phosphide (R,T)
P007	2763-96-4	5-(Aminomethyl)-3-isoxazolol
P007	2763-96-4	3(2H)-Isoxazolone, 5-(aminomethyl)-
P008	504-24-5	4-Aminopyridine
P008	504-24-5	4-Pyridinamine
P009	131-74-8	Ammonium picrate (R)
P009	131-74-8	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	7778-39-4	Arsenic acid H ₃ AsO ₄

P011	1303-28-2	Arsenic oxide As_2O_5
P011	1303-28-2	Arsenic pentoxide
P012	1327-53-3	Arsenic oxide As_2O_3
P012	1327-53-3	Arsenic trioxide
P013	542-62-1	Barium cyanide
P014	108-98-5	Benzenethiol
P014	108-98-5	Thiophenol
P015	7440-41-7	Beryllium powder
P016	542-88-1	Dichloromethyl ether
P016	542-88-1	Methane, oxybis[chloro-
P017	598-31-2	Bromoacetone
P017	598-31-2	2-Propanone, 1-bromo-
P018	357-57-3	Brucine
P018	357-57-3	Strychnidin-10-one, 2,3-dimethoxy-
P020	88-85-7	Dinoseb
P020	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
P021	592-01-8	Calcium cyanide
P021	592-01-8	Calcium cyanide $\text{Ca}(\text{CN})_2$
P022	75-15-0	Carbon disulfide
P023	107-20-0	Acetaldehyde, chloro-
P023	107-20-0	Chloroacetaldehyde
P024	106-47-8	Benzenamine, 4-chloro-
P024	106-47-8	p-Chloroaniline

P026	5344-82-1	1-(o-Chlorophenyl)thiourea
P026	5344-82-1	Thiourea, (2-chlorophenyl)-
P027	542-76-7	3-Chloropropionitrile
P027	542-76-7	Propanenitrile, 3-chloro-
P028	100-44-7	Benzene, (chloromethyl)-
P028	100-44-7	Benzyl chloride
P029	544-92-3	Copper cyanide
P029	544-92-3	Copper cyanide Cu(CN)
P030	----	Cyanides (soluble cyanide salts), not otherwise specified
P031	460-19-5	Cyanogen
P031	460-19-5	Ethanedinitrile
P033	506-77-4	Cyanogen chloride
P033	506-77-4	Cyanogen chloride (CN)Cl
P034	131-89-5	2-Cyclohexyl-4,6-dinitrophenol
P034	131-89-5	Phenol, 2-cyclohexyl-4,6-dinitro-
P036	696-57-1	Arsonous dichloride, phenyl-
P036	696-57-1	Dichlorophenylarsine
P037	60-57-1	Dieldrin
P037	60-57-1	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-,(1aalpha,2beta,2aalpha,3beta,6beta,6aalpha,7beta,7aalpha)-
P038	692-42-2	Arsine, diethyl-
P038	692-42-2	Diethylarsine
P039	298-04-4	Disulfoton

P039	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl] ester
P040	297-97-2	O,O-Diethyl O-pyrazinyl phosphorothioate
P040	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester
P041	311-45-5	Diethyl-p-nitrophenyl phosphate
P041	311-45-5	Phosphoric acid, diethyl 4-nitrophenyl ester
P042	51-43-4	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-
P042	51-43-4	Epinephrine
P043	55-91-4	Diisopropylfluorophosphate (DFP)
P043	55-91-4	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	60-51-5	Dimethoate
P044	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester
P045	39196-18-4	2-Butanone, 3,3-dimethyl-1-(methylthio)-, O-[(methylamino)carbonyl] oxime
P045	39196-18-4	Thiofanox
P046	122-09-8	Benzeneethanamine, alpha,alpha-dimethyl-
P046	122-09-8	alpha,alpha-Dimethylphenethylamine
P047	534-52-1 *	4,6-Dinitro-o-cresol, and salts
P047	534-52-1 *	Phenol, 2-methyl-4,6-dinitro-, and salts
P048	51-28-5	2,4-Dinitrophenol
P048	51-28-5	Phenol, 2,4-dinitro-
P049	541-53-7	Dithiobiuret
P049	541-53-7	Thioimidodicarbonic diamide [(H ₂ N)C(S)] ₂ NH
P050	115-29-7	Endosulfan

P050	115-29-7	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide
P051	72-20-8 *	2,7:3,6-Dimethanonaphth [2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aalpha,2beta,2abeta, 3alpha,6alpha,6abeta,7beta,7aalpha)-, and metabolites
P051	72-20-8	Endrin
P051	72-20-8	Endrin, and metabolites
P054	151-56-4	Aziridine
P054	151-56-4	Ethyleneimine
P056	7782-41-4	Fluorine
P057	640-19-7	Acetamide, 2-fluoro-
P057	640-19-7	Fluoroacetamide
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P058	62-74-8	Fluoroacetic acid, sodium salt
P059	76-44-8	Heptachlor
P059	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-
P060	465-73-6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a-hexahydro-, (1alpha,4alpha,4abeta,5beta,8beta,8abeta)-
P060	465-73-6	Isodrin
P062	757-58-4	Hexaethyl tetraphosphate
P062	757-58-4	Tetraphosphoric acid, hexaethyl ester
P063	74-90-8	Hydrocyanic acid
P063	74-90-8	Hydrogen cyanide
P064	624-83-9	Methane, isocyanato-

P064	624-83-9	Methyl isocyanate
P065	628-86-4	Fulminic acid, mercury(2+) salt (R,T)
P065	628-86-4	Mercury fulminate (R,T)
P066	16752-77-5	Ethanimidothioic acid, N-[[[(methylamino)carbonyl]oxy]-, methyl ester
P066	16752-77-5	Methomyl
P067	75-55-8	Aziridine, 2-methyl-
P067	75-55-8	1,2-Propylenimine
P068	60-34-4	Hydrazine, methyl-
P068	60-34-4	Methyl hydrazine
P069	75-86-5	2-Methylactonitrile
P069	75-86-5	Propanenitrile, 2-hydroxy-2-methyl-
P070	116-06-3	Aldicarb
P070	116-06-3	Propanal, 2-methyl-2-(methylthio)-, O-[(methylamino)carbonyl]oxime
P071	298-00-0	Methyl parathion
P071	298-00-0	Phosphorothioic acid, O,O,-dimethyl O-(4-nitrophenyl) ester
P072	86-88-4	alpha-Naphthylthiourea
P072	86-88-4	Thiourea, 1-naphthalenyl-
P073	13463-39-3	Nickel carbonyl
P073	13463-39-3	Nickel carbonyl Ni(CO) ₄ , (T-4)-
P074	57-19-7	Nickel cyanide
P074	57-19-7	Nickel cyanide Ni(CN) ₂

P075	54-11-5 *	Nicotine, and salts (<u>this listing does not include patches, gums and lozenges that are "FDA-approved" over-the-counter nicotine replacement therapies</u>)
P075	54-11-5 *	Pyridine, 3-(1-methyl-2-pyrrolidinyl)-, (S)-, and salts (<u>this listing does not include patches, gums and lozenges that are "FDA-approved" over-the-counter nicotine replacement therapies</u>)
P076	10102-43-9	Nitric oxide
P076	10102-43-9	Nitrogen oxide NO
P077	100-01-6	Benzenamine, 4-nitro-
P077	100-01-6	p-Nitroaniline
P078	10102-44-0	Nitrogen dioxide
P078	10102-44-0	Nitrogen oxide NO ₂
P081	55-63-0	Nitroglycerine (R)
P081	55-63-0	1,2,3-Propanetriol, trinitrate (R)
P082	62-75-9	Methanamine, N-methyl-N-nitroso-
P082	62-75-9	N-Nitrosodimethylamine
P084	4549-40-0	N-Nitrosomethylvinylamine
P084	4549-40-0	Vinylamine, N-methyl-N-nitroso-
P085	152-16-9	Diphosphoramidate, octamethyl-
P085	152-16-9	Octamethylpyrophosphoramidate
P087	20816-12-0	Osmium oxide OsO ₄ , (T-4)-
P087	20816-12-0	Osmium tetroxide
P088	145-73-3	Endothall
P088	145-73-3	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	56-38-2	Parathion

P089	56-38-2	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester
P092	62-38-4	Mercury, (acetato-O)phenyl
P092	62-38-4	Phenylmercury acetate
P093	103-85-5	Phenylthiourea
P093	103-85-5	Thiourea, phenyl-
P094	298-02-2	Phorate
P094	298-02-2	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester
P095	75-44-5	Carbonic dichloride
P095	75-44-5	Phosgene
P096	7803-51-2	Hydrogen phosphide
P096	7803-51-2	Phosphine
P097	52-85-7	Famphur
P097	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino) sulfonyl]phenyl] O,O-dimethyl ester
P098	151-50-8	Potassium cyanide
P098	151-50-8	Potassium cyanide K(CN)
P099	506-61-6	Argentate(1-), bis(cyano-C)-, potassium
P099	506-61-6	Potassium silver cyanide
P101	107-12-0	Ethyl cyanide
P101	107-12-0	Propanenitrile
P102	107-19-7	Propargyl alcohol
P102	107-19-7	2-Propyn-1-ol
P103	630-10-4	Selenourea
P104	506-64-9	Silver cyanide

P104	506-64-9	Silver cyanide Ag(CN)
P105	26628-22-8	Sodium azide
P106	143-33-9	Sodium cyanide
P106	143-33-9	Sodium cyanide Na(CN)
P108	157-24-9 *	Strychnidin-10-one, and salts
P108	157-24-9 *	Strychnine, and salts
P109	3689-24-5	Tetraethyldithiopyrophosphate
P109	3689-24-5	Thiodiphosphoric acid, tetraethyl ester
P110	78-00-2	Plumbane, tetraethyl-
P110	78-00-2	Tetraethyl lead
P111	107-49-3	Diphosphoric acid, tetraethyl ester
P111	107-49-3	Tetraethyl pyrophosphate
P112	509-14-8	Methane, tetranitro- (R)
P112	509-14-8	Tetranitromethane (R)
P113	1314-32-5	Thallic oxide
P113	1314-32-5	Thallium oxide Tl ₂ O ₃
P114	12039-52-0	Selenious acid, dithallium(1+) salt
P114	12039-52-0	Thallium(I) selenite
P115	7446-18-6	Sulfuric acid, dithallium(1+) salt
P115	7446-18-6	Thallium(I) sulfate
P116	79-19-6	Hydrazinecarbothioamide
P116	79-19-6	Thiosemicarbazide
P118	75-70-7	Methanethiol, trichloro-
P118	75-70-7	Trichloromethanethiol

P119	7803-55-6	Ammonium vanadate
P119	7803-55-6	Vanadic acid, ammonium salt
P120	1314-62-1	Vanadium oxide V ₂ O ₅
P120	1314-62-1	Vanadium pentoxide
P121	557-21-1	Zinc cyanide
P121	557-21-1	Zinc cyanide Zn(CN) ₂
P122	1314-84-7	Zinc phosphide Zn ₃ P ₂ , when present at concentrations greater than 10 per cent (R, T)
P123	8001-35-2	Toxaphene
P127	1563-66-2	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbamate
P127	1563-66-2	Carbofuran
P128	315-18-4	Mexacarbate
P128	315-18-4	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester)
P185	26419-73-8	1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, O-[(methylamino)-carbonyl]oxime
P185	26419-73-8	Tirpate
P188	57-64-7	Benzoic acid, 2hydroxy-, compd. With (3aS-cis)- 1,2,3,3a,8,8a-hexahydro-1,3a,8-trimethylpyrrolo [2,3-b]indol-5yl methylcarbamate ester (1:1)
P188	57-64-7	Physostigmine salicylate
P189	55285-14-8	Carbamic acid, [(dibutylamino)-thio]methyl-, 2,3-dihydro-2,2-dimethyl- 7benzofuranyl ester
P189	55285-14-8	Carbosulfan
P190	1129-41-5	Carbamic acid, methyl-, 3-methylphenyl ester
P190	1129-41-5	Metolcarb

P191	644-64-4	Carbamic acid, dimethyl-, 1-[(dimethyl-amino)carbonyl]- 5-methyl-1H-pyrazol-3yl ester
P191	644-64-4	Dimetilan
P192	119-38-0	Carbamic acid, dimethyl-, 3-methyl-1-(1-methylethyl)-1H-pyrazol-5-yl ester
P192	119-38-0	Isolan
P194	23135-22-0	Ethanimidothioic acid, 2-(dimethylamino)-N- [[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P194	23135-22-0	Oxamyl
P196	15339-36-3	Manganese, bis(dimethylcarbomodithioata-S,S')-,
P196	15339-36-3	Manganese, dimethyldithiocarbamate
P197	17702-57-7	Formparanate
P197	17702-57-7	Methanimidamide, N,N-dimethyl-N'- [2-methyl-4-[[[(methylamino)carbonyl]oxy]phenyl]-
P198	23422-53-9	Formetanate hydrochloride
P198	23422-53-9	Methanimidamide, N,N-dimethyl-N'-[3- [[(methylamino)-carbonyl]oxy]phenyl]-, monohydrochloride
P199	2032-65-7	Methiocarb
P199	2032-65-7	Phenol, (3,5-dimethyl-4-(methylthio)-, methylcarbamate
P201	2631-37-0	Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P201	2631-37-0	Promecarb
P202	64-00-6	m-Cumenyl methylcarbamate
P202	64-00-6	3-Isopropylphenyl N-methylcarbamate
P202	64-00-6	Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	1646-88-4	Aldicarb sulfone

P203	1646-88-4	Propanal, 2-methyl-2-(methyl-sulfonyl)-, O- [(methylamino)carbonyl] oxime
P204	57-47-6	Physostigmine
P204	57-47-6	Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro1,3a,8- thrimethyl-, methylcarbamate (ester), (3aS-cis)-
P205	137-30-4	Zinc, bis(dimethylcarbamoedithioato-S,S')-
P205	137-30-4	Ziram
* CAS Number given for parent compound only		

"FDA" means the federal food and drug administration.

- (F) The commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products referred to in paragraphs (A) to (D) of this rule, are identified as toxic wastes (T) unless otherwise designated ~~and are subject to the small quantity generator exclusion defined in paragraphs (A) and (G) of rule 3745-51-05 of the Administrative Code.~~

[Comment: For the convenience of the regulated community, the primary hazardous properties of these materials have been indicated by the letters T (toxicity), R (reactivity), I (ignitability) and C (corrosivity). Absence of a letter indicates that the compound is only listed for toxicity. Wastes are first listed in alphabetical order by substance and then listed again in numerical order by EPA hazardous waste number.]

These wastes and corresponding EPA hazardous waste numbers are:

(F) Alphabetical List

EPA Hazardous Waste #	CAS #	Substance
U394	30558-43-1	A2213
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-

U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	94-75-7 *	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters
U112	141-78-6	Acetic acid ethyl ester (I)
U144	301-04-2	Acetic acid, lead(2+) salt
U214	563-68-8	Acetic acid, thallium(1+) salt
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
U002	67-64-1	Acetone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U008	79-10-7	Acrylic acid (I)
U009	107-13-1	Acrylonitrile
U011	61-82-5	Amitrole
U012	62-53-3	Aniline (I,T)
U136	75-60-5	Arsinic acid, dimethyl
U014	492-80-8	Auramine
U015	115-02-6	Azaserine
U101	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8- [[aminocarbonyloxy]methyl]- 1,1a,2,8,8a,8b-hexahydro-8a- methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balpha)]-
U280	101-27-9	Barban
U278	22781-23-3	Bendiocarb

U364	22961-82-6	Bendiocarb phenol
U271	17804-35-2	Benomyl
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U016	225-51-4	Benz[c]acridine
U107	98-87-3	Benzal chloride
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U018	56-55-3	Benz[a]anthracene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U328	95-53-4	Benzenamine, 2-methyl-
U353	106-49-0	Benzenamine, 4-methyl-
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U019	71-43-2	Benzene (I,T)
U038	510-15-6	Benzeneacetic acid, 4-chloro-alpha-(4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U037	108-90-7	Benzene, chloro-
U221	25376-45-8	Benzenediamine, ar-methyl-

U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U070	95-50-1	Benzene, 1,2-dichloro-
U071	541-73-1	Benzene, 1,3-dichloro-
U072	106-46-7	Benzene, 1,4-dichloro-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U017	98-87-3	Benzene, (dichloromethyl)-
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U239	1330-20-7	Benzene, dimethyl- (I)
U201	108-46-3	1,3-Benzenediol
U127	118-74-1	Benzene, hexachloro-
U056	110-82-7	Benzene, hexahydro- (I)
U220	108-88-3	Benzene, methyl-
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U169	98-95-3	Benzene, nitro-
U183	608-93-5	Benzene, pentachloro-
U185	82-68-8	Benzene, pentachloronitro-
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)

U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U023	98-07-7	Benzene, (trichloromethyl)-
U234	99-35-4	Benzene, 1,3,5-trinitro-
U021	92-87-5	Benzidine
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U278	22781-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U064	189-55-9	Benzo[<i>rst</i>]pentaphene
U248	81-81-2 *	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-, and salts, when present at concentrations of 0.3 per cent or less
U022	50-32-8	Benzo[<i>a</i>]pyrene
U197	106-51-4	p-Benzoquinone
U023	98-07-7	Benzotrichloride (C,R,T)
U085	1464-53-5	2,2'-Bioxirane
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U225	75-25-2	Bromoform

U030	101-55-3	4-Bromophenyl phenyl ether
U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U031	71-36-3	1-Butanol (I)
U159	78-93-3	2-Butanone (I,T)
U160	1338-23-4	-Butanone, peroxide (R,T)
U053	4170-30-3	2-Butenal
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U143	303-34-4	2-Butenoic acid, 2-methyl-, 7-[[2,3-dihydroxy2-(1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, 1S-[1alpha(Z),7(2S*,3R*),7aalpha]]-
U031	71-36-3	n-Butyl alcohol (I)
U136	75-60-5	Cacodylic acid
U032	13765-19-0	Calcium chromate
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U271	17804-35-2	Carbamic acid, [1-[(buthylamino)carbonyl]- 1H-benzimidazol-2-yl], methyl ester
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U238	51-79-6	Carbamic acid, ethyl ester
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbobothioyl)]bis-, dimethyl ester
U097	79-44-7	Carbamic chloride, dimethyl-
U114	111-54-6 *	Carbamodithioic acid, 1,2-ethanediybis-, salts and esters

U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U279	63-25-2	Carbaryl
U372	10605-21-7	Carbendazim
U367	1563-38-8	Carbofuran phenol
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U033	353-50-4	Carbonic difluoride
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U033	353-50-4	Carbon oxyfluoride (R,T)
U211	56-23-5	Carbon tetrachloride
U034	75-87-6	Chloral
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha and gamma isomers
U026	494-03-1	Chlornaphazin
U037	108-90-7	Chlorobenzene
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U042	110-75-8	2-Chloroethyl vinyl ether
U044	67-66-3	Chloroform
U046	107-30-2	Chloromethyl methyl ether
U047	91-58-7	beta-Chloronaphthalene

U048	95-57-8	o-Chlorophenol
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U050	218-01-9	Chrysene
U051	-----	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Cumene (I)
U246	506-68-3	Cyanogen bromide (CN)Br
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U056	110-82-7	Cyclohexane (I)
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U057	108-94-1	Cyclohexanone (I)
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U058	50-18-0	Cyclophosphamide
U240	94-75-7 *	2,4-D, salts and esters
U059	20830-81-3	Daunomycin
U060	72-54-8	DDD
U061	50-29-3	DDT
U062	2303-16-4	Diallate
U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane

U069	84-74-2	Dibutyl phthalate
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U078	75-35-4	1,1-Dichloroethylene
U079	156-60-5	1,2-Dichloroethylene
U025	111-44-4	Dichloroethyl ether
U027	108-60-1	Dichloroisopropyl ether
U024	111-91-1	Dichloromethoxy ethane
U081	120-83-2	2,4-Dichlorophenol
U082	87-65-0	2,6-Dichlorophenol
U084	542-75-6	1,3-Dichloropropene
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U395	5952-26-1	Diethylene glycol, dicarbamate
U108	123-91-1	1,4-Diethyleneoxide
U028	117-81-7	Diethylhexyl phthalate
U086	1615-80-1	N,N'-Diethylhydrazine
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U090	94-58-6	Dihydrosafrole

U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	3,31-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U099	540-73-8	1,2-Dimethylhydrazine
U101	105-67-9	2,4-Dimethylphenol
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U110	142-84-7	Dipropylamine (I)
U111	621-64-7	Di-n-propylnitrosamine
U041	106-89-8	Epichlorohydrin
U001	75-07-0	Ethanal (I)
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U404	121-44-8	Ethanamine, N, N-diethyl-

U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U067	106-93-4	Ethane, 1,2-dibromo-
U076	75-34-3	Ethane, 1,1-dichloro-
U077	107-06-2	Ethane, 1,2-dichloro-
U131	67-72-1	Ethane, hexachloro-
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-
U184	76-01-7	Ethane, pentachloro-
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U226	71-55-6	Ethane, 1,1,1-trichloro-
U227	79-00-5	Ethane, 1,1,2-trichloro-
U218	62-55-5	Ethanethioamide
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis [(methylimino)carbonyloxy]]bis-, dimethyl ester
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-hydroxy-2-oxo-, methyl ester
U359	110-80-5	Ethanol, 2-ethoxy-
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U004	98-86-2	Ethanone, 1-phenyl-
U043	75-01-4	Ethene, chloro-
U042	110-75-8	Ethene, (2-chloroethoxy)-

U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U210	127-18-4	Ethene, tetrachloro-
U228	79-01-6	Ethene, trichloro-
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U238	51-79-6	Ethyl carbamate (urethane)
U117	60-29-7	Ethyl ether (I)
U114	111-54-6 *	Ethylenebisdithiocarbamic acid, salts and esters
U067	106-93-4	Ethylene dibromide
U077	107-06-2	Ethylene dichloride
U359	110-80-5	Ethylene glycol monoethyl ether
U115	75-21-8	Ethylene oxide (I,T)
U116	96-45-7	Ethylenethiourea
U076	75-34-3	Ethylidene dichloride
U118	97-63-2	Ethyl methacrylate
U119	62-50-0	Ethyl methanesulfonate
U120	206-44-0	Fluoranthene
U122	50-00-0	Formaldehyde
U123	64-18-6	Formic acid (C,T)
U124	110-00-9	Furan (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U147	108-31-6	2,5-Furandione
U213	109-99-9	Furan, tetrahydro-(I)

U125	98-01-1	Furfural (I)
U124	110-00-9	Furfuran (I)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-
U126	765-34-4	Glycidylaldehyde
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-
U127	118-74-1	Hexachlorobenzene
U128	87-68-3	Hexachlorobutadiene
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U243	1888-71-7	Hexachloropropene
U133	302-01-2	Hydrazine (R,T)
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U116	96-45-7	2-Imidazolidinethione

U137	193-39-5	Indeno[1,2,3-cd]pyrene
U190	85-44-9	1,3-Isobenzofurandione
U140	78-83-1	Isobutyl alcohol (I,T)
U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U143	303-34-4	Lasiocarpine
U144	301-04-2	Lead acetate
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U145	7446-27-7	Lead phosphate
U146	1335-32-6	Lead subacetate
U129	58-89-9	Lindane
U163	70-25-7	MNNG
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U149	109-77-3	Malononitrile
U150	148-82-3	Melphalan
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)
U092	124-40-3	Methanamine, N-methyl- (I)
U029	74-83-9	Methane, bromo-
U045	74-87-3	Methane, chloro- (I, T)
U046	107-30-2	Methane, chloromethoxy-
U068	74-95-3	Methane, dibromo-
U080	75-09-2	Methane, dichloro-

U075	75-71-8	Methane, dichlorodifluoro-
U138	74-88-4	Methane, iodo-
U211	56-23-5	Methane, tetrachloro-
U225	75-25-2	Methane, tribromo-
U044	67-66-3	Methane, trichloro-
U121	75-69-4	Methane, trichlorofluoro-
U119	62-50-0	Methanesulfonic acid, ethyl ester
U153	74-93-1	Methanethiol (I, T)
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro2,3,3a,4,7,7a-hexahydro-
U154	67-56-1	Methanol (I)
U155	91-80-5	Methapyrilene
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U247	72-43-5	Methoxychlor
U154	67-56-1	Methyl alcohol (I)
U029	74-83-9	Methyl bromide
U186	504-60-9	1-Methylbutadiene (I)
U045	74-87-3	Methyl chloride (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U226	71-55-6	Methyl chloroform
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U068	74-95-3	Methylene bromide

U080	75-09-2	Methylene chloride
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U138	74-88-4	Methyl iodide
U161	108-10-1	Methyl isobutyl ketone (I)
U162	80-62-6	Methyl methacrylate (I,T)
U161	108-10-1	4-Methyl-2-pentanone (I)
U164	56-04-2	Methylthiouracil
U101	50-07-7	Mitomycin C
U059	20830-81-3	5,12-Naphthacenedione, -acetyl-10- [(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl)oxy]- 7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U167	134-32-7	1-Naphthalenamine
U168	91-59-8	2-Naphthalenamine
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U165	91-20-3	Naphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U166	130-15-4	1,4-Naphthalenedione
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis [5-amino-4-hydroxy]-, tetrasodium salt
U279	63-25-2	1-Naphthalenol, methylcarbamate
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	beta-Naphthylamine

U217	10102-45-1	Nitric acid, thallium(1+) salt
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U171	79-46-9	2-Nitropropane (I,T)
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U177	684-93-5	N-Nitroso-N-methylurea
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U180	930-55-2	N-Nitrosopyrrolidine
U181	99-55-8	5-Nitro-o-toluidine
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U115	75-21-8	Oxirane (I,T)
U126	765-34-4	Oxiranecarboxyaldehyde
U041	106-89-8	Oxirane, (chloromethyl)-
U182	123-63-7	Paraldehyde
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Pentachloroethane
U185	82-68-8	Pentachloronitrobenzene (PCNB)
See F027	87-86-5	Pentachlorophenol

U161	108-10-1	Pentanol, 4-methyl-
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U048	95-57-8	Phenol, 2-chloro-
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	Phenol, 2,6-dichloro-
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U101	105-67-9	Phenol, 2,4-dimethyl-
U052	1319-77-3	Phenol, methyl-
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U170	100-02-7	Phenol, 4-nitro-
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-
See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U189	1314-80-3	Phosphorus sulfide (R)
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline

U179	100-75-4	Piperidine, 1-nitroso-
U192	23950-58-5	Pronamide
U194	107-10-8	1-Propanamine (I,T)
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U110	142-84-7	1-Propanamine, N-propyl- (I)
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U083	78-87-5	Propane, 1,2-dichloro-
U171	79-46-9	Propane, 2-nitro- (I,T)
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U193	1120-71-4	1,3-Propane sultone
U149	109-77-3	Propanedinitrile
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U002	67-64-1	2-Propanone (I)
U007	79-06-1	2-Propenamide
U084	542-75-6	1-Propene, 1,3-dichloro-
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U009	107-13-1	2-Propenenitrile
U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U008	79-10-7	2-Propenoic acid (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)

U373	122-42-9	Propham
U411	114-26-1	Propoxur
U194	107-10-8	n-Propylamine (I,T)
U083	78-87-5	Propylene dichloride
U387	52888-80-9	Prosulfocarb
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U196	110-86-1	Pyridine
U191	109-06-8	Pyridine, 2-methyl-
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U180	930-55-2	Pyrrolidine, 1-nitroso-
U200	50-55-5	Reserpine
U201	108-46-3	Resorcinol
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide
U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS ₂ (R,T)
U015	115-02-6	L-Serine, diazoacetate (ester)
See F027	93-72-1	Silvex (2,4,5-TP)
U206	18883-66-4	Streptozotocin
U103	77-78-1	Sulfuric acid, dimethyl ester
U189	1314-80-3	Sulfur phosphide (R)
See F027	93-76-5	2,4,5-T

U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Tetrachloroethylene
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Thioacetamide
U410	59669-26-0	Thiodicarb
U153	74-93-1	Thiomethanol (I,T)
U244	137-26-8	Thioperoxydicarbonic diamide $[(\text{H}_2\text{N})\text{C}(\text{S})]_2\text{S}_2$, tetramethyl
U409	23564-05-8	Thiophanate-methyl
U219	62-56-6	Thiourea
U244	137-26-8	Thiram
U220	108-88-3	Toluene
U221	25376-45-8	Toluenediamine
U223	26471-62-5	Toluene diisocyanate (R,T)
U328	95-53-4	o-Toluidine
U353	106-49-0	p-Toluidine
U222	636-21-5	o-Toluidine hydrochloride

U389	2303-17-5	Triallate
U226	71-55-6	1,1,1-Trichloroethane
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Trichloroethylene
U121	75-69-4	Trichloromonofluoromethane
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
U404	121-44-8	Triethylamine
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	Trypan blue
U237	66-75-1	Uracil mustard
U176	759-73-9	Urea, N-ethyl-N-nitroso-
U177	684-93-5	Urea, N-methyl-N-nitroso-
U043	75-01-4	Vinyl chloride
U248	81-81-2 *	Warfarin, and salts, when present at concentrations of 0.3 per cent or less
U239	1330-20-7	Xylene (I)
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U249	1314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations of 10 per cent or less

* CAS Number given for parent compound only.
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(F) Numerical List

EPA Hazardous Waste #	CAS #	Substance
U001	75-07-0	Acetaldehyde (I)
U001	75-07-0	Ethanal (I)
U002	67-64-1	Acetone (I)
U002	67-64-1	2-Propanone (I)
U003	75-05-8	Acetonitrile (I,T)
U004	98-86-2	Acetophenone
U004	98-86-2	Ethanone, 1-phenyl-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U005	53-96-3	2-Acetylaminofluorene
U006	75-36-5	Acetyl chloride (C,R,T)
U007	79-06-1	Acrylamide
U007	79-06-1	2-Propenamide
U008	79-10-7	Acrylic acid (I)
U008	79-10-7	2-Propenoic acid (I)
U009	107-13-1	Acrylonitrile
U009	107-13-1	2-Propenenitrile
U010	50-07-7	Azirino[2',3':3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[[(aminocarbonyl)oxy]methyl]- 1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-, [1aS-(1aalpha, 8beta,8aalpha,8balph)]-
U010	50-07-7	Mitomycin C

U011	61-82-5	Amitrole
U011	61-82-5	1H-1,2,4-Triazol-3-amine
U012	62-53-3	Aniline (I,T)
U012	62-53-3	Benzenamine (I,T)
U014	492-80-8	Auramine
U014	492-80-8	Benzenamine, 4,4'-carbonimidoylbis[N,N-dimethyl-
U015	115-02-6	Azaserine
U015	115-02-6	L-Serine, diazoacetate (ester)
U016	225-51-4	Benz[c]acridine
U017	98-87-3	Benzal chloride
U017	98-87-3	Benzene, (dichloromethyl)-
U018	56-55-3	Benz[a]anthracene
U019	71-43-2	Benzene (I,T)
U020	98-09-9	Benzenesulfonic acid chloride (C,R)
U020	98-09-9	Benzenesulfonyl chloride (C,R)
U021	92-87-5	Benzidine
U021	92-87-5	[1,1'-Biphenyl]-4,4'-diamine
U022	50-32-8	Benzo[a]pyrene
U023	98-07-7	Benzene, (trichloromethyl)-
U023	98-07-7	Benzotrichloride (C,R,T)
U024	111-91-1	Dichloromethoxy ethane
U024	111-91-1	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-
U025	111-44-4	Dichloroethyl ether
U025	111-44-4	Ethane, 1,1'-oxybis[2-chloro-

U026	494-03-1	Chlornaphazin
U026	494-03-1	Naphthalenamine, N,N'-bis(2-chloroethyl)-
U027	108-60-1	Dichloroisopropyl ether
U027	108-60-1	Propane, 2,2'-oxybis[2-chloro-
U028	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
U028	117-81-7	Diethylhexyl phthalate
U029	74-83-9	Methane, bromo-
U029	74-83-9	Methyl bromide
U030	101-55-3	Benzene, 1-bromo-4-phenoxy-
U030	101-55-3	4-Bromophenyl phenyl ether
U031	71-36-3	1-Butanol (I)
U031	71-36-3	n-Butyl alcohol (I)
U032	13765-19-0	Calcium chromate
U032	13765-19-0	Chromic acid H ₂ CrO ₄ , calcium salt
U033	353-50-4	Carbonic difluoride
U033	353-50-4	Carbon oxyfluoride (R,T)
U034	75-87-6	Acetaldehyde, trichloro-
U034	75-87-6	Chloral
U035	305-03-3	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino]-
U035	305-03-3	Chlorambucil
U036	57-74-9	Chlordane, alpha and gamma isomers
U036	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro2,3,3a,4,7,7a-hexahydro-
U037	108-90-7	Benzene, chloro-

U037	108-90-7	Chlorobenzene
U038	510-15-6	Benzeneacetic acid, -chloro-alpha- (4-chlorophenyl)-alpha-hydroxy-, ethyl ester
U038	510-15-6	Chlorobenzilate
U039	59-50-7	p-Chloro-m-cresol
U039	59-50-7	Phenol, 4-chloro-3-methyl-
U041	106-89-8	Epichlorohydrin
U041	106-89-8	Oxirane, (chloromethyl)-
U042	110-75-8	2-Chloroethyl vinyl ether
U042	110-75-8	Ethene, (2-chloroethoxy)-
U043	75-01-4	Ethene, chloro-
U043	75-01-4	Vinyl chloride
U044	67-66-3	Chloroform
U044	67-66-3	Methane, trichloro-
U045	74-87-3	Methane, chloro- (I, T)
U045	74-87-3	Methyl chloride (I,T)
U046	107-30-2	Chloromethyl methyl ether
U046	107-30-2	Methane, chloromethoxy-
U047	91-58-7	beta-Chloronaphthalene
U047	91-58-7	Naphthalene, 2-chloro-
U048	95-57-8	o-Chlorophenol
U048	95-57-8	Phenol, 2-chloro-
U049	3165-93-3	Benzenamine, 4-chloro-2-methyl-, hydrochloride
U049	3165-93-3	4-Chloro-o-toluidine, hydrochloride

U050	218-01-9	Chrysene
U051	----	Creosote
U052	1319-77-3	Cresol (Cresylic acid)
U052	1319-77-3	Phenol, methyl-
U053	4170-30-3	2-Butenal
U053	4170-30-3	Crotonaldehyde
U055	98-82-8	Benzene, (1-methylethyl)- (I)
U055	98-82-8	Cumene (I)
U056	110-82-7	Benzene, hexahydro- (I)
U056	110-82-7	Cyclohexane (I)
U057	108-94-1	Cyclohexanone (I)
U058	50-18-0	Cyclophosphamide
U058	50-18-0	2H-1,3,2-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-, 2-oxide
U059	20830-81-3	Daunomycin
U059	20830-81-3	5,12-Naphthacenedione, 8-acetyl-10-[(3-amino-2,3,6-trideoxy)-alpha-L-lyxo-hexopyranosyl oxy]- 7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-, (8S-cis)-
U060	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-
U060	72-54-8	DDD
U061	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-chloro-
U061	50-29-3	DDT
U062	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
U062	2303-16-4	Diallate

U063	53-70-3	Dibenz[a,h]anthracene
U064	189-55-9	Benzo[rst]pentaphene
U064	189-55-9	Dibenzo[a,i]pyrene
U066	96-12-8	1,2-Dibromo-3-chloropropane
U066	96-12-8	Propane, 1,2-dibromo-3-chloro-
U067	106-93-4	Ethane, 1,2-dibromo-
U067	106-93-4	Ethylene dibromide
U068	74-95-3	Methane, dibromo-
U068	74-95-3	Methylene bromide
U069	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
U069	84-74-2	Dibutyl phthalate
U070	95-50-1	Benzene, 1,2-dichloro-
U070	95-50-1	o-Dichlorobenzene
U071	541-73-1	Benzene, 1,3-dichloro-
U071	541-73-1	m-Dichlorobenzene
U072	106-46-7	Benzene, 1,4-dichloro-
U072	106-46-7	p-Dichlorobenzene
U073	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-
U073	91-94-1	3,3'-Dichlorobenzidine
U074	764-41-0	2-Butene, 1,4-dichloro- (I,T)
U074	764-41-0	1,4-Dichloro-2-butene (I,T)
U075	75-71-8	Dichlorodifluoromethane
U075	75-71-8	Methane, dichlorodifluoro-
U076	75-34-3	Ethane, 1,1-dichloro-

U076	75-34-3	Ethylidene dichloride
U077	107-06-2	Ethane, 1,2-dichloro-
U077	107-06-2	Ethylene dichloride
U078	75-35-4	1,1-Dichloroethylene
U078	75-35-4	Ethene, 1,1-dichloro-
U079	156-60-5	1,2-Dichloroethylene
U079	156-60-5	Ethene, 1,2-dichloro-, (E)-
U080	75-09-2	Methane, dichloro-
U080	75-09-2	Methylene chloride
U081	120-83-2	2,4-Dichlorophenol
U081	120-83-2	Phenol, 2,4-dichloro-
U082	87-65-0	2,6-Dichlorophenol
U082	87-65-0	Phenol, 2,6-dichloro-
U083	78-87-5	Propane, 1,2-dichloro-
U083	78-87-5	Propylene dichloride
U084	542-75-6	1,3-Dichloropropene
U084	542-75-6	1-Propene, 1,3-dichloro
U085	1464-53-5	2,2'-Bioxirane
U085	1464-53-5	1,2:3,4-Diepoxybutane (I,T)
U086	1615-80-1	N,N'-Diethylhydrazine
U086	1615-80-1	Hydrazine, 1,2-diethyl-
U087	3288-58-2	O,O-Diethyl S-methyl dithiophosphate
U087	3288-58-2	Phosphorodithioic acid, O,O-diethyl S-methyl ester
U088	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester

U088	84-66-2	Diethyl phthalate
U089	56-53-1	Diethylstilbesterol
U089	56-53-1	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-
U090	94-58-6	1,3-Benzodioxole, 5-propyl-
U090	94-58-6	Dihydrosafrole
U091	119-90-4	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-
U091	119-90-4	3,3'-Dimethoxybenzidine
U092	124-40-3	Dimethylamine (I)
U092	124-40-3	Methanamine, N-methyl- (I)
U093	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
U093	60-11-7	p-Dimethylaminoazobenzene
U094	57-97-6	Benz[a]anthracene, 7,12-dimethyl-
U094	57-97-6	7,12-Dimethylbenz[a]anthracene
U095	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-
U095	119-93-7	3,3'-Dimethylbenzidine
U096	80-15-9	alpha,alpha-Dimethylbenzylhydroperoxide (R)
U096	80-15-9	Hydroperoxide, 1-methyl-1-phenylethyl- (R)
U097	79-44-7	Carbamic chloride, dimethyl-
U097	79-44-7	Dimethylcarbamoyl chloride
U098	57-14-7	1,1-Dimethylhydrazine
U098	57-14-7	Hydrazine, 1,1-dimethyl-
U099	540-73-8	1,2-Dimethylhydrazine
U099	540-73-8	Hydrazine, 1,2-dimethyl-
U101	105-67-9	2,4-Dimethylphenol

U101	105-67-9	Phenol, 2,4-dimethyl-
U102	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
U102	131-11-3	Dimethyl phthalate
U103	77-78-1	Dimethyl sulfate
U103	77-78-1	Sulfuric acid, dimethyl ester
U105	121-14-2	Benzene, 1-methyl-2,4-dinitro-
U105	121-14-2	2,4-Dinitrotoluene
U106	606-20-2	Benzene, 2-methyl-1,3-dinitro-
U106	606-20-2	2,6-Dinitrotoluene
U107	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
U107	117-84-0	Di-n-octyl phthalate
U108	123-91-1	1,4-Diethyleneoxide
U108	123-91-1	1,4-Dioxane
U109	122-66-7	1,2-Diphenylhydrazine
U109	122-66-7	Hydrazine, 1,2-diphenyl-
U110	142-84-7	Dipropylamine (I)
U110	142-84-7	1-Propanamine, N-propyl- (I)
U111	621-64-7	Di-n-propylnitrosamine
U111	621-64-7	1-Propanamine, N-nitroso-N-propyl-
U112	141-78-6	Acetic acid ethyl ester (I)
U112	141-78-6	Ethyl acetate (I)
U113	140-88-5	Ethyl acrylate (I)
U113	140-88-5	2-Propenoic acid, ethyl ester (I)
U114	111-54-6 *	Carbamodithioic acid, 1,2-ethanediybis-, salts and esters

U114	111-54-6 *	Ethylenebisdithiocarbamic acid, salts and esters
U115	75-21-8	Ethylene oxide (I,T)
U115	75-21-8	Oxirane (I,T)
U116	96-45-7	Ethylenethiourea
U116	96-45-7	2-Imidazolidinethione
U117	60-29-7	Ethane, 1,1'-oxybis-(I)
U117	60-29-7	Ethyl ether (I)
U118	97-63-2	Ethyl methacrylate
U118	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
U119	62-50-0	Ethyl methanesulfonate
U119	62-50-0	Methanesulfonic acid, ethyl ester
U120	206-44-0	Fluoranthene
U121	75-69-4	Methane, trichlorofluoro-
U121	75-69-4	Trichloromonofluoromethane
U122	50-00-0	Formaldehyde
U123	64-18-06	Formic acid (C,T)
U124	110-00-9	Furan (I)
U124	110-00-9	Furfuran (I)
U125	98-01-1	2-Furancarboxaldehyde (I)
U125	98-01-1	Furfural (I)
U126	765-34-4	Glycidylaldehyde
U126	765-34-4	Oxiranecarboxyaldehyde
U127	118-74-1	Benzene, hexachloro-
U127	118-74-1	Hexachlorobenzene

U128	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-
U128	87-68-3	Hexachlorobutadiene
U129	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1alpha,2alpha,3beta,4alpha,5alpha,6beta)-
U129	58-89-9	Lindane
U130	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-
U130	77-47-4	Hexachlorocyclopentadiene
U131	67-72-1	Ethane, hexachloro-
U131	67-72-1	Hexachloroethane
U132	70-30-4	Hexachlorophene
U132	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-
U133	302-01-2	Hydrazine (R,T)
U134	7664-39-3	Hydrofluoric acid (C,T)
U134	7664-39-3	Hydrogen fluoride (C,T)
U135	7783-06-4	Hydrogen sulfide
U135	7783-06-4	Hydrogen sulfide H ₂ S
U136	75-60-5	Arsinic acid, dimethyl-
U136	75-60-5	Cacodylic acid
U137	193-39-5	Indeno[1,2,3-cd]pyrene
U138	74-88-4	Methane, iodo-
U138	74-88-4	Methyl iodide
U140	78-83-1	Isobutyl alcohol (I,T)
U140	78-83-1	1-Propanol, 2-methyl- (I,T)
U141	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-

U141	120-58-1	Isosafrole
U142	143-50-0	Kepone
U142	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-
U143	303-34-4	2-Butenoic acid, -methyl-,7-[[[2,3-dihydroxy-2- (1-methoxyethyl)-3-methyl-1-oxobutoxy]methyl]-2,3,5,7atetrahydro-1H-pyrrolizin-1-yl ester, 1S-[1alpha(Z),7(2S*,3R*),7alpha]]-
U143	303-34-4	Lasiocarpine
U144	301-04-2	Acetic acid, lead(2+) salt
U144	301-04-2	Lead acetate
U145	7446-27-7	Lead phosphate
U145	7446-27-7	Phosphoric acid, lead(2+) salt (2:3)
U146	1335-32-6	Lead, bis(acetato-O)tetrahydroxytri-
U146	1335-32-6	Lead subacetate
U147	108-31-6	2,5-Furandione
U147	108-31-6	Maleic anhydride
U148	123-33-1	Maleic hydrazide
U148	123-33-1	3,6-Pyridazinedione, 1,2-dihydro-
U149	109-77-3	Malononitrile
U149	109-77-3	Propanedinitrile
U150	148-82-3	Melphalan
U150	148-82-3	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-
U151	7439-97-6	Mercury
U152	126-98-7	Methacrylonitrile (I, T)

U152	126-98-7	2-Propenenitrile, 2-methyl- (I,T)
U153	74-93-1	Methanethiol (I, T)
U153	74-93-1	Thiomethanol (I,T)
U154	67-56-1	Methanol (I)
U154	67-56-1	Methyl alcohol (I)
U155	91-80-5	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-
U155	91-80-5	Methapyrilene
U156	79-22-1	Carbonochloridic acid, methyl ester (I,T)
U156	79-22-1	Methyl chlorocarbonate (I,T)
U157	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U157	56-49-5	3-Methylcholanthrene
U158	101-14-4	Benzenamine, 4,4'-methylenebis[2-chloro-
U158	101-14-4	4,4'-Methylenebis(2-chloroaniline)
U159	78-93-3	2-Butanone (I,T)
U159	78-93-3	Methyl ethyl ketone (MEK) (I,T)
U160	1338-23-4	2-Butanone, peroxide (R,T)
U160	1338-23-4	Methyl ethyl ketone peroxide (R,T)
U161	108-10-1	Methyl isobutyl ketone (I)
U161	108-10-1	4-Methyl-2-pentanone (I)
U161	108-10-1	Pentanol, 4-methyl-
U162	80-62-6	Methyl methacrylate (I,T)
U162	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester (I,T)
U163	70-25-7	Guanidine, N-methyl-N'-nitro-N-nitroso-

U163	70-25-7	MNNG
U164	56-04-2	Methylthiouracil
U164	56-04-2	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U165	91-20-3	Naphthalene
U166	130-15-4	1,4-Naphthalenedione
U166	130-15-4	1,4-Naphthoquinone
U167	134-32-7	1-Naphthalenamine
U167	134-32-7	alpha-Naphthylamine
U168	91-59-8	2-Naphthalenamine
U168	91-59-8	beta-Naphthylamine
U169	98-95-3	Benzene, nitro-
U169	98-95-3	Nitrobenzene (I,T)
U170	100-02-7	p-Nitrophenol
U170	100-02-7	Phenol, 4-nitro-
U171	79-46-9	2-Nitropropane (I,T)
U171	79-46-9	Propane, 2-nitro- (I,T)
U172	924-16-3	1-Butanamine, N-butyl-N-nitroso-
U172	924-16-3	N-Nitrosodi-n-butylamine
U173	1116-54-7	Ethanol, 2,2'-(nitrosoimino)bis-
U173	1116-54-7	N-Nitrosodiethanolamine
U174	55-18-5	Ethanamine, N-ethyl-N-nitroso-
U174	55-18-5	N-Nitrosodiethylamine
U176	759-73-9	N-Nitroso-N-ethylurea
U176	759-73-9	Urea, N-ethyl-N-nitroso-

U177	684-93-5	N-Nitroso-N-methylurea
U177	684-93-5	Urea, N-methyl-N-nitroso-
U178	615-53-2	Carbamic acid, methylnitroso-, ethyl ester
U178	615-53-2	N-Nitroso-N-methylurethane
U179	100-75-4	N-Nitrosopiperidine
U179	100-75-4	Piperidine, 1-nitroso-
U180	930-55-2	N-Nitrosopyrrolidine
U180	930-55-2	Pyrrolidine, 1-nitroso-
U181	99-55-8	Benzenamine, 2-methyl-5-nitro-
U181	99-55-8	5-Nitro-o-toluidine
U182	123-63-7	Paraldehyde
U182	123-63-7	1,3,5-Trioxane, 2,4,6-trimethyl-
U183	608-93-5	Benzene, pentachloro-
U183	608-93-5	Pentachlorobenzene
U184	76-01-7	Ethane, pentachloro-
U184	76-01-7	Pentachloroethane
U185	82-68-8	Benzene, pentachloronitro-
U185	82-68-8	Pentachloronitrobenzene (PCNB)
U186	504-60-9	1-Methylbutadiene (I)
U186	504-60-9	1,3-Pentadiene (I)
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U187	62-44-2	Phenacetin
U188	108-95-2	Phenol
U189	1314-80-3	Phosphorus sulfide (R)

U189	1314-80-3	Sulfur phosphide (R)
U190	85-44-9	1,3-Isobenzofurandione
U190	85-44-9	Phthalic anhydride
U191	109-06-8	2-Picoline
U191	109-06-8	Pyridine, 2-methyl-
U192	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-
U192	23950-58-5	Pronamide
U193	1120-71-4	1,2-Oxathiolane, 2,2-dioxide
U193	1120-71-4	1,3-Propane sultone
U194	107-10-8	1-Propanamine (I,T)
U194	107-10-8	n-Propylamine (I,T)
U196	110-86-1	Pyridine
U197	106-51-4	p-Benzoquinone
U197	106-51-4	2,5-Cyclohexadiene-1,4-dione
U200	50-55-5	Reserpine
U200	50-55-5	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester, (3beta,16beta,17alpha,18beta,20alpha)-
U201	108-46-3	1,3-Benzenediol
U201	108-46-3	Resorcinol
U203	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
U203	94-59-7	Safrole
U204	7783-00-8	Selenious acid
U204	7783-00-8	Selenium dioxide

U205	7488-56-4	Selenium sulfide
U205	7488-56-4	Selenium sulfide SeS ₂ (R,T)
U206	18883-66-4	Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-, D-
U206	18883-66-4	D-Glucose, 2-deoxy-2-[[[(methylnitrosoamino)-carbonyl]amino]-
U206	18883-66-4	Streptozotocin
U207	95-94-3	Benzene, 1,2,4,5-tetrachloro-
U207	95-94-3	1,2,4,5-Tetrachlorobenzene
U208	630-20-6	Ethane, 1,1,1,2-tetrachloro-
U208	630-20-6	1,1,1,2-Tetrachloroethane
U209	79-34-5	Ethane, 1,1,2,2-tetrachloro-
U209	79-34-5	1,1,2,2-Tetrachloroethane
U210	127-18-4	Ethene, tetrachloro-
U210	127-18-4	Tetrachloroethylene
U211	56-23-5	Carbon tetrachloride
U211	56-23-5	Methane, tetrachloro-
U213	109-99-9	Furan, tetrahydro-(I)
U213	109-99-9	Tetrahydrofuran (I)
U214	563-68-8	Acetic acid, thallium(1+) salt
U214	563-68-8	Thallium(I) acetate
U215	6533-73-9	Carbonic acid, dithallium(1+) salt
U215	6533-73-9	Thallium(I) carbonate
U216	7791-12-0	Thallium(I) chloride
U216	7791-12-0	Thallium chloride TlCl

U217	10102-45-1	Nitric acid, thallium(1+) salt
U217	10102-45-1	Thallium(I) nitrate
U218	62-55-5	Ethanethioamide
U218	62-55-5	Thioacetamide
U219	62-56-6	Thiourea
U220	108-88-3	Benzene, methyl-
U220	108-88-3	Toluene
U221	25376-45-8	Benzenediamine, ar-methyl-
U221	25376-45-8	Toluenediamine
U222	636-21-5	Benzenamine, 2-methyl-, hydrochloride
U222	636-21-5	o-Toluidine hydrochloride
U223	26471-62-5	Benzene, 1,3-diisocyanatomethyl- (R,T)
U223	26471-62-5	Toluene diisocyanate (R,T)
U225	75-25-2	Bromoform
U225	75-25-2	Methane, tribromo-
U226	71-55-6	Ethane, 1,1,1-trichloro-
U226	71-55-6	Methyl chloroform
U226	71-55-6	1,1,1-Trichloroethane
U227	79-00-5	Ethane, 1,1,2-trichloro-
U227	79-00-5	1,1,2-Trichloroethane
U228	79-01-6	Ethene, trichloro-
U228	79-01-6	Trichloroethylene
U234	99-35-4	Benzene, 1,3,5-trinitro-
U234	99-35-4	1,3,5-Trinitrobenzene (R,T)

U235	126-72-7	1-Propanol, 2,3-dibromo-, phosphate (3:1)
U235	126-72-7	Tris(2,3-dibromopropyl) phosphate
U236	72-57-1	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)bis[5-amino-4-hydroxy]-, tetrasodium salt
U236	72-57-1	Trypan blue
U237	66-75-1	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-
U237	66-75-1	Uracil mustard
U238	51-79-6	Carbamic acid, ethyl ester
U238	51-79-6	Ethyl carbamate (urethane)
U239	1330-20-7	Benzene, dimethyl- (I)
U239	1330-20-7	Xylene (I)
U240	94-75-7 *	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters
U240	94-75-7 *	2,4-D, salts and esters
U243	1888-71-7	Hexachloropropene
U243	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
U244	137-26-8	Thioperoxydicarbonic diamide [(H ₂ N)C(S)] ₂ S ₂ , tetramethyl-
U244	137-26-8	Thiram
U246	506-68-3	Cyanogen bromide (CN)Br
U247	72-43-5	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-
U247	72-43-5	Methoxychlor
U248	81-81-2 *	2H-1-Benzopyran-2-one,4-hydroxy-3- (3-oxo-1-phenyl-butyl)-, and salts, when present at concentrations of 0.3 per cent or less
U248	81-81-2 *	Warfarin, and salts, when present at concentrations of 0.3 per cent or less

U249	1314-84-7	Zinc phosphide Zn_3P_2 , when present at concentrations of 10 per cent or less
U271	17804-35-2	Benomyl
U271	17804-35-2	Carbamic acid, [1-[(buthylamino)carbonyl]- 1H-benzimidazol-2-yl], methyl ester
U278	22781-23-3	Bendiocarb
U278	22781-23-3	1,3-Benzodioxol-4-ol, 2,2-dimethyl-, methyl carbamate
U279	63-25-2	Carbaryl
U279	63-25-2	1-Naphthalenol, methylcarbamate
U280	101-27-9	Barban
U280	101-27-9	Carbamic acid, (3-chlorophenyl)-, 4-chloro-2-butynyl ester
U328	95-53-4	Benzenamine, 2-methyl-
U328	95-53-4	o-Toluidine
U353	106-49-0	Benzenamine, 4-methyl-
U353	106-49-0	p-Toluidine
U359	110-80-5	Ethanol, 2-ethoxy-
U359	110-80-5	Ethylene glycol monoethyl ether
U364	22961-82-6	Bendiocarb phenol
U364	22961-82-6	1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U367	1563-38-8	7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U367	1563-38-8	Carbofuran phenol
U372	10605-21-7	Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U372	10605-21-7	Carbendazim
U373	122-42-9	Carbamic acid, phenyl-, 1-methylethyl ester

U373	122-42-9	Propham
U387	52888-80-9	Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U387	52888-80-9	Prosulfocarb
U389	2303-17-5	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3,3-trichloro-2-propenyl) ester
U389	2303-17-5	Triallate
U394	30558-43-1	A2213
U394	30558-43-1	Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	5952-26-1	Diethylene glycol, dicarbamate
U395	5952-26-1	Ethanol, 2,2'-oxybis-, dicarbamate
U404	121-44-8	Ethanamine, N, N-diethyl-
U404	121-44-8	Triethylamine
U409	23564-05-8	Carbamic acid, [1,2-phenylenebis (iminocarbonylthioyl)]bis-, dimethyl ester
U409	23564-05-8	Thiophanate-methyl
U410	59669-26-0	Ethanimidothioic acid, N,N'-[thiobis [(methylimino)carbonyloxy]]bis-, dimethyl ester
U410	59669-26-0	Thiodicarb
U411	114-26-1	Phenol, 2-(1-methylethoxy)-, methylcarbamate
U411	114-26-1	Propoxur
See F027	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
See F027	87-86-5	Pentachlorophenol
See F027	87-86-5	Phenol, pentachloro-
See F027	58-90-2	Phenol, 2,3,4,6-tetrachloro-

See F027	95-95-4	Phenol, 2,4,5-trichloro-
See F027	88-06-2	Phenol, 2,4,6-trichloro-
See F027	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
See F027	93-72-1	Silvex (2,4,5-TP)
See F027	93-76-5	2,4,5-T
See F027	58-90-2	2,3,4,6-Tetrachlorophenol
See F027	95-95-4	2,4,5-Trichlorophenol
See F027	88-06-2	2,4,6-Trichlorophenol
* CAS Number given for parent compound only.		

~~(G) As used in this rule, the phrase "commercial chemical products or manufacturing chemical intermediates having the generic name listed in ..." refers to a chemical substance which is manufactured or formulated for commercial or manufacturing use which consists of the commercially pure grade of the chemical, any technical grades of the chemical that are produced or marketed, and all formulations in which the chemical is the sole active ingredient. That term does not refer to a material, such as a manufacturing process waste, that contains any of the substances listed in paragraph (E) or (F) of this rule. Where a manufacturing process waste is deemed to be a hazardous waste because such waste contains a substance listed in paragraph (E) or (F) of this rule, such waste will be listed in either rule 3745-51-31 or 3745-51-32 of the Administrative Code, or will be identified as a hazardous waste by the characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.~~

Effective: 10/5/2020

Five Year Review (FYR) Dates: Exempt

CERTIFIED ELECTRONICALLY

Certification

09/21/2020

Date

Promulgated Under: 119.03
Statutory Authority: 3734.12
Rule Amplifies: 3734.12
Prior Effective Dates: 04/15/1981, 05/22/1981 (Emer.), 08/26/1981 (Emer.),
12/02/1981, 01/07/1983, 05/29/1985 (Emer.),
08/29/1985, 01/30/1986, 09/22/1986, 11/13/1987,
12/08/1988, 12/30/1989, 06/29/1990, 02/11/1992,
02/14/1995, 09/02/1997, 12/07/2000, 12/07/2004,
09/05/2010, 03/17/2012, 10/31/2015

3745-51-39

Conditional exclusion for used, broken CRTs and processed CRT glass undergoing recycling.

Used, broken cathode ray tubes (CRTs) are not wastes if the CRTs meet the following conditions:

(A) Prior to processing. These materials are not wastes if the materials are destined for recycling and if the materials meet the following requirements:

(1) Storage. The broken CRTs shall be either:

(a) Stored in a building with a roof, floor, and walls.

(b) Placed in a container (i.e., a package or a vehicle) that is constructed, filled, and closed to minimize releases to the environment of CRT glass (including fine solid materials).

(2) Labeling. Each container in which the used, broken CRT is contained shall be labeled or marked clearly with one of the following phrases: "Used cathode ray tubes- contain leaded glass" or "Leaded glass from televisions or computers." The container also shall be labeled "Do not mix with other glass materials."

(3) Transportation. The used, broken CRTs shall be transported in a container that meets the requirements of paragraphs (A)(1)(b) and (A)(2) of this rule.

(4) Accumulating speculatively and use constituting disposal. The used, broken CRTs are subject to the limitations on being "accumulated speculatively" as provided in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code. If the used, broken CRTs are used in a manner constituting disposal, the used, broken CRTs shall comply with the applicable requirements of rules 3745-266-20 to 3745-266-23 of the Administrative Code instead of this rule.

(5) Exports. In addition to the applicable conditions specified in paragraphs (A) (1) to (A)(4) of this rule, exporters of used, broken CRTs shall notify U.S. EPA of an intended export before the CRTs are scheduled to leave the United States, and shall comply with the notification requirements in 40 ~~CFR~~C.F.R. 261.39 (a)(5)(i) to (a)(5)(xi). ~~Notifications submitted by mail should be sent to "Office of Enforcement and Compliance Assurance, Mail Code 2254A, United States Environmental Protection Agency, 1200 Pennsylvania Avenue, N.W., Washington, DC," 20460. Hand-delivered notifications should be sent to "Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division, Mail Code 2254A, United States Environmental Protection Agency, Ariel Rios Bldg., Room 6144, 1200 Pennsylvania Ave., NW., Washington, DC." In both cases, the following~~

~~shall be prominently displayed on the front of the envelope: "Attention: Notification of Intent to Export CRTs."~~

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) Requirements for used CRT processing. Used, broken CRTs undergoing "CRT processing" as defined in rule 3745-50-10 of the Administrative Code are not wastes if such wastes meet the following requirements:

(1) Storage. Used, broken CRTs undergoing processing are subject to the requirement of paragraph (A)(4) of this rule.

(2) Processing.

(a) All activities specified in subparagraphs (b) and (c) of the definition of "CRT processing" in rule 3745-50-10 of the Administrative Code shall be performed within a building with a roof, floor, and walls.

(b) No activities may be performed that use temperatures high enough to volatilize lead from CRTs.

(C) Processed CRT glass sent to CRT glass making or lead smelting. Glass from used CRTs that is destined for recycling at a CRT glass manufacturer or a lead smelter after processing is not a waste unless such glass is "accumulated speculatively" as defined in paragraph (C)(8) of rule 3745-51-01 of the Administrative Code.

(D) Use constituting disposal. Glass from used CRTs that is used in a manner constituting disposal shall comply with rules 3745-266-20 to 3745-266-23 of the Administrative Code instead of this rule.

[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: 10/5/2020
Five Year Review (FYR) Dates: 7/13/2020 and Exempt

CERTIFIED ELECTRONICALLY

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09/21/2020

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3745-52-01**Definitions - generator standards.**

As used in Chapter 3745-52 of the Administrative Code:

- (A) "Condition for exemption" means any requirement in rules 3745-52-14 to 3745-52-17, 3745-52-70, 3745-52-200 to 3745-52-216, or 3745-52-230 to 3745-52-233 of the Administrative Code that states an event, action, or standard that shall occur or be met in order to obtain an exemption from any applicable requirement in Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.
- (B) "Independent requirement" means a requirement of Chapter 3745-52 of the Administrative Code that states an event, action, or standard that shall occur or be met; and that applies without relation to, or irrespective of, the purpose of obtaining a conditional exemption for storage facility permit, interim standards, and operating requirements under rules 3745-52-14 to 3745-52-17, 3745-52-200 to 3745-52-216, or 3745-52-230 to 3745-52-233 of the Administrative Code.

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3745-52-10**Applicability- generator standards.**

(A) Chapter 3745-52 of the Administrative Code establishes standards for generators of "hazardous waste," as defined in rule 3745-50-10 of the Administrative Code, as follows:

(1) A person who generates a hazardous waste is subject to all of the following:

(a) Independent requirements of a very small quantity generator:

(i) Paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, hazardous waste determination and recordkeeping.

(ii) Rule 3745-52-13 of the Administrative Code, generator category determinations.

(b) Independent requirements of a small quantity generator:

(i) Rule 3745-52-11 of the Administrative Code, hazardous waste determination and recordkeeping.

(ii) Rule 3745-52-13 of the Administrative Code, generator category determinations.

(iii) Rule 3745-52-18 of the Administrative Code, U.S. EPA identification numbers and re-notification for small quantity generators and large quantity generators.

(iv) Rules 3745-52-20 to 3745-52-27 of the Administrative Code, manifest requirements for small quantity generators and large quantity generators.

(v) Rules 3745-52-30 to 3745-52-35 of the Administrative Code, pre-transport requirements for small quantity generators and large quantity generators.

(vi) Rule 3745-52-40 of the Administrative Code, recordkeeping - generator standards.

(vii) Rule 3745-52-44 of the Administrative Code, recordkeeping for small quantity generators.

(viii) Rule 3745-52-80 of the Administrative Code and 40 C.F.R. Part 262 subpart H, transboundary movements of hazardous waste for recovery or disposal.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(c) Independent requirements of a large quantity generator:

- (i) Rule 3745-52-11 of the Administrative Code, hazardous waste determination and recordkeeping.
- (ii) Rule 3745-52-13 of the Administrative Code, generator category determinations.
- (iii) Rule 3745-52-18 of the Administrative Code, U.S. EPA identification numbers and re-notification for small quantity generators and large quantity generators.
- (iv) Rules 3745-52-20 to 3745-52-27 of the Administrative Code, manifest requirements for small quantity generators and large quantity generators.
- (v) Rules 3745-52-30 to 3745-52-35 of the Administrative Code, pre-transport requirements for small quantity generators and large quantity generators.
- (vi) Rules 3745-52-40 to 3745-52-43 of the Administrative Code, recordkeeping and reporting applicable to small quantity generators and large quantity generators.
- (vii) Rule 3745-52-80 of the Administrative Code and 40 C.F.R. Part 262 subpart H, transboundary movements of hazardous waste for recovery or disposal.

(2) A generator who accumulates hazardous waste on-site is a person who stores or treats hazardous waste. Such generator is subject to the applicable requirements of Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, unless the generator is one of the following:

(a) A very small quantity generator who only accumulates hazardous waste by storing and meets the conditions for exemption in rule 3745-52-14 of the Administrative Code.

[Comment: A very small quantity generator of hazardous may only treat or dispose of hazardous waste pursuant to the requirements in paragraphs (A)(5)(a) and (A)(5)(b) of rule 3745-52-14 of the Administrative Code.]

(b) A small quantity generator who meets the conditions for exemption in rules 3745-52-15 and 3745-52-16 of the Administrative Code.

(c) A large quantity generator who meets the conditions for exemption in rules 3745-52-15 and 3745-52-17 of the Administrative Code.

(3) A generator shall not transport, offer the generator's hazardous waste for transport, or otherwise cause the generator's waste to be sent to a facility that is not a designated facility or not otherwise authorized to receive the generator's hazardous waste.

(B) Determining generator category. A generator shall use rule 3745-52-13 of the Administrative Code to determine which provisions of Chapter 3745-52 of the Administrative Code are applicable to the generator based on the quantity of hazardous waste generated per calendar month.

(C) [Reserved.]

(D) Any person who exports or imports hazardous wastes shall comply with rule 3745-52-18 of the Administrative Code and 40 C.F.R. Part 262 subpart H.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(E) Any person who imports hazardous wastes from a foreign country into the state of Ohio shall comply with the standards applicable to generators in Chapter 3745-52 of the Administrative Code.

(F) A farmer who generates waste pesticides which are hazardous wastes and who complies with rule 3745-52-70 of the Administrative Code is not required to comply with other standards in Chapter 3745-52 or Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, or 3745-270, or rules 3745-50-40 to 3745-50-235 of the Administrative Code with respect to such pesticides.

(G) Noncompliance with generator requirements.

(1) A generator's violation of an independent requirement is subject to penalty and injunctive relief pursuant to the hazardous waste rules and sections 3734. and 3745. of the Revised Code.

(2) A generator's noncompliance with a condition for exemption in Chapter 3745-52 of the Administrative Code is not subject to penalty or injunctive relief pursuant to the hazardous waste rules and sections 3734. and 3745. of the Revised Code as a violation of a condition for exemption in Chapter 3745-52 of the Administrative Code. Noncompliance by any generator with an applicable condition for exemption from storage or treatment permit and operation requirements means that the facility is a storage or treatment facility, which has been established and is operating without an exemption from the Ohio hazardous waste permitting and operations requirements in section 3734. of the Revised Code, Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity. Without an exemption, any violations of such storage or treatment activities are subject to penalty and injunctive relief pursuant to the hazardous waste rules and sections 3734. and 3745. of the Revised Code.

(H) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility shall comply with the generator standards in Chapter 3745-52 of the Administrative Code.

(I) Persons responding to an explosives or munitions emergency in accordance with paragraph (G)(8)(a)(iv) or (G)(8)(d) of rule 3745-54-01 or paragraph (C)(11)(a)(iv) or (C)(11)(d) of rule 3745-65-01 of the Administrative Code and paragraph (D)(1)(d) or (D)(3) of rule 3745-50-45 of the Administrative Code are not required to comply with the generator standards in Chapter 3745-52 of the Administrative Code.

(J) [Reserved.]

(K) [Reserved.]

(L) The laboratories owned by an eligible academic entity that chooses to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code are not subject to (for purposes of this paragraph, the terms "laboratory" and "eligible academic entity" have the meaning defined in rule 3745-52-200 of the Administrative Code) either of the following:

- (1) The independent requirements of rule 3745-52-11 or rule 3745-52-15 of the Administrative Code for large quantity generators and small quantity generators, except as provided in rules 3745-52-200 to 3745-52-216 of the Administrative Code.
 - (2) The conditions of rule 3745-52-14 of the Administrative Code, for very small quantity generators, except as provided in rules 3745-52-200 to 3745-52-216 of the Administrative Code.
- (M) All "reverse distributors," as defined in rule 3745-266-500 of the Administrative Code, are subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code for the management of hazardous waste pharmaceuticals in lieu of Chapter 3745-52 of the Administrative Code.
- (N) Each "healthcare facility," as defined in rule 3745-266-500 of the Administrative Code, shall determine whether the healthcare facility is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code for the management of hazardous waste pharmaceuticals, based on the total hazardous waste the healthcare facility generates per calendar month (including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste). A healthcare facility that generates more than one hundred kilograms (two hundred twenty pounds) of hazardous waste per calendar month, or more than one kilogram (2.2 pounds) of acute hazardous waste per calendar month, or more than one hundred kilograms (two hundred twenty pounds) per calendar month of any residue or contaminated soil, water, or other debris, resulting from the clean-up of a spill, into or on any land or water, of any acute hazardous wastes listed in rule 3745-51-31 of the Administrative Code or paragraph (E) of rule 3745-51-33 of the Administrative Code, is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code for the management of hazardous waste pharmaceuticals in lieu of Chapter 3745-52 of the Administrative Code. A healthcare facility that is a very small quantity generator when counting all of the healthcare facility's hazardous waste, including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste, remains subject to rule 3745-52-14 of the Administrative Code and is not subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code, except for rules 3745-266-505 and 3745-266-507 of the Administrative Code and the optional provisions of rule 3745-266-504 of the Administrative Code.

[Comment 1: A generator who treats, stores, or disposes of hazardous waste on-site shall comply with the applicable standards and permit requirements in rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code]

[Comment 2: 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."]

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TO BE RESCINDED

3745-52-10 **Applicability- generator standards.**

- (A) Chapter 3745-52 of the Administrative Code establishes standards for generators of hazardous wastes.
- (B) Paragraphs (C) and (D) of rule 3745-51-05 of the Administrative Code shall be used to determine the applicability of Chapter 3745-52 of the Administrative Code that are dependent on calculations of the quantity of hazardous waste generated per month.
- (C) A generator who treats, stores, or disposes of hazardous wastes on-site shall comply with only the following with respect to that waste:
- (1) Rule 3745-52-70 of the Administrative Code, if applicable, for farmers.
 - (2) Rule 3745-52-11 of the Administrative Code for determining whether or not the generator has a hazardous waste.
 - (3) Paragraphs (C) and (D) of rule 3745-52-40 of the Administrative Code for recordkeeping.
 - (4) Rule 3745-52-12 of the Administrative Code for obtaining a U.S. EPA identification number.
 - (5) Rule 3745-52-43 of the Administrative Code for additional reporting.
 - (6) Rule 3745-52-34 of the Administrative Code for accumulation of the generator's waste.
- (D) Any person who exports or imports hazardous wastes for recovery shall comply with 40 CFR Part 262 subpart H. A waste is considered hazardous if the waste meets the definition of "hazardous waste" in rule 3745-51-03 of the Administrative Code and is subject to either the manifesting requirements of rules 3745-52-20 to 3745-52-27 of the Administrative Code, or the universal waste management standards of Chapter 3745-273 of the Administrative Code, or the export requirements in the spent lead-acid battery management standards of rule 3745-266-80 of the Administrative Code.
- [Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

- (E) Any person who imports hazardous wastes from a foreign country into the state of Ohio shall comply with the standards applicable to generators in Chapter 3745-52 of the Administrative Code.
- (F) A farmer who generates waste pesticides which are hazardous wastes; and who complies with rule 3745-52-70 of the Administrative Code; is not required to comply with other standards in Chapter 3745-52 or Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, or 3745-270, or rules 3745-50-40 to 3745-50-235 of the Administrative Code with respect to such pesticides.
- (G) Any person who generates a hazardous waste as defined in rule 3745-51-03 of the Administrative Code is subject to the compliance requirements and penalties prescribed in section 3734.13 of the Revised Code if that person does not comply with Chapter 3745-52 of the Administrative Code.
- (H) An owner or operator who initiates a shipment of hazardous waste from a treatment, storage, or disposal facility shall comply with the generator standards in Chapter 3745-52 of the Administrative Code.
- (I) Persons responding to an explosives or munitions emergency in accordance with paragraph (G)(8)(a)(iv) or (G)(8)(d) of rule 3745-54-01 or paragraph (C)(11)(a)(iv) or (C)(11)(d) of rule 3745-65-01 of the Administrative Code; and paragraph (D)(1)(d) or (D)(3) of rule 3745-50-45 of the Administrative Code are not required to comply with Chapter 3745-52 of the Administrative Code.
- (J) [Reserved.]
- (K) [Reserved.]
- (L) The laboratories owned by an eligible academic entity that chooses to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code are not subject to (for purposes of this paragraph, the terms "laboratory" and "eligible academic entity" have the meaning defined in rule 3745-52-200 of the Administrative Code):
- (1) Rule 3745-52-11 or paragraph (C) of rule 3745-52-34 of the Administrative Code for large quantity generators and small quantity generators, except as provided in rules 3745-52-200 to 3745-52-216 of the Administrative Code.
 - (2) Paragraph (B) of rule 3745-51-05 of the Administrative Code, for conditionally exempt small quantity generators, except as provided in rules 3745-52-200 to 3745-52-216 of the Administrative Code.

[Comment 1: Rule 3745-52-34 of the Administrative Code is applicable to the on-site accumulation or treatment of hazardous waste by generators. Therefore, rule 3745-52-34 of

the Administrative Code applies only to owners or operators who are shipping hazardous waste which was generated at that facility.]

[Comment 2: A generator who treats, stores, or disposes of hazardous waste on-site shall comply with the applicable standards and permit requirements in rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code]

[Comment 3: 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."]

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3745-52-11

Hazardous waste determination and recordkeeping.

A person who generates a "waste" (as defined in rule 3745-51-02 of the Administrative Code) shall make an accurate determination as to whether that waste is a hazardous waste in order to ensure wastes are properly managed according to all applicable hazardous waste rules. A hazardous waste determination is made using the following steps:

- (A) The hazardous waste determination for each waste shall be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of the management of the waste that the waste has, or may have, changed the waste's properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the waste classification of the waste may change.
- (B) A person shall determine whether the waste is excluded from regulation under rule 3745-51-04 of the Administrative Code.
- (C) If the waste is not excluded under rule 3745-51-04 of the Administrative Code, the person shall then use knowledge of the waste to determine whether the waste meets any of the listing descriptions under rules 3745-51-30 to 3745-51-35 of the Administrative Code. Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. If the waste is listed, the person may file a delisting petition under 40 C.F.R. 260.20 and 40 C.F.R. 260.22 to demonstrate to the administrator that the waste from this particular site or operation is not a hazardous waste.
- (D) The person then shall determine whether the waste exhibits one or more hazardous characteristics as identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code by following the procedures in paragraph (D)(1) or (D)(2) of this rule, or a combination of both, as follows:
- (1) The person shall apply knowledge of the hazard characteristic of the waste in light of the materials or the processes used to generate the waste. Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or the waste's constituents. A test other than a test method provided in rules 3745-51-20 to 3745-51-24 of the Administrative Code, or an equivalent test method approved by the administrator under 40 C.F.R. 260.21,

may be used as part of a person's knowledge to determine whether a waste exhibits a characteristic of hazardous waste. However, such tests do not, by themselves, provide definitive results. Persons testing the waste shall obtain a "representative sample" (as defined in rule 3745-50-10 of the Administrative Code) of the waste for the testing.

(2) When available knowledge is inadequate to make an accurate determination, the person shall test the waste according to the applicable methods provided in rules 3745-51-20 to 3745-51-24 of the Administrative Code or according to an equivalent method approved by the administrator under 40 C.F.R. 260.21 and in accordance with the following:

(a) Persons testing the waste shall obtain a representative sample of the waste for the testing.

(b) Where a test method is specified in rules 3745-51-20 to 3745-51-24 of the Administrative Code, the results of the regulatory test, when properly performed, are definitive for determining the regulatory status of the waste.

(E) If the waste is determined to be hazardous, the generator shall refer to Chapters 3745-51, 3745-54 to 3745-57, 3745-65 to 374-69, 3745-205, 3745-256, 3745-266, 3745-270, and 3745-273 of the Administrative Code for other possible exclusions or restrictions pertaining to management of the specific waste.

(F) Recordkeeping for small quantity generators and large quantity generators. A small quantity generator or large quantity generator shall maintain records that support the hazardous waste determinations, including records that identify whether a waste is a "hazardous waste" (as defined in rule 3745-51-03 of the Administrative Code). Records shall be maintained for at least three years after the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. These records shall comprise the generator's knowledge of the waste and shall support the generator's determination, as described in paragraphs (C) and (D) of this rule. The records shall include, but are not limited to, the results of any tests, sampling, waste analyses, or other determinations made in accordance with this rule; records that document the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated; the composition of the waste and the properties of the waste; and records which explain the knowledge basis for the generator's determination, as described in paragraph (D)(1) of this rule. The periods of record retention provided in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director.

(G) Identifying hazardous waste numbers for small quantity generators and large quantity generators. If the waste is determined to be hazardous, small quantity generators and large quantity generators shall identify all applicable EPA hazardous waste numbers in rules 3745-51-20 to 3745-51-24 and 3745-51-30 to 3745-51-35 of the Administrative Code. Prior to shipping the waste off site, the generator also shall mark the containers with all applicable EPA hazardous waste numbers according to rule 3745-52-32 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."]

Replaces: 3745-52-11 rescinded, 3745-52-40 portion
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3745-52-11 **Hazardous waste determination.**

Any person who generates a "waste," as defined in rule 3745-51-02 of the Administrative Code, shall determine if that waste is a hazardous waste using the following method:

- (A) The generator should first determine if the waste is excluded from regulation under rule 3745-51-04 of the Administrative Code.
- (B) The generator shall then determine if the waste is listed as a hazardous waste in rules 3745-51-30 to 3745-51-35 of the Administrative Code.

[Comment: Even if the waste is listed, the generator still has an opportunity under 40 CFR 260.22 to demonstrate to the administrator that the waste from the generator's particular facility or operation is not a hazardous waste.]

- (C) For purposes of compliance with Chapter 3745-270 of the Administrative Code, or if the waste is not listed as a hazardous waste in rules 3745-51-30 to 3745-51-35 of the Administrative Code, the generator shall then determine whether the waste is identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code by either:
 - (1) Testing the waste according to the methods in rules 3745-51-20 to 3745-51-24 of the Administrative Code, or according to an equivalent method approved by the U.S. EPA region V regional administrator pursuant to 40 CFR 260.21.
 - (2) Applying knowledge of the hazardous characteristic of the waste in light of the materials or the processes used.
- (D) If the waste is determined to be hazardous, the generator shall refer to Chapters 3745-51, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, 3745-270, and 3745-273 of the Administrative Code for possible exclusions or restrictions pertaining to management of the specific waste.

[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."]

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Generator identification numbers.

- (A) A generator shall not treat, store, dispose of, transport, or offer for transportation hazardous waste without having received a U.S. EPA identification number from U.S. EPA or Ohio EPA.
- (B) A generator shall not offer the generator's hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received a U.S. EPA identification number.
- (C) A recognized trader shall not arrange for import or export of hazardous waste without having received a U.S. EPA identification number.

[Comment 1: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

[Comment 2: 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."]

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3745-52-13

Generator category determinations.

A generator shall determine the generator's generator category. A generator's category is based on the amount of hazardous waste generated each month and may change from month to month. This rule provides procedures to determine whether a generator is a "very small quantity generator," a "small quantity generator," or a "large quantity generator," as defined in rule 3745-50-10 of the Administrative Code, for a particular month.

(A) Generators of either acute hazardous waste or non-acute hazardous waste. A generator who generates either acute hazardous waste or non-acute hazardous waste in a calendar month shall determine the generator category for that month by doing all of the following:

- (1) Counting the total amount of hazardous waste generated in the calendar month.
- (2) Subtracting from the total any amounts of waste exempt from counting as described in paragraphs (C) and (D) of this rule.
- (3) Determining the resulting generator category for the hazardous waste generated using the table of this rule.

(B) Generators of both acute and non-acute hazardous wastes. A generator who generates both acute hazardous waste and non-acute hazardous waste in the same calendar month shall determine the generator category for that month by doing all of the following:

- (1) Counting separately the total amount of acute hazardous waste and the total amount of non-acute hazardous waste generated in the calendar month.
- (2) Subtracting from each total any amounts of waste exempt from counting as described in paragraphs (C) and (D) of this rule.
- (3) Determining separately the resulting generator categories for the quantities of acute and non-acute hazardous waste generated using the table of this rule.
- (4) Comparing the resulting generator categories from paragraph (B)(3) of this rule and applying the more stringent generator category to the accumulation and management of both non-acute hazardous waste and acute hazardous waste generated for that month.

Table - Generator categories based on quantity of waste in kilograms (kg) generated in a calendar month

<u>Quantity of acute hazardous waste generated in a calendar month</u>	<u>Quantity of non-acute hazardous waste generated in a calendar month</u>	<u>Quantity of residues from a cleanup of acute hazardous waste generated in a calendar month</u>	<u>Generator category</u>
<u>Greater than 1 kg</u>	<u>Any amount</u>	<u>Any amount</u>	<u>Large quantity generator</u>
<u>Any amount</u>	<u>Greater than or equal to 1,000 kg</u>	<u>Any amount</u>	<u>Large quantity generator</u>
<u>Any amount</u>	<u>Any amount</u>	<u>Greater than 100 kg</u>	<u>Large quantity generator</u>
<u>Less than or equal to 1 kg</u>	<u>Greater than 100 kg and less than 1,000 kg</u>	<u>Less than or equal to 100 kg</u>	<u>Small quantity generator</u>
<u>Less than or equal to 1 kg</u>	<u>Less than or equal to 100 kg</u>	<u>Less than or equal to 100 kg</u>	<u>Very small quantity generator</u>

(C) When making the monthly quantity-based determinations required by Chapter 3745-52 of the Administrative Code, the generator shall include all hazardous waste that the generator generates, except hazardous waste that conform to any of the following:

- (1) Is exempt from regulation under paragraphs (C) to (F) of rule 3745-51-04, paragraph (A)(3) of rule 3745-51-06, paragraph (A)(1) of rule 3745-51-07, or rule 3745-51-08 of the Administrative Code.
- (2) Is managed immediately upon generation only in "on-site elementary neutralization units," "wastewater treatment units," or "totally enclosed treatment facilities" as defined in rule 3745-50-10 of the Administrative Code.
- (3) Is recycled, without prior storage or accumulation, only in an on-site process subject to regulation under paragraph (C)(2) of rule 3745-51-06 of the Administrative Code.
- (4) Is used oil managed in accordance with paragraph (A)(4) of rule 3745-51-06 and Chapter 3745-279 of the Administrative Code.

- (5) Is spent lead-acid batteries managed in accordance with rule 3745-266-80 of the Administrative Code.
- (6) Is universal waste managed in accordance with rule 3745-51-09 and Chapter 3745-273 of the Administrative Code.
- (7) Is a hazardous waste that is an unused commercial chemical product (listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code or exhibiting one or more characteristics in rules 3745-51-20 to 3745-51-24 of the Administrative Code) that is generated solely as a result of a laboratory clean-out conducted at an eligible academic entity pursuant to rule 3745-52-213 of the Administrative Code. For purposes of this paragraph, the term "eligible academic entity" shall have the meaning as defined in rule 3745-52-200 of the Administrative Code.
- (8) Is managed as part of an episodic event in compliance with the conditions of rules 3745-52-230 to 3745-52-233 of the Administrative Code.
- (9) Is a "hazardous waste pharmaceutical," as defined in rule 3745-266-500 of the Administrative Code, that is subject to or managed in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code or is a hazardous waste pharmaceutical that is also a drug enforcement administration controlled substance and is conditionally exempt under rule 3745-266-506 of the Administrative Code.
- (D) In determining the quantity of hazardous waste generated in a calendar month, a generator need not include any of the following:
- (1) Hazardous waste when the hazardous waste is removed from on-site accumulation, so long as the hazardous waste was previously counted once.
 - (2) Hazardous waste generated by on-site treatment (including reclamation) of the generator's hazardous waste, so long as the hazardous waste that is treated was previously counted once.
 - (3) Hazardous waste spent materials that are generated, reclaimed, and subsequently reused on site, so long as such spent materials were previously counted once.
- (E) Based on the generator category as determined under this rule, the generator shall meet the applicable independent requirements in rule 3745-52-10 of the Administrative Code. A generator's category also determines which of the provisions of rule 3745-52-14, 3745-52-15, 3745-52-16, or 3745-52-17 of the Administrative Code shall be met to obtain an exemption from the storage or treatment facility permit, interim standards, and operating requirements when accumulating hazardous waste.

(F) Mixing hazardous wastes with wastes.

(1) Very small quantity generator wastes.

(a) Hazardous wastes generated by a very small quantity generator may be mixed with wastes. Very small quantity generators may mix a portion or all of the very small quantity generator's hazardous waste with waste and remain subject to rule 3745-52-14 of the Administrative Code even though the resultant mixture exceeds the quantity limits identified in the definition of very small quantity generator, unless the mixture exhibits one or more of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(b) If the resulting mixture exhibits a characteristic of hazardous waste, this resultant mixture is a newly-generated hazardous waste. The very small quantity generator shall count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the very small quantity generator calendar month quantity limits identified in the definition of "very small quantity generator" in rule 3745-50-10 of the Administrative Code. If so, to remain exempt from the permitting, interim standards, and operating standards, the very small quantity generator shall meet the conditions for exemption applicable to either a small quantity generator or a large quantity generator. The very small quantity generator also shall comply with the applicable independent requirements for either a small quantity generator or a large quantity generator.

(c) If a very small quantity generator's wastes are mixed with used oil, the mixture is subject to Chapter 3745-279 of the Administrative Code. Any material produced from such a mixture by processing, blending, or other treatment is also regulated under Chapter 3745-279 of the Administrative Code.

(2) Small quantity generator and large quantity generator wastes.

(a) Hazardous wastes generated by a small quantity generator or large quantity generator may be mixed with waste. These mixtures are subject to all of the following: the mixture rule in paragraphs (A)(2)(d), (B)(2), (B)(3), and (G)(2)(a) of rule 3745-51-03 of the Administrative Code; the prohibition of dilution at paragraph (A) of rule 3745-270-03 of the Administrative Code; the land disposal restriction requirements of rule 3745-270-40 of the Administrative Code if a characteristic hazardous waste is mixed with a waste so that the mixture no longer exhibits

the hazardous characteristic; and the hazardous waste determination requirement in rule 3745-52-11 of the Administrative Code.

- (b) If the resulting mixture is found to be a hazardous waste, this resultant mixture is a newly-generated hazardous waste. A small quantity generator shall count both the resultant mixture amount plus the other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the small quantity generator calendar monthly quantity limits identified in the definition of "small quantity generator" in rule 3745-50-10 of the Administrative Code. If so, to remain exempt from the permitting, interim standards, and operating standards, the small quantity generator shall meet the conditions for exemption applicable provisions to a large quantity generator. The small quantity generator shall comply with the applicable independent requirements for a large quantity generator.

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3745-52-14**Conditions for exemption for very small quantity generators.**

[Comment: For purposes of this rule, accumulate means the storage of hazardous waste. A very small quantity generator may only treat or dispose of hazardous waste if permissible in accordance with paragraph (A)(5)(a) or (A)(5)(b) of this rule.]

(A) Provided that the very small quantity generator meets all the conditions for exemption listed in this rule, hazardous waste generated by the very small quantity generator is not subject to Chapters 3745-50, 3745-52 (except rules 3745-52-10 to 3745-52-14 of the Administrative Code), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, and the very small quantity generator may accumulate hazardous waste on-site without complying with such requirements. The conditions for exemption are as follows:

- (1) In a calendar month the very small quantity generator generates less than or equal to the amounts specified in the definition of "very small quantity generator" in rule 3745-50-10 of the Administrative Code.
- (2) The very small quantity generator complies with paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code.
- (3) If the very small quantity generator accumulates at any time greater than 1.0 kilogram (2.2 pounds) of acute hazardous waste or 100.0 kilograms (220.0 pounds) of any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill, into or on any land or water, of any acute hazardous waste listed in rule 3745-51-31 of the Administrative Code or paragraph (E) of rule 3745-51-33 of the Administrative Code, all quantities of that acute hazardous waste are subject to all of the following additional conditions for exemption:
 - (a) Such waste is held on-site for no more than ninety days beginning on the date the accumulated wastes exceed the amounts provided in paragraph (A)(3) of this rule.
 - (b) The conditions for exemption in paragraphs (A) to (G) of rule 3745-52-17 of the Administrative Code.
- (4) If the very small quantity generator accumulates at any time 1,000.0 kilograms (2,200.0 pounds) or greater of non-acute hazardous waste, all quantities of that hazardous waste are subject to all of the following:
 - (a) Such waste is held on-site for no more than one hundred eighty days, or two hundred seventy days, if applicable, beginning on the date the

accumulated waste exceeds the amounts provided in paragraph (A)(3) of this rule.

(b) The quantity of waste accumulated on site never exceeds 6,000.0 kilograms (13,200.0 pounds).

(c) The conditions for exemption in paragraphs (B)(2) to (F) of rule 3745-52-16 of the Administrative Code.

(5) A very small quantity generator that accumulates hazardous waste in amounts less than or equal to the limits in paragraphs (A)(3) and (A)(4) of this rule shall either treat or dispose of the hazardous waste in an on-site facility, or ensure delivery to an off-site treatment, storage, or disposal facility, either of which, if located in the United States, is all of the following:

(a) Permitted in accordance with rules 3745-50-40 to 3745-50-235 of the Administrative Code.

(b) Operating in accordance with a permit by rule as described in paragraph (C) of rule 3745-50-40 and Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code.

(c) Authorized to manage hazardous waste by a state with a hazardous waste management program federally authorized.

(d) Permitted, licensed, or registered by a state other than Ohio to manage municipal solid waste and, if managed in a municipal solid waste landfill, is subject to 40 C.F.R. Part 258 and applicable state law.

(e) Permitted, licensed, or registered by a state to manage non-municipal non-hazardous waste and, if managed in a non-municipal non-hazardous waste disposal unit, is subject to 40 C.F.R. 257.5 to 40 C.F.R. 257.30 and applicable state law.

(f) A facility operating under paragraph (C)(2) or (C)(3) of rule 3745-51-06 of the Administrative Code.

(g) For universal waste managed under Chapter 3745-273 of the Administrative Code, a universal waste handler or destination facility subject to Chapter 3745-273 of the Administrative Code.

(h) A large quantity generator under the control of the same person as the very small quantity generator, provided the following conditions are met:

- (i) The very small quantity generator and the large quantity generator are under the control of the same "person," as defined in rule 3745-50-10 of the Administrative Code. "Control," for the purposes of this rule, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different "person," as defined in rule 3745-50-10 of the Administrative Code, shall not be deemed to "control" such generators.
- (ii) The very small quantity generator marks the containers of hazardous waste with all of the following:
- (a) The words "Hazardous Waste."
- (b) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].
- (i) A "reverse distributor," as defined in rule 3745-266-500 of the Administrative Code, if the hazardous waste pharmaceutical is a potentially creditable hazardous waste pharmaceutical generated by a "healthcare facility," as defined in rule 3745-266-500 of the Administrative Code.
- (j) A healthcare facility that meets the conditions in paragraph (L) of rule 3745-266-502 and paragraph (B) of rule 3745-266-503 of the Administrative Code, as applicable, to accept non-creditable hazardous waste pharmaceuticals and potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator.
- (k) For airbag waste, an airbag waste collection facility or a designated facility subject to paragraph (J) of rule 3745-51-04 of the Administrative Code.

(B) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste that contains free liquids (whether or not sorbents have been added) in any landfill is prohibited.

(C) A very small quantity generator experiencing an episodic event may generate and accumulate hazardous waste in accordance with rules 3745-52-230 to 3745-52-233 of the Administrative Code in lieu of rules 3745-52-15 to 3745-52-17 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."]

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3745-52-15**Satellite accumulation area requirements for small quantity generators and large quantity generators.**

(A) A generator may accumulate as much as fifty-five gallons of non-acute hazardous waste and either one quart of liquid acute hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code or one kilogram (kg) (2.2 pounds) of solid acute hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code in containers at or near any point of generation where wastes initially accumulate which is under the control of the operator of the process generating the waste, without a permit or permit by rule and without complying with Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code, provided that all of the conditions for exemption in this rule are met. A generator may comply with the conditions for exemption in this rule instead of complying with the conditions for exemption in paragraph (B) of rule 3745-52-16 or paragraph (A) of rule 3745-52-17 of the Administrative Code, except as required in paragraphs (A)(7) and (A)(8) of rule 3745-52-15 of the Administrative Code. The conditions for exemption for satellite accumulation are as follows:

- (1) If a container holding hazardous waste is not in good condition, or if the container begins to leak, the generator shall immediately transfer the hazardous waste from this container to a container that is in good condition and does not leak, or immediately transfer and manage the waste in a central accumulation area operated in compliance with paragraph (B) of rule 3745-52-16 or paragraph (A) of rule 3745-52-17 of the Administrative Code.
- (2) The generator shall use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so that the ability of the container to contain the waste is not impaired.
- (3) Special standards for incompatible wastes.
 - (a) Incompatible wastes, or incompatible wastes and materials, (see appendix to rule 3745-66-99 of the Administrative Code for examples) shall not be placed in the same container, unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.
 - (b) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material (see appendix to rule 3745-66-99 of the Administrative Code for examples), unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

- (c) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated nearby in other containers shall be separated from the other materials or protected from the incompatible waste or material by any practical means.
- (4) A container holding hazardous waste shall be closed at all times during accumulation, except when either of the following occur:
- (a) When adding, removing, or consolidating waste.
 - (b) When temporary venting of a container is necessary due to either of the following:
 - (i) For the proper operation of equipment.
 - (ii) To prevent dangerous situations, such as build-up of extreme pressure.
- (5) A generator shall mark or label the generator's container with all of the following:
- (a) The words "Hazardous Waste."
 - (b) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].
- (6) A generator who accumulates either acute hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code or non-acute hazardous waste in excess of the amounts listed in paragraph (A) of this rule at or near any point of generation shall do the following:
- (a) Within three consecutive calendar days, comply with the applicable central accumulation area requirements in paragraph (B) of rule 3745-52-16 or paragraph (A) of rule 3745-52-17 of the Administrative Code; or
 - (b) Remove the excess from the satellite accumulation area within three consecutive calendar days to one of the following:

- (i) A central accumulation area operated in accordance with the applicable requirements in paragraph (B) of rule 3745-52-16 or paragraph (A) of rule 3745-52-17 of the Administrative Code.
 - (ii) An on-site permit by rule or permitted treatment, storage, or disposal facility.
 - (iii) An off-site designated facility; and
 - (c) During the three-consecutive-calendar-day period, the generator shall continue to comply with paragraphs (A)(1) to (A)(5) of this rule. The generator shall mark or label the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.
- (7) All satellite accumulation areas operated by a small quantity generator shall meet the preparedness and prevention requirements of paragraph (B)(8) of rule 3745-52-16 and emergency procedures of paragraph (B)(9) of rule 3745-52-16 of the Administrative Code.
- (8) All satellite accumulation areas operated by a large quantity generator shall meet the preparedness, prevention, and emergency procedures in rules 3745-52-250 to 3745-52-265 of the Administrative Code.

(B) [Reserved.]

[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."]

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3745-52-16**Conditions for exemption for small quantity generators that accumulate hazardous waste.**

A small quantity generator may accumulate or treat hazardous waste on-site without a hazardous waste permit, and without complying with Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code or the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided that all the conditions for exemption listed in this rule are met:

(A) Generation. The generator generates in a calendar month no more than the amounts specified in the definition of "small quantity generator" in rule 3745-50-10 of the Administrative Code.

(B) Accumulation or treatment. The generator accumulates or treats hazardous waste on-site for no more than one hundred eighty days, unless in compliance with the conditions for exemption for longer accumulation in paragraphs (D) and (E) of this rule. The following accumulation conditions also apply:

(1) Accumulation limit. The quantity of hazardous waste accumulated or treated on-site never exceeds 6,000.0 kilograms (13,200.0 pounds).

(2) Accumulation or treatment of hazardous waste in containers:

(a) Condition of containers. If a container holding hazardous waste is not in good condition, or if the container begins to leak, the small quantity generator shall immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of this rule.

(b) Compatibility of waste with container. The small quantity generator shall use a container made of or lined with materials that shall not react with, and are otherwise compatible with, the hazardous waste to be accumulated or treated, so that the ability of the container to contain the waste is not impaired.

(c) Management of containers.

(i) A container holding hazardous waste shall always be closed during accumulation, except when necessary to add or remove waste.

(ii) A container holding hazardous waste shall not be opened, handled, accumulated, or treated in a manner that may rupture the container or cause the container to leak.

(d) Inspections. At least weekly, the small quantity generator shall inspect central accumulation areas. The small quantity generator shall look for leaking containers and for deterioration of containers caused by corrosion or other factors. See paragraph (B)(2)(a) of this rule for remedial action required if deterioration or leaks are detected.

(e) Special conditions for accumulation or treatment of incompatible wastes.

(i) Incompatible wastes, or incompatible wastes and materials, (see appendix to rule 3745-66-99 of the Administrative Code for examples) shall not be placed in the same container, unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(ii) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material (see appendix of rule 3745-66-99 of the Administrative Code for examples), unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(iii) A container accumulating hazardous waste that is incompatible with any waste or other materials accumulated, treated, or stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from waste or materials by means of a dike, berm, wall, or other device.

(3) Accumulation or treatment of hazardous waste in tanks.

(a) [Reserved.]

(b) A small quantity generator of hazardous waste shall comply with the following general operating conditions:

(i) Treatment or accumulation of hazardous waste in tanks shall comply with paragraph (B) of rule 3745-65-17 of the Administrative Code.

(ii) Hazardous wastes or treatment reagents shall not be placed in a tank if the hazardous wastes or treatment reagents could cause the tank or the tank's inner liner to rupture, leak, corrode, or otherwise fail before the end of the tank's intended life.

(iii) Uncovered tanks shall be operated to ensure at least sixty centimeters (two feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control

system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top sixty centimeters (two feet) of the tank.

(iv) Where hazardous waste is continuously fed into a tank, the tank shall be equipped with a means to stop this inflow (e.g., waste feed cutoff system or by-pass system to a stand-by tank).

(c) Except as noted in paragraph (B)(3)(d) of this rule, a small quantity generator that accumulates or treats hazardous waste in tanks shall inspect, where present, all of the following:

(i) Discharge control equipment (e.g., waste feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that the discharge control equipment is in good working order.

(ii) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day, to ensure that the tank is being operated according to the tank's design.

(iii) The level of waste in the tank at least once each operating day, to ensure compliance with paragraph (B)(3)(b)(iii) of this rule.

(iv) The construction materials of the tank at least weekly, to detect corrosion or leaking of fixtures or seams.

(v) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly, to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation). The generator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(d) A small quantity generator accumulating or treating hazardous waste in tanks or tank systems that have full secondary containment and that either use leak detection equipment, to alert personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly, where applicable, the areas identified in paragraph (B)(3)(c) of this rule. Use of the alternate inspection

schedule shall be documented in the generator's operating record. This documentation shall include a description of the established workplace practices at the generator.

(e) [Reserved.]

(f) A small quantity generator accumulating or treating hazardous waste in tanks, upon closure of the facility, shall remove all hazardous waste from tanks, discharge control equipment, and discharge confinement structures. At closure, as throughout the operating period, unless the small quantity generator can demonstrate, in accordance with paragraph (C) or (D) of rule 3745-51-03 of the Administrative Code, that any waste removed from the small quantity generator's tank is not a hazardous waste, then the small quantity generator shall manage such waste in accordance with all applicable provisions of Chapters 3745-52, 3745-53, 3745-65 to 3745-69, 3745-256, and 3745-270 of the Administrative Code.

(g) A small quantity generator shall comply with the following special conditions for accumulation or treatment of ignitable or reactive waste:

(i) Ignitable or reactive waste shall not be placed in a tank, unless any of the following are met:

(a) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that the resulting waste, mixture, or dissolution of material no longer meets the definition of ignitable waste or reactive waste under rule 3745-51-21 or 3745-51-23 of the Administrative Code, and paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(b) The waste is accumulated or treated in such a way that the waste is protected from any material or conditions that may cause the waste to ignite or react.

(c) The tank is used solely for emergencies.

(ii) A small quantity generator which treats or accumulates ignitable or reactive waste in covered tanks shall comply with the buffer zone requirements for tanks contained in tables 2-1 through 2-6 of the national fire protection association's "Flammable and Combustible Liquids Code."

(iii) A small quantity generator shall comply with the following special conditions for incompatible wastes:

(a) Incompatible wastes, or incompatible wastes and materials (see appendix to rule 3745-66-99 of the Administrative Code for examples), shall not be placed in the same tank unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(b) Hazardous waste shall not be placed in an unwashed tank that previously held an incompatible waste or material unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(4) Accumulation or treatment of hazardous waste on drip pads. If the waste is placed on drip pads, the small quantity generator shall comply with all of the following:

(a) Rules 3745-69-40 to 3745-69-45 of the Administrative Code, except paragraph (C) of rule 3745-69-45 of the Administrative Code.

(b) The small quantity generator shall remove all wastes from the drip pad at least once every ninety days. Any hazardous wastes that are removed from the drip pad at least once every ninety days are then subject to the one hundred eighty day accumulation or treatment limit in paragraph (B) of this rule and rule 3745-52-15 of the Administrative Code if hazardous wastes are being managed in satellite accumulation areas prior to being moved to the central accumulation area.

(c) The small quantity generator shall maintain on-site at the facility all of the following records readily available for inspection:

(i) A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every ninety days.

(ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system, and the date and time of removal.

(5) Accumulation or treatment of hazardous waste in containment buildings. If the waste is placed in containment buildings, the small quantity generator shall comply with rules 3745-256-100 to 3745-256-102 of the Administrative Code. The generator shall label the generator's containment buildings with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors.

emergency responders, waste handlers, or other persons on-site, and also in a conspicuous place to provide an indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704]. The generator shall also maintain all of the following:

(a) The professional engineer certification that the building complies with the design standards specified in rule 3745-256-101 of the Administrative Code. This certification shall be in the generator's files prior to operation of the unit.

(b) The following records by use of inventory logs, monitoring equipment, or any other effective means:

(i) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with maintaining the ninety day limit, and documentation that the procedures are complied with.

(ii) Documentation that the unit is emptied at least once every ninety days.

(iii) Inventory logs or records with the information required in paragraph (B)(5)(b)(i) of this rule shall be maintained on-site and readily available for inspection.

(6) Labeling and marking of containers and tanks.

(a) Containers. A small quantity generator shall mark or label the small quantity generator's containers with all of the following:

(i) The words "Hazardous Waste."

(ii) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding);

a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) The date upon which each period of accumulation begins, clearly visible for inspection on each container.

(b) Tanks. A small quantity generator accumulating or treating hazardous waste in tanks shall do all of the following:

(i) Mark or label the small quantity generator's tanks with the words "Hazardous Waste."

(ii) Mark or label the small quantity generator's tanks with an indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) Use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within one hundred eighty days after first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within one hundred eighty days after first entering.

(iv) Keep inventory logs or records with the above information on-site and readily available for inspection.

(7) Land disposal restrictions. A small quantity generator shall comply with all the applicable requirements in Chapter 3745-270 of the Administrative Code.

(8) Preparedness and prevention.

(a) Maintenance and operation of facility. A small quantity generator shall maintain and operate the small quantity generator's facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-

sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water, which could threaten human health or the environment.

(b) Required equipment. All areas where hazardous waste is either generated or accumulated or treated shall be equipped with the items in paragraph (B) (8)(b) of this rule (unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified in this paragraph or the actual waste generation area or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified in this paragraph). A small quantity generator may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies.

(i) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

(ii) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.

(iii) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment.

(iv) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

(c) Testing and maintenance of equipment. All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure proper operation in time of emergency.

(d) Access to communications or alarm system.

(i) Whenever hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access (e.g., direct or unimpeded access) to an internal alarm or emergency communication device, either directly

or through visual or voice contact with another employee, unless such a device is not required under paragraph (B)(8)(b) of this rule.

(ii) In the event there is just one employee on the premises while the facility is operating, the employee shall have immediate access (e.g., direct or unimpeded access) to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required under paragraph (B)(8)(b) of this rule.

(e) Required aisle space. The small quantity generator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

(f) Arrangements with local authorities.

(i) The small quantity generator shall attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the local emergency planning committee, if the local emergency planning committee is determined to be the appropriate organization with which to make arrangements.

(a) A small quantity generator attempting to make arrangements with the local fire department shall determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers, and local hospitals.

(b) As part of this coordination, the small quantity generator shall attempt to make arrangements, as necessary, to familiarize the organizations listed in paragraph (B)(8)(f)(i) of this rule with the layout of the facility, the properties of hazardous waste handled at the facility, and associated hazards, places where facility personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes, as well as the types of injuries or illnesses

that could result from fires, explosions, or releases at the facility.

(c) Where more than one police or fire department might respond to an emergency, the small quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire department or police department, and arrangements with any others to provide support to the primary emergency authority.

(ii) A small quantity generator shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation shall include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.

(iii) A facility possessing twenty-four-hour response capabilities may seek a waiver from the authority having jurisdiction over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.

(9) Emergency procedures. The small quantity generator complies with all of the following conditions for those areas of the generator facility where hazardous waste is generated and accumulated:

(a) At all times, there shall be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility to coordinate all emergency response measures specified in paragraph (B)(9)(d) of this rule. This employee is the emergency coordinator.

(b) The small quantity generator shall post the following information next to telephones or in areas directly involved in the generation and accumulation of hazardous waste:

(i) The name and emergency telephone number of the emergency coordinator.

- (C) Transporting over two hundred miles. A small quantity generator who must transport the small quantity generator's waste, or offers the small quantity generator's waste for transportation, over a distance of two hundred miles or more for off-site treatment, storage, or disposal may accumulate hazardous waste on-site for two hundred seventy days or less without a permit or without having permit by rule provided that the generator complies with the conditions of paragraph (B) of this rule.
- (D) Accumulation time limit extension. A small quantity generator who accumulates hazardous waste for more than one hundred eighty days (or for more than two hundred seventy days if the small quantity generator must transport the small quantity generator's waste, or offer the small quantity generator's waste for transportation, over a distance of two hundred miles or more) is subject to rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-270 of the Administrative Code unless the small quantity generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period. Such extension may be granted by Ohio EPA if hazardous wastes shall remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days may be granted at the discretion of the director on a case-by-case basis.
- (E) Rejected load. A small quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of rule 3745-54-72 or 3745-65-72 of the Administrative Code may accumulate the returned waste on-site in accordance with paragraphs (A) to (D) of this rule. Upon receipt of the returned shipment, the generator shall perform either of the following:
- (1) Sign item 18c of the manifest, if the transporter returned the shipment using the original manifest.
 - (2) Sign item 20 of the manifest, if the transporter returned the shipment using a new manifest.
- (F) A small quantity generator experiencing an episodic event may accumulate hazardous waste in accordance with rules 3745-52-230 to 3745-52-233 of the Administrative Code in lieu of rule 3745-52-17 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."]

Replaces: 3745-52-34 rescinded, 3745-66-101 rescinded
Effective: 10/5/2020
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CERTIFIED ELECTRONICALLY

Certification

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3745-52-17**Conditions for exemption for large quantity generators that accumulate hazardous waste.**

A large quantity generator may accumulate or treat hazardous waste on-site without a hazardous waste permit or a permit by rule, and without complying with Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code, or the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided that all of the following are met:

(A) Accumulation. A large quantity generator accumulates or treats hazardous waste on-site for no more than ninety days, unless in compliance with the accumulation time limit extension of F006 accumulation conditions for exemption in paragraphs (B) to (E) of this rule. All of the following accumulation conditions also apply:

(1) Accumulation or treatment of hazardous waste in containers. If the hazardous waste is placed in containers, the large quantity generator shall comply with the following:

(a) [Reserved.]

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

(b) Condition of containers. If a container holding hazardous waste is not in good condition, or if the container begins to leak, the large quantity generator shall immediately transfer the hazardous waste from this container to a container that is in good condition, or immediately manage the waste in some other way that complies with the conditions for exemption of this rule.

(c) Compatibility of waste with container. The large quantity generator shall use a container made of or lined with materials that shall not react with, and are otherwise compatible with, the hazardous waste to be stored, so that the ability of the container to contain the waste is not impaired.

(d) Management of containers.

(i) A container holding hazardous waste shall always be closed during accumulation, except when necessary to add or remove waste.

(ii) A container holding hazardous waste shall not be opened, handled, or stored in a manner that may rupture the container or cause the container to leak.

(e) Inspections. At least weekly, the large quantity generator shall inspect central accumulation areas. The large quantity generator shall look for leaking containers and for deterioration of containers caused by corrosion or other factors. See paragraph (A)(1)(b) of this rule for remedial action required if deterioration or leaks are detected.

(f) Special conditions for accumulation of ignitable and reactive wastes.

(i) Containers holding ignitable or reactive waste shall be located at least fifteen meters (fifty feet) from the facility's property line unless a written approval is obtained from the authority having jurisdiction over the local fire code allowing hazardous waste accumulation to occur within this restricted area. A record of the written approval shall be maintained as long as ignitable or reactive hazardous waste is accumulated in this area.

(ii) The large quantity generator shall take precautions to prevent accidental ignition or reaction of ignitable or reactive waste. This waste shall be separated and protected from sources of ignition or reaction including but not limited to the following: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, the large quantity generator shall confine smoking and open flame to specially designated locations. "No Smoking" signs shall be conspicuously placed where there is a hazard from ignitable waste or reactive waste.

(g) Special conditions for accumulation of incompatible wastes.

(i) Incompatible wastes, or incompatible wastes and materials, (see appendix to rule 3745-66-99 of the Administrative Code for examples) shall not be placed in the same container unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(ii) Hazardous waste shall not be placed in an unwashed container that previously held an incompatible waste or material (see appendix to rule 3745-66-99 of the Administrative Code for examples) unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(iii) A container holding a hazardous waste that is incompatible with any waste or other materials accumulated or stored nearby in other containers, piles, open tanks, or surface impoundments shall be separated from the other materials or protected from wastes or materials by means of a dike, berm, wall, or other device.

(2) Accumulation or treatment of hazardous waste in tanks. If the hazardous waste is placed in tanks, the large quantity generator shall comply with the applicable requirements of rules 3745-66-90 to 3745-66-99 of the Administrative Code, except paragraph (C) of rule 3745-66-97 of the Administrative Code.

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

(3) Accumulation of hazardous waste on drip pads. If the hazardous waste is placed on drip pads, the large quantity generator shall comply with all of the following:

(a) Rules 3745-69-40 to 3745-69-45 of the Administrative Code.

(b) The large quantity generator shall remove all wastes from the drip pad at least once every ninety days. Any hazardous wastes that are removed from the drip pad are then subject to the ninety day accumulation limit in paragraph (A) of this rule and rule 3745-52-15 of the Administrative Code, if the hazardous wastes are being managed in satellite accumulation areas prior to being moved to a central accumulation area.

(c) The large quantity generator shall maintain on-site at the facility all of the following records readily available for inspection:

(i) A written description of procedures that are followed to ensure that all wastes are removed from the drip pad and the sump or collection system at least once every ninety days.

(ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system, and the date and time of removal.

(4) Accumulation or treatment of hazardous waste in containment buildings. If the waste is placed in containment buildings, the large quantity generator shall comply with rules 3745-256-100 to 3745-256-102 of the Administrative Code. The generator shall label the large quantity generator's containment building with the words "Hazardous Waste" in a conspicuous place easily visible to employees, visitors, emergency responders, waste handlers, or other persons on-site, and also in a conspicuous place to provide an indication of

the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704]. The generator also shall maintain all of the following:

(a) The professional engineer certification that the building complies with the design standards specified in rule 3745-256-101 of the Administrative Code. This certification shall be in the generator's files prior to operation of the unit.

(b) The following records by use of inventory logs, monitoring equipment, or any other effective means:

(i) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety days, a written description of the waste generation and management practices for the facility showing that the generator is consistent with respecting the ninety day limit, and documentation that the procedures are complied with.

(ii) Documentation that the unit is emptied at least once every ninety days.

(iii) Inventory logs or records with the information required in paragraph (A)(4)(b) of this rule shall be maintained on-site and readily available for inspection.

(5) Labeling and marking of containers and tanks.

(a) Containers. A large quantity generator shall mark or label the generator's containers with all of the following:

(i) The words "Hazardous waste."

(ii) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at

29 CFR 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) The date upon which each period of accumulation or treatment begins, clearly visible for inspection on each container.

(b) Tanks. A large quantity generator accumulating hazardous waste in tanks shall do all of the following:

(i) Mark or label the generator's tanks with the words "Hazardous waste."

(ii) Mark or label the generator's tanks with an indication of the hazardous of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) Use inventory logs, monitoring equipment, or other records to demonstrate that hazardous waste has been emptied within ninety days after first entering the tank if using a batch process, or in the case of a tank with a continuous flow process, demonstrate that estimated volumes of hazardous waste entering the tank daily exit the tank within ninety days after first entering.

(iv) Keep inventory logs or records with the information required by paragraph (A)(5)(b) of this rule on-site and readily available for inspection.

(6) Emergency procedures. The large quantity generator complies with the standards in rules 3745-52-250 to 3745-52-265 of the Administrative Code.

(7) Personnel training.

(a) Personnel training requirements.

(i) Facility personnel shall successfully complete a program of classroom instruction, online training (e.g., computer-based or electronic), or on-the-job training that teaches the facility personnel to perform the facility personnel's duties in a way that ensures compliance with

Chapter 3745-52 of the Administrative Code. The large quantity generator shall ensure that this program includes all the elements described in the documents required in paragraph (A)(7)(d) of this rule.

(ii) This program shall be directed by a person trained in hazardous waste management procedures, and shall include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which the facility personnel are employed.

(iii) At a minimum, the training program shall be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing personnel with emergency procedures, emergency equipment, and emergency systems, including (where applicable) all of the following:

(a) Procedures to use, inspect, repair, and replace facility emergency and monitoring equipment.

(b) Key parameters for automatic waste feed cut-off systems.

(c) Communications or alarm systems.

(d) Response to fires or explosions.

(e) Response to groundwater contamination incidents

(f) Shutdown of operations.

(iv) For facility personnel who receive emergency response training pursuant to occupational safety and health administration regulations 29 CFR 1910.120(p)(8) and 1910.120(q), the large quantity generator is not required to provide separate emergency response training pursuant to this rule, provided that the overall facility training meets all the conditions of exemption in this rule.

(b) Facility personnel shall successfully complete the program required in paragraph (A)(7)(a) of this rule within six months after the date of employment or assignment to the facility, or to a new position at the facility, whichever is later. Facility personnel shall not work in unsupervised positions until personnel have completed the training standards of paragraph (A)(7)(a) of this rule.

- (c) Facility personnel shall take part in an annual review of the initial training required in paragraph (A)(7)(a) of this rule.
- (d) The large quantity generator shall maintain all of the following documents and records at the facility:

 - (i) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.
 - (ii) A written job description for each position listed under paragraph (A)(7)(d)(i) of this rule. This description may be consistent in the description's degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position.
 - (iii) A written description of the type and amount of both introductory and continuing training that shall be given to each person filling a position listed under paragraph (A)(7)(d)(i) of this rule.
 - (iv) Records that document that the training or job experience, required under paragraphs (A)(7)(a) to (A)(7)(c) of this rule, has been given to, and completed by, facility personnel.
- (e) Training records on current personnel shall be kept until closure of the facility. Training records on former employees shall be kept for at least three years after the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.
- (8) Closure. A large quantity generator accumulating hazardous wastes in containers, tanks, drip pads, and containment buildings, prior to closing a unit at the facility, or prior to closing the facility, shall meet all of the following conditions:

 - (a) Notification for closure of a waste accumulation unit. A large quantity generator shall perform one of the following when closing a waste accumulation unit:

 - (i) Place a notice in the operating record within thirty days after closure identifying the location of the unit within the facility.
 - (ii) Meet the closure performance standards of paragraph (A)(8)(c) of this rule for container, tank, and containment building waste

accumulation units, or paragraph (A)(8)(d) of this rule for drip pads, and notify Ohio EPA following the procedures in paragraph (A)(8)(b)(ii) of this rule for the waste accumulation unit. If the waste accumulation unit is subsequently reopened, the generator may remove the notice from the operating record.

(b) Notification for closure of the facility.

(i) Notify Ohio EPA using Ohio EPA form EPA 9029 no later than thirty days prior to closing the facility.

(ii) Notify Ohio EPA using Ohio EPA form EPA 9029 within ninety days after closing the facility that the facility has complied with the closure performance standards of paragraph (A)(8)(c) or (A)(8)(d) of this rule. If the facility cannot meet the closure performance standards of paragraph (A)(8)(c) or (A)(8)(d) of this rule, notify Ohio EPA using Ohio EPA form EPA 9029 that the facility shall close as a landfill under rule 3745-68-10 of the Administrative Code in the case of a container, tank or containment building units, or for a facility with drip pads, notify using Ohio EPA form EPA 9029 that the facility shall close under the standards of paragraph (B) of rule 3745-69-45 of the Administrative Code.

(iii) A large quantity generator may request additional time to clean close, but the large quantity generator shall notify Ohio EPA using Ohio EPA form EPA 9029 within seventy-five days after the date provided in paragraph (A)(8)(b)(i) of this rule to request an extension and provide an explanation as to why the additional time is required.

(c) Closure performance standards for container, tank systems, and containment building waste accumulation units.

(i) At closure, the generator shall close the waste accumulation unit or facility in a manner that conforms to the following:

(a) Minimizes the need for further maintenance by controlling, minimizing, or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground water or surface water or to the atmosphere.

- (b) Removes or decontaminates all contaminated equipment, structures, and soil, and any remaining hazardous waste residues from waste accumulation units including containment system components (pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste, unless paragraph (D) of rule 3745-51-03 of the Administrative Code applies.
- (c) Any hazardous waste generated in the process of closing either the generator's facility or units accumulating hazardous waste shall be managed in accordance with all applicable standards of Chapters 3745-52, 3745-53, 3745-65 to 3745-69, 3745-256, and 3745-270 of the Administrative Code, including removing any hazardous waste contained in these units within ninety days after generating the hazardous waste, and managing these wastes in a hazardous waste permitted treatment, storage and disposal facility or a facility operating under permit by rule.
- (d) If the generator demonstrates that any contaminated soils and wastes cannot be practicably removed or decontaminated as required in paragraph (A)(8)(c)(i)(b) of this rule, then the waste accumulation unit is considered to be a landfill and the generator shall close the waste accumulation unit and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (rule 3745-68-10 of the Administrative Code). In addition, for the purposes of closure, post-closure, and financial responsibility, such a waste accumulation unit is then considered to be a landfill, and the generator shall meet all of the requirements for landfills specified in rules 3745-66-10 to 3745-66-21 and rules 3745-66-40 to 66-48 of the Administrative Code.
- (d) Closure performance standards for drip pad waste accumulation units. At closure, the generator shall comply with the closure requirements of paragraphs (A)(8)(b) and (A)(8)(c)(i)(a) and (A)(8)(c)(i)(c) of this rule, and paragraphs (A) and (B) of rule 3745-69-45 of the Administrative Code.
- (e) The closure requirements of paragraph (A)(8) of this rule do not apply to satellite accumulation areas.

- (9) Land disposal restrictions. The large quantity generator complies with all applicable requirements in Chapter 3745-270 of the Administrative Code.
- (B) Accumulation time limit extension. A large quantity generator who accumulates hazardous waste for more than ninety days is subject to Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, unless the large quantity generator has been granted an extension to the ninety-day period. Such extension may be granted by the director if hazardous wastes shall remain on-site for longer than ninety days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days may be granted at the discretion of the director on a case-by-case basis.
- (C) Accumulation of F006. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006 may accumulate F006 waste on-site for more than ninety days, but not more than one hundred eighty days without being subject to Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided that the large quantity generator complies with all of the following additional conditions for exemption:
- (1) The large quantity generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants, or contaminants entering F006 or otherwise released to the environment prior to the F006 waste's recycling.
 - (2) The F006 waste is legitimately recycled through metals recovery.
 - (3) No more than twenty thousand kilograms of F006 waste is accumulated on-site at any one time.
 - (4) The F006 waste is managed in accordance with all of the following:
 - (a) F006 management requirements.
 - (i) If the F006 waste is placed in containers, the large quantity generator shall comply with the applicable conditions for exemption in paragraph (A)(1) of this rule.
 - (ii) If the F006 is placed in tanks, the large quantity generator shall comply with the applicable conditions for exemption of paragraph (A)(2) of this rule.

(iii) If the F006 is placed in containment buildings, the large quantity generator shall comply with rules 3745-256-100 to 3745-256-102 of the Administrative Code, and has placed the large quantity generator's professional engineer certification that the building complies with the design standards specified in rule 3745-256-101 of the Administrative Code in the facility's files prior to operation of the unit. The large quantity generator shall maintain either of the following records:

(a) A written description of procedures to ensure that the F006 waste remains in the unit for no more than one hundred eighty days, a written description of the waste generation and management practices for the facility showing that the practices are consistent with the one hundred eighty-day limit, and documentation that the large quantity generator is complying with the procedures.

(b) Documentation that the unit is emptied at least once every one hundred eighty days.

(b) The large quantity generator is exempt from rules 3745-66-10 to 3745-66-21 and 3745-66-40 to 3745-66-48 of the Administrative Code, except for those referenced in paragraph (A)(8) of this rule.

(c) The date upon which each period of accumulation begins is clearly marked and is clearly visible for inspection on each container.

(d) While being accumulated on-site, each container and tank is labeled or marked clearly with all of the following:

(i) The words "Hazardous Waste."

(ii) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 CFR Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 CFR 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(e) The large quantity generator complies with the requirements in paragraphs (A)(6) and (A)(7) of this rule.

(D) F006 transported over two hundred miles. A large quantity generator who also generates wastewater treatment sludges from electroplating operations that meet the listing description for the EPA hazardous waste number F006, and who must transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than ninety days, but not more than two hundred seventy days without being subject to Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code, and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, if the large quantity generator complies with all of the conditions for exemption of paragraphs (C)(1) to (C)(4) of this rule.

(E) F006 accumulation time extension. A large quantity generator accumulating F006 in accordance with paragraphs (C) and (D) of this rule who accumulates F006 waste on-site for more than one hundred eighty days (or for more than two hundred seventy days if the generator must transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more), or who accumulates more than twenty thousand kilograms of F006 waste on-site is an operator of a storage facility and is subject to Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, unless the generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period or an exception to the twenty thousand kilogram accumulation limit. Such extensions and exceptions may be granted by Ohio EPA if F006 waste shall remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) or if more than twenty thousand kilograms of F006 waste shall remain on-site due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days or an exception to the accumulation limit may be granted at the discretion of the director of on a case-by-case basis.

(F) Consolidation of hazardous waste received from very small quantity generators. Large quantity generators may accumulate or treat on-site hazardous waste received from very small quantity generators under control of the same "person," as defined in rule 3745-50-10 of the Administrative Code, without a storage permit or permit by rule and without complying with Chapters 3745-50, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code and the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, provided that the large quantity generator complies with all of the following conditions. "Control," for the purposes of this rule, means the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or

otherwise, except that contractors who operate generator facilities on behalf of a different person shall not be deemed to "control" such generators.

(1) The large quantity generator notifies Ohio EPA at least thirty days prior to receiving the first shipment from a very small quantity generator using Ohio EPA form EPA 9029.

(a) Identifies on the form the name and site address for the very small quantity generator as well as the name and business telephone number for a contact person for the very small quantity generator.

(b) Submits an updated Ohio EPA form EPA 9029 within thirty days after a change in the name or site address for the very small quantity generator.

(2) The large quantity generator maintains records of shipments for three years from the date the hazardous waste was received from the very small quantity generator. These records shall identify the name, site address, and contact information for the very small quantity generator and include a description of the hazardous waste received, including the quantity and the date the waste was received.

(3) The large quantity generator complies with the independent requirements identified in paragraph (A)(1)(c) of rule 3745-52-10 of the Administrative Code and the conditions for exemption in this rule for all hazardous waste received from a very small quantity generator. For purposes of the labeling and marking requirements in paragraph (A)(5) of this rule, the large quantity generator shall label the container or unit with the date accumulation started (i.e., the date the hazardous waste was received from the very small quantity generator). If the large quantity generator is consolidating incoming hazardous waste from a very small quantity generator with either the large quantity generator's hazardous waste or with hazardous waste from other very small quantity generators, the large quantity generator shall label each container or unit with the earliest date any hazardous waste in the container was accumulated or treated on-site.

(G) Rejected load. A large quantity generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of rule 3745-54-72 or 3745-65-72 of the Administrative Code may accumulate the returned waste on-site in accordance with paragraphs (A) and (B) of this rule. Upon receipt of the returned shipment, the generator shall perform one of the following:

(1) Sign item 18c of the manifest, if the transporter returned the shipment using the original manifest.

(2) Sign item 20 of the manifest, if the transporter returned the shipment using a new manifest.

[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."]

Replaces: 3745-52-34 rescinded
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03/17/2012, 10/31/2015

3745-52-18**U.S. EPA identification numbers and re-notification for small quantity generators and large quantity generators.**

- (A) A generator shall not treat, store, dispose of, transport, or offer for transportation hazardous waste without having received a U.S. EPA identification number from U.S. EPA or Ohio EPA.
- (B) A generator who has not received a U.S. EPA identification number shall obtain one by applying to Ohio EPA using Ohio EPA form EPA 9029. Upon receiving the request, Ohio EPA shall assign a U.S. EPA identification number to the generator.
- (C) A generator shall not offer the generator's hazardous waste to transporters or to treatment, storage, or disposal facilities that have not received a U.S. EPA identification number.
- (D) Re-notification.
- (1) A small quantity generator shall re-notify Ohio EPA starting in 2021 and every four years thereafter using Ohio EPA form EPA 9029. This re-notification shall be submitted by September first of each year in which re-notifications are required.
- (2) A large quantity generator shall re-notify Ohio EPA by March first of each even-numbered year thereafter using Ohio EPA form EPA 9029. A large quantity generator may submit this re-notification as part of the biennial report required under rule 3745-52-41 of the Administrative Code.
- (E) A recognized trader shall not arrange for import or export of hazardous waste without having received a U.S. EPA identification number.

[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."]

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3745-52-20

Manifest - general requirements.**(A) Use requirements.**

(1) A generator who transports, or offers for transport a hazardous waste for offsite treatment, storage, or disposal, or a treatment, storage, ~~and~~ disposal facility who offers for transport a rejected hazardous waste load, ~~must~~shall prepare a manifest ("OMB" control number 2050-0039) on U.S. EPA form 8700-22, and if necessary, U.S. EPA form 8700-22A (the continuation sheet), ~~according to the instructions included in the appendix to 40 CFR Part 262.~~

(2) [Reserved.]

(3) Electronic manifest. In lieu of using the manifest form specified in paragraph (A) (1) of this rule, a person required to prepare a manifest under paragraph (A) (1) of this rule may prepare and use an electronic manifest, provided that the person does the following:

(a) Complies with rule 3745-52-24 of the Administrative Code for use of electronic manifests.

(b) Complies with 40 C.F.R. 3.10 for the reporting of electronic documents to U.S. EPA.

(B) The generator ~~must~~shall designate on the manifest one facility which is permitted to handle the waste described on the manifest.

(C) The generator may also designate on the manifest one alternate facility which is permitted to handle ~~his~~the waste in the event an emergency prevents delivery of the waste to the primary designated facility.

(D) If the transporter is unable to deliver the hazardous waste to the designated facility or the alternate facility, the generator ~~must~~shall either designate another facility or instruct the transporter to return the waste.

(E) ~~The requirements of rules~~Rules 3745-52-20 to 3745-52-57 of the Administrative Code do not apply to hazardous waste produced by generators of greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month where both of the following apply:

(1) The waste is reclaimed under a contractual agreement pursuant to which both of the following apply:

(a) The type of waste and frequency of shipments are specified in the agreement;

- (b) The vehicle used to transport the waste to the recycling facility and to deliver regenerated material back to the generator is owned and operated by the reclaimer of the waste; ~~and,~~
- (2) The generator maintains a copy of the reclamation agreement in ~~his~~the files for a period of at least three years after termination or expiration of the agreement.
- (F) ~~The requirements of rules~~Rules 3745-52-20 to ~~3745-52-57~~3745-52-27 of the Administrative Code and paragraph (B) of rule 3745-52-32 of the Administrative Code do not apply to the transport of hazardous wastes on a public or private right-of-way within or along the border of contiguous property under the control of the same person, even if such contiguous property is divided by a public or private right-of-way. Notwithstanding paragraph (A) of rule 3745-53-10 of the Administrative Code, the generator or transporter ~~must~~shall comply with the requirements for transporters ~~set forth~~ in rules 3745-53-30 and 3745-53-31 of the Administrative Code in the event of a discharge of hazardous waste on a public or private right-of-way.

[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."]

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3745-52-24

Use of the electronic manifest.

(A) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with paragraph (A)(3) of rule 3745-52-20 of the Administrative Code, and used in accordance with this rule in lieu of U.S. EPA forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in the hazardous waste rules to obtain, complete, sign, provide, use, or retain a manifest.

(1) Any requirement in the hazardous waste rules to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 C.F.R. 262.25(a).

(2) Any requirement in the hazardous waste rules to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when an electronic manifest is transmitted to the other person by submittal to the electronic manifest system.

(3) Any requirement in the hazardous waste rules for a generator to keep or retain a copy of each manifest is satisfied by retention of a signed electronic manifest in the generator's account on the national e-manifest system, provided that such copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector.

(4) No generator may be held liable for the inability to produce an electronic manifest for inspection under this rule if the generator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the generator bears no responsibility.

(B) A generator may participate in the electronic manifest system either by accessing the electronic manifest system from the generator's own electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the generator's site by the transporter who accepts the hazardous waste shipment from the generator for off-site transportation.

(C) Restriction on use of electronic manifests. A generator may use an electronic manifest for the tracking of waste shipments involving any hazardous waste only if known at the time the manifest is originated that all waste handlers named on the manifest participate in the use of the electronic manifest, except as follows:

(1) A generator may sign by hand and retain a paper copy of the manifest signed by hand by the initial transporter, in lieu of executing the generator copy

electronically, thereby enabling the transporter and subsequent waste handlers to execute the remainder of the manifest copies electronically.

(2) [Reserved.]

(D) Requirement for one printed copy. To the extent the hazardous materials regulation on shipping papers for carriage by public highway requires shippers of hazardous materials to supply a paper document for compliance with 49 C.F.R. 177.817, a generator who originates an electronic manifest also shall provide the initial transporter with one printed copy of the electronic manifest.

(E) Special procedures when electronic manifest is unavailable. If a generator has prepared an electronic manifest for a hazardous waste shipment, but the electronic manifest system becomes unavailable for any reason prior to the time that the initial transporter has signed electronically to acknowledge the receipt of the hazardous waste from the generator, then the generator shall obtain and complete a paper manifest and, if necessary, a continuation sheet (U.S. EPA forms 8700-22 and 8700-22A) in accordance with the manifest instructions, and use these paper forms from this point forward in accordance with rule 3745-52-23 of the Administrative Code.

(F) Special procedures for electronic signature methods undergoing tests. If a generator has prepared an electronic manifest for a hazardous waste shipment, and signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the generator also shall sign with an ink signature the generator or offeror certification on the printed copy of the manifest provided under paragraph (D) of this rule.

(G) [Reserved.]

(H) Post-receipt manifest data corrections. After facilities have certified to the receipt of hazardous wastes by signing item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Generators may participate electronically in the post-receipt data corrections process by following the process described in paragraph (L) of rule 3745-54-71 of the Administrative Code, which applies to corrections made to either paper or electronic manifest records.

[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."]

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3745-52-25**Electronic manifest signatures.**

Electronic signature methods for the e-manifest system shall be all of the following:

(A) Be a legally valid and enforceable signature under 40 C.F.R. 262.25(a).

(B) Be a method that is designed and implemented in a manner that U.S. EPA considers to be as cost-effective and practical as possible for the users of the manifest.

[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."]

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3745-52-32

Marking.

(A) Before transporting hazardous wastes or offering hazardous ~~wastes~~waste for transportation off-site, the generator ~~must~~shall mark each package of hazardous ~~wastes~~waste in accordance with the applicable United States department of transportation regulations on hazardous materials under 49 ~~CFR~~C.F.R. Part 172.

(B) Before transporting hazardous ~~wastes~~waste or offering hazardous ~~wastes~~waste for transportation off-site, a generator ~~must~~shall mark each container of one hundred nineteen gallons or less used in such transportation with all of the following words and information displayed in accordance with ~~the requirements of~~ 49 ~~CFR~~C.F.R. 172.304:

~~"Hazardous waste — Federal law prohibits improper disposal. If found, contact the nearest police or public safety authority, or the United States Environmental Protection Agency. Generator's name and address _____ Generator's U.S. EPA identification number _____ Manifest document number _____."~~

(1) Hazardous waste - Federal law prohibits improper disposal. If found, contact the nearest police or public safety authority or the United States Environmental Protection Agency.

(2) Generator's name and address.

(3) Generator's U.S. EPA identification number.

(4) Manifest tracking number.

(5) EPA hazardous waste numbers.

(C) A generator may use a nationally recognized electronic system, such as bar coding, to identify the EPA hazardous waste numbers, as required by paragraph (B)(5) or (D) of this rule.

(D) Lab packs to be incinerated in compliance with paragraph (C) of rule 3745-270-42 of the Administrative Code are not required to be marked with EPA hazardous waste numbers, except D004, D005, D006, D007, D008, D010, and D011, where applicable.

[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."]

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08/29/1985 (Emer.), 10/20/1998, 02/16/2009

TO BE RESCINDED

3745-52-34 **Accumulation time of hazardous waste.**

(A) Except as provided in paragraphs (D), (E), and (F) of this rule, a generator may, for ninety days or less, accumulate or conduct treatment of hazardous waste that is generated on-site without an Ohio hazardous waste permit, provided that:

(1) The waste is placed in or using a combination of:

(a) Containers and the generator complies with the applicable requirements in rules 3745-66-70 to 3745-66-77 of the Administrative Code.

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

(b) Tanks and the generator complies with the applicable requirements of rules 3745-66-90 to 3745-66-101 of the Administrative Code, except paragraph (C) of rule 3745-66-97 and rule 3745-66-100 of the Administrative Code.

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

(c) Drip pads and the generator complies with rules 3745-69-40 to 3745-69-45 of the Administrative Code and maintains the following records at the facility:

(i) A description of procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every ninety days.

(ii) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.

- (d) Containment buildings and the generator complies with rules 3745-256-100 to 3745-256-102 of the Administrative Code, has placed its professional engineer certification that the building complies with the design standards specified in rule 3745-256-101 of the Administrative Code in the operating record no later than sixty days after the date of initial operation of the unit. Professional engineer certification is required prior to operation of the unit. The owner or operator shall maintain the following records at the facility:
 - (i) A written description of procedures to ensure that each waste volume remains in the unit for no more than ninety days, a written description of the waste generation and management practices for the facility showing that they are consistent with respecting the ninety-day limit, and documentation that the procedures are complied with; or
 - (ii) Documentation that the unit is emptied at least once every ninety days.
 - (e) In addition, a generator who, for ninety days or less, accumulates or conducts treatment of hazardous waste that is generated on site without an Ohio hazardous waste permit is exempt from rules 3745-66-10 to 3745-66-21 and 3745-66-40 to 3745-66-48 of the Administrative Code except for paragraphs (A) and (B) of rule 3745-66-11 and rule 3745-66-14 of the Administrative Code.
- (2) The date upon which each period of accumulation or treatment begins is clearly marked and visible for inspection on each container.
 - (3) While being accumulated or treated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste."
 - (4) The generator complies with the requirements for owners or operators in rules 3745-65-16, 3745-65-30 to 3745-65-37, 3745-65-50 to 3745-65-56 and all applicable requirements of Chapter 3745-270 of the Administrative Code.
- (B) A generator of one thousand kilograms or greater of hazardous waste in a calendar month, or greater than one kilogram of acute hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code in a calendar month, who accumulates hazardous waste for more than ninety days, is an operator of a storage facility and is subject to Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code and the permit requirements of rules 3745-50-40 to 3745-50-235 of the Administrative Code

unless the owner or operator has been granted an extension to the ninety-day period. Such extension may be granted by the director if hazardous wastes shall remain on-site for longer than ninety days due to unforeseen, temporary, and uncontrollable circumstances. An extension of up to thirty days may be granted at the discretion of the director on a case-by-case basis.

(C) A generator:

(1) May accumulate as much as fifty-five gallons of hazardous waste or one quart of acutely hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit and without complying with paragraph (A) or (D) of this rule provided the generator:

(a) Complies with rules 3745-66-71, 3745-66-72, and paragraph (A) of rule 3745-66-73 of the Administrative Code; and

(b) Marks the containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

(2) Who accumulates either hazardous waste or acutely hazardous waste listed in rule 3745-51-31 or paragraph (E) of rule 3745-51-33 of the Administrative Code in excess of the amounts listed in paragraph (C)(1) of this rule at or near any point of generation shall, with respect to that amount of excess waste, comply within three days with paragraph (A) of this rule or other applicable provisions of Chapter 3745-52 of the Administrative Code. During the three-day period, the generator shall continue to comply with paragraphs (C)(1)(a) and (C)(1)(b) of this rule. The generator shall mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.

(D) A generator who generates greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month may, for one hundred eighty days or less, accumulate or conduct treatment of hazardous waste that is generated on-site without an Ohio hazardous waste permit, provided that:

(1) The quantity of waste accumulated on-site never exceeds six thousand kilograms;

(2) The generator complies with rules 3745-66-70 to 3745-66-74 and rule 3745-66-77 of the Administrative Code;

(3) The generator complies with rule 3745-66-101 of the Administrative Code;

- (4) The generator complies with paragraphs (A)(2) and (A)(3) of this rule, rules 3745-65-30 to 3745-65-37 of the Administrative Code, and all applicable requirements of Chapter 3745-270 of the Administrative Code; and
- (5) The generator complies with the following requirements:
- (a) At all times there shall be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures specified in paragraph (D)(5)(d) of this rule. This employee is the emergency coordinator.
 - (b) The generator shall post the following information next to the telephone:
 - (i) The name and telephone number of the emergency coordinator;
 - (ii) Location of fire extinguishers and spill control material, and, if present, fire alarms; and
 - (iii) The telephone number of the fire department, unless the facility has a direct alarm.
 - (c) The generator shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies;
 - (d) The emergency coordinator or the emergency coordinator's designee shall respond to any emergencies that arise. The applicable responses are as follows:

- (i) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher;
 - (ii) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil;
 - (iii) In the event of a fire, explosion, or other release which could threaten human health outside the facility, or when the generator has knowledge that a spill has reached surface water, the generator shall immediately notify the "National Response Center using their twenty-four hour toll free number: 800/424-8802." The report shall include the following information:
 - (a) The name, address, and U.S. EPA identification number of the generator;
 - (b) Date, time, and type of incident (e.g., spill or fire);
 - (c) Quantity and type of hazardous waste involved in the incident;
 - (d) Extent of injuries, if any; and
 - (e) Estimated quantity and disposition of recovered materials, if any.
- (E) A generator who generates greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month and who shall transport the waste, or offer the waste for transportation, over a distance of two hundred miles or more for off-site treatment, storage, or disposal, may, for two hundred seventy days or less, accumulate or conduct treatment of hazardous waste that is generated on-site without an Ohio hazardous waste permit provided that the generator complies with paragraph (D) of this rule.
- (F) A generator who:
- (1) Generates greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month is an operator of a storage or treatment facility if:
 - (a) The generator accumulates or treats hazardous waste in quantities exceeding six thousand kilograms; or

- (b) The generator, for more than one hundred eighty days (or for more than two hundred seventy days if the generator transports the waste, or offers the waste for transportation, over a distance of two hundred miles or more), accumulates or conducts treatment of hazardous waste that is generated on-site.
- (2) Is an operator of a storage or treatment facility as described in paragraph (F)(1) of this rule is subject to Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 and rules 3745-50-40 to 3745-50-235 of the Administrative Code unless the generator has been granted an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period. Such extension, of up to thirty days, may be granted at the discretion of the director on a case-by-case basis if hazardous waste shall remain on-site for longer than one-hundred eighty days (or two-hundred seventy days if applicable) due to unforeseen, temporary, and uncontrollable circumstances.
- (G) A generator who generates one thousand kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for EPA hazardous waste number F006, may accumulate F006 waste on-site for more than ninety days, but not more than one hundred eighty days without having an Ohio hazardous waste permit, provided that:
- (1) The generator has implemented pollution prevention practices that reduce the amount of any hazardous substances, pollutants or contaminants entering F006 or otherwise released to the environment prior to its recycling;
 - (2) The F006 waste is legitimately recycled through metals recovery;
 - (3) No more than twenty thousand kilograms of F006 waste is accumulated on-site at any one time; and
 - (4) The F006 waste is managed in accordance with the following:
 - (a) The F006 waste is placed in any combination of the following:

- (i) Containers and the generator complies with the applicable requirements of rules 3745-66-70 to 3745-66-77 of the Administrative Code.

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

- (ii) Tanks and the generator complies with the applicable requirements of rules 3745-66-90 to 3745-66-101 of the Administrative Code except paragraph (C) of rule 3745-66-97 and rule 3745-66-100 of the Administrative Code.

[Comment: Pursuant to federal law, generators also shall comply with the applicable requirements of 40 CFR Part 265 subparts AA, BB, and CC.]

- (iii) Containment buildings and the generator complies with rules 3745-256-100 to 3745-256-102 of the Administrative Code, and has placed the professional engineer certification that the building complies with the design standards specified in rule 3745-256-102 of the Administrative Code in the facility's operating record prior to operation of the unit. The owner or operator shall maintain the following records at the facility:

- (a) A written description of procedures to ensure that the F006 waste remains in the unit for no more than one hundred eighty days, a written description of the waste generation and management practices for the facility showing that they are consistent with the one hundred eighty-day limit, and documentation that the generator is complying with the procedures; or

- (b) Documentation that the unit is emptied at least once every one hundred eighty days.

- (b) In addition, such a generator is exempt from rules 3745-66-10 to 3745-66-21 and 3745-66-40 to 3745-66-48 of the Administrative Code, except for rules 3745-66-11 and 3745-66-14 of the Administrative Code;

- (c) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
 - (d) While being accumulated on-site, each container and tank is labeled or marked clearly with the words "hazardous waste"; and
 - (e) The generator complies with the requirements for owners or operators in paragraph (A)(5) of rule 3745-270-07 and rules 3745-65-16, 3745-65-30 to 3745-65-37, and 3745-65-50 to 3745-65-56 of the Administrative Code.
- (H) A generator who generates one thousand kilograms or greater of hazardous waste per calendar month who also generates wastewater treatment sludges from electroplating operations that meet the listing description for EPA hazardous waste number F006, and who shall transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more for off-site metals recovery, may accumulate F006 waste on-site for more than ninety days, but not more than two hundred seventy days without an Ohio hazardous waste permit if the generator complies with paragraphs (G)(1) to (G)(4)(e) of this rule.
- (I) A generator accumulating F006 in accordance with paragraphs (G) to (G)(4)(e) and (H) of this rule who accumulates F006 waste on-site for more than one hundred eighty days (or for more than two hundred seventy days if the generator shall transport this waste, or offer this waste for transportation, over a distance of two hundred miles or more), or who accumulates more than twenty thousand kilograms of F006 waste on-site is an operator of a storage facility and is subject to Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code, and the permit requirements of rules 3745-50-40 to 3745-50-235 of the Administrative Code unless the generator has been granted either an extension to the one hundred eighty-day (or two hundred seventy-day if applicable) period or an exception to the twenty thousand kilogram accumulation limit. Such extension, of up to thirty days, or exception to the accumulation limit, may be granted at the discretion of the director on a case-by-case basis if hazardous waste shall remain on-site for longer than one hundred eighty days (or two hundred seventy days if applicable) or if more than twenty thousand kilograms of F006 waste shall remain on-site due to unforeseen, temporary, and uncontrollable circumstances.
- (J) Reserved.
- (K) Reserved.
- (L) Reserved.

(M) A generator who sends a shipment of hazardous waste to a designated facility with the understanding that the designated facility can accept and manage the waste and later receives that shipment back as a rejected load or residue in accordance with the manifest discrepancy provisions of rule 3745-54-72 or 3745-65-72 of the Administrative Code may accumulate the waste on-site in accordance with paragraphs (A) and (B) or (D), (E), and (F) of this rule, depending on the amount of hazardous waste on-site in that calendar month. Upon receipt of the return shipment, the generator shall either:

- (1) Sign item 18c of the manifest, if the transporter returned the shipment using the original manifest.
- (2) Sign item 20 of the manifest, if the transporter returned the shipment using a new manifest.

[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."]

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02/14/1995, 09/02/1997, 10/20/1998, 12/07/2000,
03/13/2002, 12/07/2004, 02/16/2009, 09/05/2010,
03/17/2012, 10/31/2015

3745-52-35**Liquids in landfills prohibition.**

The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited. Prior to disposal in a hazardous waste landfill, liquids shall meet additional requirements as specified in rules 3745-57-14 and 3745-68-14 of the Administrative Code.

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Rule Amplifies: 3734.12

3745-52-40

Recordkeeping for small quantity generators and large quantity generators.

- (A) ~~The~~A generator ~~must~~shall keep a copy of each manifest signed in accordance with paragraph (A) of rule 3745-52-23 of the Administrative Code for three years or until ~~he~~the generator receives a signed copy from the designated facility which received the waste. This signed copy ~~must~~shall be retained as a record for at least three years after the date the waste was accepted by the initial transporter.
- (B) ~~The~~A generator ~~must~~shall keep a copy of each biennial report and exception report for a period of at least three years after the due date of the report.
- ~~(C) The generator must keep records of any test results, waste analyses, or other determinations made in accordance with rule 3745-52-11 of the Administrative Code for at least three years after the date that the waste was last sent to on-site or off-site treatment, storage, or disposal.~~
- (C) See paragraph (F) of rule 3745-52-11 of the Administrative Code for recordkeeping requirements for documenting hazardous waste determinations.
- (D) The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity or as requested by the director.

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08/26/1981 (Emer.), 12/02/1981, 03/09/2001,
05/13/2007, 02/05/2013

3745-52-41**Biennial report for large quantity generators.**

- (A) A generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who ships any hazardous waste off-site to a treatment, storage, or disposal facility within the United States shall complete and submit the hazardous waste biennial report using Ohio EPA forms EPA 9027, EPA 9028, and EPA 9029 by March first of the following even-numbered year and shall cover generator activities during the previous year.
- (B) Any generator who is a large quantity generator for at least one month of an odd-numbered year (reporting year) who treats, stores, or disposes of hazardous waste on-site shall complete and submit the hazardous waste biennial report using Ohio EPA forms EPA 9027, EPA 9028, and EPA 9029 by March first of the following even-numbered year covering those wastes in accordance with rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code. This requirement also applies to large quantity generators that receive hazardous waste from very small quantity generators pursuant to paragraph (F) of rule 3745-52-17 of the Administrative Code.
- (C) Exports of hazardous waste to foreign countries are not required to be reported on the biennial report form. A separate annual report requirement is provided in 40 C.F.R. 262.83(g) for hazardous waste exporters.

[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."]

Replaces: 3745-52-41 rescinded
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12/07/2000, 03/13/2002, 12/07/2004, 02/16/2009,
02/05/2013, 02/12/2018

TO BE RESCINDED

3745-52-41

Biennial report- generator standards.

- (A) A generator who ships any hazardous waste off-site shall prepare and submit to Ohio EPA the "Hazardous Waste Biennial Report" by March first of each even numbered year. The generator shall prepare the "Hazardous Waste Biennial Report" using Ohio EPA forms EPA 9027, EPA 9028, and EPA 9029 provided by the director upon the request of the generator. The "Hazardous Waste Biennial Report" shall cover generator activities during the previous calendar year, and shall include the following information:
- (1) The U.S. EPA identification number, name, and address of the generator.
 - (2) The calendar year covered by the report.
 - (3) The U.S. EPA identification number, name, and address for each off-site treatment, storage, or disposal facility to which waste was shipped during the year.
 - (4) The name and U.S. EPA identification number of each transporter used during the reporting year for shipments to a treatment, storage, or disposal facility.
 - (5) A description, EPA hazardous waste number (from rules 3745-51-20 to 3745-51-24 or 3745-51-30 to 3745-51-35 of the Administrative Code), U.S. department of transportation hazard class, and quantity of each hazardous waste shipped off-site for shipments to a treatment, storage, or disposal facility. This information shall be listed by U.S. EPA identification number of each such off-site facility to which waste was shipped.
 - (6) A description of the efforts undertaken during the year to reduce the quantity and toxicity of hazardous waste generated.
 - (7) A description of the changes in quantity and toxicity of waste actually achieved during the year in comparison to previous years.
 - (8) The certification signed by the generator or authorized representative.
- (B) Any generator who treats, stores, or disposes of hazardous waste on-site shall submit a "Hazardous Waste Biennial Report" covering those wastes in accordance with rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code.

[Comment: Reporting for exports of hazardous waste is not required on the "Biennial Report" form; however, 40 CFR 262.83 requires a separate annual report. The annual report is to be submitted to U.S. EPA and not to Ohio EPA.]

[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."]

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12/07/2000, 03/13/2002, 12/07/2004, 02/16/2009,
02/05/2013, 02/12/2018

3745-52-44

Recordkeeping for small quantity generators.

A small quantity generator is subject only to the following independent requirements in rules 3745-52-40 to 3745-52-44 of the Administrative Code:

(A) Paragraphs (A), (C), and (D) of rule 3745-52-40 of the Administrative Code, recordkeeping.

(B) Paragraph (B) of rule 3745-52-42 of the Administrative Code, exception reporting.

(C) Rule 3745-52-43 of the Administrative Code, additional reporting.

Replaces: 3745-52-44 rescinded
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TO BE RESCINDED

3745-52-44

Recordkeeping and reporting requirements for generators of between one hundred and one thousand kilograms per month.

A generator of greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month is subject only to the requirements of paragraphs (A), (C), and (D) of rule 3745-52-40 of the Administrative Code for recordkeeping, paragraph (B) of rule 3745-52-42 of the Administrative Code for exception reporting, and rule 3745-52-43 of the Administrative Code for additional reporting requirements.

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TO BE RESCINDED

3745-52-50

Applicability- exports of hazardous waste to a foreign country.

Regulations in 40 CFR Part 262 subpart H establish requirements applicable to exports of hazardous waste to a foreign country. A "primary exporter" (as defined in 40 CFR 262.81) of hazardous waste shall comply with the special requirements of 40 CFR Part 262 subpart H, and a transporter transporting hazardous waste for export to a foreign country shall comply with applicable requirements of Chapter 3745-53 of the Administrative Code.

[Comment 1: The authorities in 40 CFR Part 262 subpart H, regarding exports of hazardous waste to a foreign country, are not delegable to states. Ohio EPA will recognize the administrator's decisions under these federal regulations.]

[Comment 2: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

[Comment 3: 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."]

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TO BE RESCINDED

3745-52-60

Imports of hazardous waste from a foreign country.

- (A) Any person who imports hazardous waste from a foreign country into the state of Ohio shall comply with Chapter 3745-52 of the Administrative Code and the special requirements of 40 CFR Part 262 subpart H.

[Comment: The authorities in 40 CFR Part 262 subpart H, regarding imports of hazardous waste from a foreign country, are not delegable to states. Ohio EPA will recognize the administrator's decisions under these federal regulations.]

- (B) When importing hazardous waste from a foreign country into Ohio a person shall comply with rule 3745-52-20 of the Administrative Code for the manifest except that:
- (1) In place of the generator's name, address, and U.S. EPA identification number, the name and address of the foreign generator and the importer's name, address, and U.S. EPA identification number shall be used.
 - (2) In place of the generator's signature on the certification statement, the Ohio importer or the Ohio importer's agent shall sign and date the certification and obtain the signature of the initial transporter.
- (C) A person who imports hazardous waste may obtain the manifest form from any source that is registered with U.S. EPA as a supplier of manifests (e.g., states, waste handlers, or commercial forms printers).
- (D) In the "International Shipments" block, the importer shall check the import box and enter the point of entry (city and state) into the United States.
- (E) The importer shall provide the transporter with an additional copy of the manifest to be submitted by the receiving facility to U.S. EPA in accordance with paragraph (A)(3) of rule 3745-54-71 and paragraph (A)(3) of rule 3745-65-71 of the Administrative Code.

[Comment 1: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

[Comment 2: 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."]

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02/12/2018

3745-52-80

Applicability - transboundary movement of hazardous waste for recovery or disposal.

(A) This rule and 40 C.F.R. Part 262 subpart H apply to transboundary movements of hazardous wastes.

(B) Any person (including exporter, importer, disposal facility operator, or recovery facility operator) who mixes two or more wastes (including hazardous and non-hazardous wastes) or otherwise subjects two or more wastes (including hazardous and non-hazardous wastes) to physical or chemical transformation operations, and thereby creates a new hazardous waste, becomes a generator and assumes all subsequent generator duties under Ohio hazardous waste laws and any exporter duties, if applicable, under this rule and 40 C.F.R. Part 262 subpart H.

[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."]

Replaces: 3745-52-50 rescinded, 3745-52-60 rescinded
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3745-52-200

Definitions_- university labs.

The following definitions apply to rules 3745-52-200 to 3745-52-216 of the Administrative Code:

~~(A)~~ "Central accumulation area" means an on-site hazardous waste accumulation area subject to either paragraphs (A) to (B) of rule 3745-52-34 of the Administrative Code (large quantity generators), or paragraphs (D) to (F) of rule 3745-52-34 of the Administrative Code (small quantity generators). A central accumulation area at an eligible academic entity that chooses to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code shall also comply with rule 3745-52-11 of the Administrative Code when accumulating unwanted material or hazardous waste.

~~(B)~~(A) "College" or "university" means a private or public, post-secondary, degree-granting, academic institution, that is accredited by an accrediting agency listed annually by the U.S. department of education.

~~(C)~~(B) "Eligible academic entity" means a college or university, or a non-profit research institute that is owned by or has a formal written affiliation agreement with a college or university, or a teaching hospital that is owned by or has a formal written affiliation agreement with a college or university.

~~(D)~~(C) "Formal written affiliation agreement for a non-profit research institute" means a written document that establishes a relationship between institutions for the purposes of research or education and is signed by an "authorized representative of a facility," as defined in rule 3745-50-10 of the Administrative Code, from each institution. A relationship on a project-by-project or grant-by-grant basis is not considered a formal written affiliation agreement.

~~(E)~~(D) "A formal written affiliation agreement for a teaching hospital" means a master affiliation agreement and program letter of agreement, as defined by the "Accreditation Council for Graduate Medical Education," with an accredited medical program or medical school.

~~(F)~~(E) "Laboratory" means an area owned by an eligible academic entity where relatively small quantities of chemicals and other substances are used on a non-production basis for teaching or research (or diagnostic purposes at a teaching hospital) and are stored and used in containers that are easily manipulated by one person. Photo laboratories, art studios, and field laboratories are considered laboratories. Areas such as chemical stockrooms and preparatory laboratories that provide a support function to teaching or research laboratories (or diagnostic laboratories at teaching hospitals) are also considered laboratories.

~~(G)~~(F) "Laboratory clean-out" means an evaluation of the inventory of chemicals and other materials in a laboratory that are no longer needed or that have expired and the subsequent removal of those chemicals or other unwanted materials from the laboratory. A clean-out may occur for several reasons. It may be on a routine basis (e.g., at the end of a semester or academic year) or as a result of a renovation, relocation, or change in laboratory supervisor or occupant. A regularly scheduled removal of unwanted material as required by rule 3745-52-208 of the Administrative Code does not qualify as a laboratory clean-out.

~~(H)~~(G) "Laboratory worker" means a person who handles chemicals or unwanted material in a laboratory and may include, but is not limited to, faculty, staff, post-doctoral fellows, interns, researchers, technicians, supervisors or managers, and principal investigators. A person does not need to be paid or otherwise compensated for work in the laboratory to be considered a laboratory worker. Undergraduate and graduate students in a supervised classroom setting are not laboratory workers.

~~(H)~~(H) "Non-profit research institute" means an organization that conducts research as ~~its~~the organization's primary function and files as a non-profit organization under the tax code of 26 U.S.C. 501(c)(3).

~~(I)~~(I) "Reactive acutely hazardous unwanted material" means an unwanted material that is one of the acutely hazardous commercial chemical products listed in paragraph (E) of rule 3745-51-33 of the Administrative Code for reactivity.

~~(K)~~(J) "Teaching hospital" means a hospital that trains students to become physicians, nurses, or other health or laboratory personnel.

~~(L)~~(K) "Trained professional" means a person who has completed the applicable hazardous waste training requirements of rule ~~3745-65-16~~3745-52-17 of the Administrative Code for large quantity generators, or is knowledgeable about normal operations and emergencies in accordance with ~~paragraph (D)(5)(c) of rule 3745-52-34~~3745-52-16 of the Administrative Code for small quantity generators and ~~conditionally exempt~~every very small quantity generators. A trained professional may be an employee of the eligible academic entity or may be a contractor or vendor who meets the requisite training requirements.

~~(M)~~(L) "Unwanted material" means any chemical, mixtures of chemicals, products of experiments, or other material from a laboratory that is no longer needed, wanted, or usable in the laboratory and that is destined for hazardous waste determination by a trained professional. Unwanted materials include reactive acutely hazardous unwanted materials and materials that may eventually be determined not to be waste pursuant to rule 3745-51-02 of the Administrative Code, or a hazardous waste pursuant to rule 3745-51-03 of the Administrative Code. If an eligible academic

entity elects to use another equally effective term in lieu of unwanted material, as allowed by paragraph (A)(1)(a) of rule 3745-52-206 of the Administrative Code, the equally effective term has the same meaning and is subject to the same requirements as unwanted material under rules 3745-52-200 to 3745-52-216 of the Administrative Code.

~~(N)~~(M) "Working container" means a small container (i.e., two gallons or less) that is in use at a laboratory bench, hood, or other work station, to collect unwanted material from a laboratory experiment or procedure.

[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."]

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3745-52-201

Applicability_- university labs.

- (A) Large quantity generators and small quantity generators. Rules 3745-52-200 to 3745-52-216 of the Administrative Code provide alternative requirements to ~~the requirements in rule~~rules 3745-52-11 and ~~paragraph (C) of rule 3745-52-34~~3745-52-15 of the Administrative Code for the hazardous waste determination and accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code, provided that such generators complete the notification requirements of rule 3745-52-203 of the Administrative Code.
- (B) ~~Conditionally exempt~~Very small quantity generators. Rules 3745-52-200 to 3745-52-216 of the Administrative Code provide alternative requirements to ~~the conditional exemption in paragraph (B) of rule 3745-51-05~~3745-52-14 of the Administrative Code for the accumulation of hazardous waste in laboratories owned by eligible academic entities that choose to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code, provided that such generators complete the notification requirements of rule 3745-52-203 of the Administrative Code.

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3745-52-202

Use of the university lab-rules is an option.

- (A) Large quantity generators and small quantity generators. Eligible academic entities have the option of complying with rules 3745-52-200 to 3745-52-216 of the Administrative Code with respect to ~~its~~the eligible academic entity's laboratories, as an alternative to complying with ~~the requirements of rule~~rules 3745-52-11 and ~~paragraph (C) of rule 3745-52-34~~3745-52-15 of the Administrative Code.
- (B) ~~Conditionally exempt~~Very small quantity generators. Eligible academic entities have the option of complying with rules 3745-52-200 to 3745-52-216 of the Administrative Code with respect to ~~its~~the eligible academic entity's laboratories, as an alternative to complying with the conditional exemption of ~~paragraph (B) of rule 3745-51-05~~3745-52-14 of the Administrative Code.

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3745-52-203

~~How an eligible academic entity indicates it will be subject to the university lab rules~~
Notification requirement - university labs.

- (A) An eligible academic entity shall notify Ohio EPA in writing, using Ohio EPA form EPA 9029, that the eligible academic entity is electing to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code for all the laboratories owned by the eligible academic entity under the same U.S. EPA identification number. An eligible academic entity that is a ~~conditionally exempt~~very small quantity generator and does not have a U.S. EPA identification number shall notify that the eligible academic entity is electing to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code for all the laboratories owned by the eligible academic entity that are "on-site," as defined in rule 3745-50-10 of the Administrative Code. An eligible academic entity shall submit a separate notification (Ohio EPA form EPA 9029) for each U.S. EPA identification number (or site, for ~~conditionally exempt~~very small quantity generators) that is electing to be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code, and shall submit the Ohio EPA form EPA 9029 before the eligible academic entity begins to operate under rules 3745-52-200 to 3745-52-216 of the Administrative Code.
- (B) When submitting the Ohio EPA form EPA 9029, the eligible academic entity shall, at a minimum, fill out the following fields on the form:
- (1) Reason for submittal.
 - (2) Site U.S. EPA identification number (except for ~~conditionally exempt~~very small quantity generators).
 - (3) Site name.
 - (4) Site location information.
 - (5) Site land type.
 - (6) "North American Industry Classification System" (NAICS) codes for the site.
 - (7) Site mailing address.
 - (8) Site contact person.
 - (9) Operator and legal owner of the site.
 - (10) Type of regulated waste activity.
 - (11) Certification.

- (C) An eligible academic entity shall keep a copy of the notification (Ohio EPA form EPA 9029) on file at the eligible academic entity for as long as the eligible academic entity's laboratories are subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code.
- (D) A teaching hospital that is not owned by a college or university shall keep a copy of the teaching hospital's formal written affiliation agreement with a college or university on file at the teaching hospital for as long as the teaching hospital's laboratories are subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code.
- (E) A non-profit research institute that is not owned by a college or university shall keep a copy of the non-profit research institute's formal written affiliation agreement with a college or university on file at the non-profit research institute for as long as the non-profit research institute's laboratories are subject to rules 3745-52-200 to 3745-52-216 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."]

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3745-52-204

~~How an eligible academic entity indicates it will withdraw from the university lab rules~~
Withdrawal notification - university labs.

- (A) An eligible academic entity shall notify Ohio EPA in writing, using Ohio EPA form EPA 9029, that the eligible academic entity is electing to no longer be subject to rules 3745-52-200 to 3745-52-216 of the Administrative Code for all the laboratories owned by the eligible academic entity under the same U.S. EPA identification number and that the eligible academic entity ~~will~~shall comply with ~~rule~~rules 3745-52-11 and ~~paragraph (C) of rule 3745-52-34~~3745-52-15 of the Administrative Code for small quantity generators and large quantity generators. An eligible academic entity that is a ~~conditionally exempt~~very small quantity generator and does not have a U.S. EPA identification number shall notify that the eligible academic entity is withdrawing from rules 3745-52-200 to 3745-52-216 of the Administrative Code for all the laboratories owned by the eligible academic entity that are "on-site" as defined in rule 3745-50-10 of the Administrative Code, and that the eligible academic entity ~~will~~shall comply with ~~the conditional exemption in paragraph (B) of rule 3745-51-05~~3745-52-14 of the Administrative Code. An eligible academic entity shall submit a separate notification (Ohio EPA form EPA 9029) for each U.S. EPA identification number (or site, for ~~conditionally exempt~~very small quantity generators) that is withdrawing from rules 3745-52-200 to 3745-52-216 of the Administrative Code and shall submit the Ohio EPA form EPA 9029 before the eligible academic entity begins to operate under ~~rule~~rules 3745-52-11 and ~~paragraph (C) of rule 3745-52-34~~3745-52-15 of the Administrative Code for small quantity generators and large quantity generators, or ~~paragraph (B) of rule 3745-51-05~~3745-52-14 of the Administrative Code for ~~conditionally exempt~~very small quantity generators.
- (B) When submitting the Ohio EPA form EPA 9029, the eligible academic entity shall, at a minimum, fill in the following fields on the form:
- (1) Reason for submittal.
 - (2) Site U.S. EPA identification number (except for ~~conditionally exempt~~very small quantity generators).
 - (3) Site name.
 - (4) Site location information.
 - (5) Site land type.
 - (6) "North American Industry Classification System" (NAICS) codes for the site.
 - (7) Site mailing address.

(8) Site contact person.

(9) Operator and legal owner of the site.

(10) Type of regulated waste activity.

(11) Certification.

(C) An eligible academic entity shall keep a copy of the withdrawal notice (Ohio EPA form EPA 9029) on file at the eligible academic entity for three years after the date of the notification.

[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."]

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3745-52-207

Training - university labs.

An eligible academic entity ~~must~~shall provide training to all individuals working in a laboratory at the eligible academic entity, as follows:

(A) Training for laboratory workers and students ~~must~~shall be commensurate with ~~their~~the duties of the laboratory workers and students so they~~the laboratory workers and students~~ understand ~~the requirements in rules 3745-52-200 to 3745-52-216 of the Administrative Code and can implement them~~these rules.

(B) An eligible academic entity may provide training for laboratory workers and students in a variety of ways, including; but not limited to any of the following:

(1) Instruction by the professor or laboratory manager before or during an experiment;
~~or.~~

(2) Formal classroom training;~~or.~~

(3) ~~Electronic/written~~Electronic or written training;~~or.~~

(4) On-the-job training;~~or.~~

(5) Written or oral exams.

(C) An eligible academic entity that is a large quantity generator ~~must~~shall maintain documentation for the durations specified in paragraph (E) of rule 3745-65-16 of the Administrative Code demonstrating training for all laboratory workers that is sufficient to determine whether laboratory workers have been trained. Examples of documentation demonstrating training may include, but are not limited to, the following:

(1) ~~Sign-in/attendance sheet(s)~~Sign-in or attendance sheets for training ~~session(s);~~
~~or~~sessions.

(2) Syllabus for training ~~session;~~ ~~or~~sessions.

(3) Certificate of training completion;~~or.~~

(4) Test results.

(D) A trained professional ~~must~~shall do both of the following:

(1) Accompany the transfer of unwanted material and hazardous waste when the unwanted material and hazardous waste is removed from the laboratory;~~and.~~

- (2) Make the hazardous waste determination, pursuant to paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, for unwanted material.

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3745-52-208

Removing containers of unwanted material from the laboratory.

- (A) Removing containers of unwanted material on a regular schedule. An eligible academic entity ~~must~~shall do either of the following:
- (1) Remove all containers of unwanted material from each laboratory on a regular interval, not to exceed ~~six~~six ~~twelve~~ months; ~~or,~~
 - (2) Remove containers of unwanted material from each laboratory within ~~six~~six ~~twelve~~ months after each container's accumulation start date.
- (B) The eligible academic entity ~~must~~shall specify in "Part I" of ~~its~~the "Laboratory Management Plan" whether ~~it will~~the eligible academic entity shall comply with paragraph (A)(1) or (A)(2) of this rule for the regular removal of unwanted material from ~~its~~the eligible academic entity's laboratories.
- (C) The eligible academic entity ~~must~~shall specify in "Part II" of ~~its~~the "Laboratory Management Plan" how ~~it will~~the eligible academic entity shall comply with paragraph (A)(1) or (A)(2) of this rule and develop a schedule for regular removals of unwanted material from ~~its~~the eligible academic entity's laboratories.
- (D) Removing containers of unwanted material when volumes are exceeded.
- (1) If a laboratory accumulates a total volume of unwanted material (including reactive acutely hazardous unwanted material) in excess of fifty-five gallons before the regularly scheduled removal, the eligible academic entity ~~must~~shall ensure that all containers of unwanted material in the laboratory (including reactive acutely hazardous unwanted material) are both:
 - (a) Marked on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) with the date that fifty-five gallons is exceeded; ~~and,~~
 - (b) Removed from the laboratory within ten calendar days after the date that fifty-five gallons was exceeded, or at the next regularly scheduled removal, whichever comes first.
 - (2) If a laboratory accumulates more than one quart of liquid reactive acutely hazardous unwanted material or more than one kilogram (2.2 pounds) of solid reactive acutely hazardous unwanted material before the regularly scheduled removal, then the eligible academic entity ~~must~~shall ensure that all containers of reactive acutely hazardous unwanted material are both:

- (a) Marked on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) with the date that one quart or one kilogram is exceeded; ~~and~~.
- (b) Removed from the laboratory within ten calendar days after the date that one quart or one kilogram was exceeded, or at the next regularly scheduled removal, whichever comes first.

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3745-52-209

Where and when to make the hazardous waste determination and where to send containers of unwanted material upon removal from the laboratory.

- (A) Large quantity generators and small quantity generators. An eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, pursuant to rule 3745-52-11 of the Administrative Code, for unwanted material in any of the following areas:
- (1) In the laboratory before the unwanted material is removed from the laboratory, in accordance with rule 3745-52-210 of the Administrative Code.
 - (2) Within four calendar days after the unwanted material arrives at an on-site central accumulation area, in accordance with rule 3745-52-211 of the Administrative Code.
 - (3) Within four calendar days after the unwanted material arrives at an on-site interim or permitted treatment, storage, or disposal facility, in accordance with rule 3745-52-212 of the Administrative Code.
- (B) ~~Conditionally exempt~~ Very small quantity generators. An eligible academic entity shall ensure that a trained professional makes a hazardous waste determination, pursuant to paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, for unwanted material in the laboratory before the unwanted material is removed from the laboratory, in accordance with rule 3745-52-210 of the Administrative Code.

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3745-52-210

Making the hazardous waste determination in the laboratory before the unwanted material is removed from the laboratory.

If an eligible academic entity makes the hazardous waste determination pursuant to rule 3745-52-11 of the Administrative Code, for unwanted material in the laboratory, the eligible academic entity shall comply with the following:

- (A) A trained professional shall make the hazardous waste determination, pursuant to paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, before the unwanted material is removed from the laboratory.
- (B) If an unwanted material is a hazardous waste, the eligible academic entity shall do the following:
- (1) Write the words "hazardous waste" on the container label that is affixed or attached to the container before the hazardous waste may be removed from the laboratory.
 - (2) Write the appropriate EPA hazardous waste numbers on the label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste is transported off-site.
 - (3) Count the hazardous waste toward the eligible academic entity's generator statuscategory, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~3745-52-13 of the Administrative Code, in the calendar month that the hazardous waste determination was made.
- (C) A trained professional shall accompany all hazardous waste that is transferred from the laboratories to an on-site central accumulation area or on-site interim or permitted treatment, storage, or disposal facility.
- (D) When hazardous waste is removed from the laboratory:
- (1) Large quantity generators and small quantity generators shall ensure ~~it~~the hazardous waste is taken directly from the laboratories to an on-site central accumulation area, or on-site interim or permitted treatment, storage, or disposal facility, or transported off-site.
 - (2) ~~Conditionally exempt~~Very small quantity generators shall ensure ~~it~~the hazardous waste is taken directly from the laboratories to any of the types of facilities listed in ~~paragraph (F)(3) of rule 3745-51-05~~3745-52-14 of the Administrative Code ~~for acute hazardous waste, or in paragraph (G)(3) of rule 3745-51-05 of the Administrative Code for hazardous waste.~~

(E) An unwanted material that is a hazardous waste is subject to all applicable hazardous waste rules when the unwanted material is removed from the laboratory.

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3745-52-211 **Making the hazardous waste determination at an on-site central accumulation area.**

If an eligible academic entity makes the hazardous waste determination, pursuant to rule 3745-52-11 of the Administrative Code, for unwanted material at an on-site central accumulation area, the eligible academic entity shall comply with the following:

- (A) A trained professional shall accompany all unwanted material that is transferred from the laboratories to an on-site central accumulation area.
- (B) All unwanted material removed from the laboratories shall be taken directly from the laboratories to the on-site central accumulation area.
- (C) The unwanted material becomes subject to the generator accumulation requirements of ~~paragraph (A) of rule 3745-52-34~~rule 3745-52-16 of the Administrative Code for ~~large~~small quantity generators, or ~~paragraphs (D) to (F) of rule 3745-52-34~~rule 3745-52-17 of the Administrative Code for ~~small~~large quantity generators, as soon as the unwanted material arrives in the central accumulation area, except for the "hazardous waste" labeling ~~requirements~~conditions of paragraph ~~(A) (3)(B)(6)~~ of rule ~~3745-52-34~~3745-52-16 and paragraph (A)(5) of rule 3745-52-17 of the Administrative Code.
- (D) A trained professional shall determine, pursuant to paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, if the unwanted material is a hazardous waste within four calendar days after the unwanted material arrives at the on-site central accumulation area.
- (E) If the unwanted material is a hazardous waste, the eligible academic entity shall do the following:
 - (1) Write the words "hazardous waste" on the container label that is affixed or attached to the container, within four calendar days after the container arrives at the on-site central accumulation area and before the hazardous waste may be removed from the on-site central accumulation area.
 - (2) Write the appropriate EPA hazardous waste numbers on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste may be treated or disposed of on-site or transported off-site.
 - (3) Count the hazardous waste toward the eligible academic entity's generator status~~category~~, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~rule 3745-52-13 of the Administrative Code in the calendar month that the hazardous waste determination was made.

(4) Manage the hazardous waste according to all applicable hazardous waste rules.

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3745-52-212

Making the hazardous waste determination at an on-site interim or permitted treatment, storage, or disposal facility.

If an eligible academic entity makes the hazardous waste determination pursuant to rule 3745-52-11 of the Administrative Code, for unwanted material at an on-site interim or permitted treatment, storage, or disposal facility, that eligible academic entity shall comply with the following:

- (A) A trained professional shall accompany all unwanted material that is transferred from the laboratories to an on-site interim or permitted treatment, storage, or disposal facility.
- (B) All unwanted material removed from the laboratories shall be taken directly from the laboratories to the on-site interim or permitted treatment, storage, or disposal facility.
- (C) The unwanted material becomes subject to the terms of the eligible academic entity's hazardous waste permit or interim as soon as the unwanted material arrives in the on-site treatment, storage or disposal facility.
- (D) A trained professional shall determine, pursuant to paragraphs (A) to (D) of rule 3745-52-11 of the Administrative Code, if the unwanted material is a hazardous waste within four calendar days after the unwanted material arrives at an on-site interim or permitted treatment, storage, or disposal facility.
- (E) If the unwanted material is a hazardous waste, the eligible academic entity shall do all of the following:
 - (1) Write the words "hazardous waste" on the container label that is affixed or attached to the container within four calendar days after arriving at the on-site interim or permitted treatment, storage, or disposal facility and before the hazardous waste may be removed from the on-site interim or permitted treatment, storage, or disposal facility.
 - (2) Write the appropriate EPA hazardous waste numbers on the container label that is associated with the container (or on the label that is affixed or attached to the container, if that is preferred) before the hazardous waste may be treated or disposed on-site or transported off-site.
 - (3) Count the hazardous waste toward the eligible academic entity's generator statuscategory, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~3745-52-13 of the Administrative Code in the calendar month that the hazardous waste determination was made.
 - (4) Manage the hazardous waste according to all applicable hazardous waste rules.

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3745-52-213

Laboratory clean-outs.

(A) One time per twelve-month period for each laboratory, an eligible academic entity may opt to conduct a laboratory clean-out that is subject to all the applicable requirements of rules 3745-52-200 to 3745-52-216 of the Administrative Code, except that:

- (1) If the volume of unwanted material in the laboratory exceeds fifty-five gallons (or one quart of liquid reactive acutely hazardous unwanted material or one kilogram of solid reactive acutely hazardous unwanted material), the eligible academic entity is not required to remove all unwanted materials from the laboratory within ten calendar days after exceeding fifty-five gallons (or one quart of liquid reactive acutely hazardous unwanted material or one kilogram of solid reactive acutely hazardous unwanted material), as required by rule 3745-52-208 of the Administrative Code. Instead, the eligible academic entity ~~must~~shall remove all unwanted materials from the laboratory within thirty calendar days ~~from~~after the start of the laboratory clean-out; ~~and~~.
- (2) For the purposes of on-site accumulation, an eligible academic entity is not required to count a hazardous waste that is an unused commercial chemical product (listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code or exhibiting one or more characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code) generated solely during the laboratory clean-out toward ~~its~~the eligible academic entity's hazardous waste generator ~~status~~category, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~rule 3745-52-13 of the Administrative Code. An unwanted material that is generated prior to the beginning of the laboratory clean-out and is still in the laboratory at the time the laboratory clean-out commences ~~must~~shall be counted toward hazardous waste generator ~~status~~category, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~rule 3745-52-13 of the Administrative Code, if ~~it~~the unwanted material is determined to be hazardous waste; ~~and~~.
- (3) For the purposes of off-site management, an eligible academic entity ~~must~~shall count all ~~its~~the eligible academic entity's hazardous waste, regardless of whether the hazardous waste was counted toward generator ~~status~~category under paragraph (A)(2) of this rule, and if ~~it~~the eligible academic entity generates more than one kilogram per month of acute hazardous waste or more than one hundred kilograms per month of non-acute hazardous waste (i.e., the ~~conditionally exempt~~very small quantity generator limits of ~~rule 3745-51-05~~as defined in rule 3745-50-10 of the Administrative Code), the hazardous waste is subject to all applicable hazardous waste rules when ~~it~~the hazardous waste is transported off-site; ~~and~~.
- (4) An eligible academic entity ~~must~~shall document the activities of the laboratory clean-out. The documentation ~~must~~, at a minimum, shall identify the laboratory

being cleaned out, the date the laboratory clean-out begins and ends, and the volume of hazardous waste generated during the laboratory clean-out. The eligible academic entity ~~must~~shall maintain the records for a period of three years ~~from~~after the date the clean-out ends;~~and.~~

(B) For all other laboratory clean-outs conducted during the same twelve-month period, an eligible academic entity is subject to all the applicable requirements of rules 3745-52-200 to 3745-52-216 of the Administrative Code, including, but not limited to the following:

- (1) The requirement to remove all unwanted materials from the laboratory within ten calendar days after exceeding fifty-five gallons (or one quart of reactive acutely hazardous unwanted material), as required by rule 3745-52-208 of the Administrative Code;~~and.~~
- (2) The requirement to count all hazardous waste, including unused hazardous waste, generated during the laboratory clean-out toward ~~its~~the eligible academic entity's hazardous waste generator ~~status~~category, pursuant to ~~paragraphs (C) and (D) of rule 3745-51-05~~rule 3745-52-13 of the Administrative Code.

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3745-52-214

Laboratory management plan.

An eligible academic entity shall develop and retain a written "Laboratory Management Plan" (LMP), or revise an existing written plan. The LMP is a site-specific document that describes how the eligible academic entity ~~will~~shall manage unwanted materials in compliance with rules 3745-52-200 to 3745-52-216 of the Administrative Code. An eligible academic entity may write one LMP for all the laboratories owned by the eligible academic entity that have opted to use rules 3745-52-200 to 3745-52-216 of the Administrative Code, even if the laboratories are located at sites with different U.S. EPA identification numbers. The LMP shall contain two parts with a total of nine elements identified in paragraphs (A) and (B) of this rule. "Part I" of the LMP shall describe procedures for each of the elements listed in paragraph (A) of this rule. An eligible academic entity shall implement and comply with the specific provisions developed to address the elements in "Part I" of the LMP. "Part II" of the LMP shall describe best management practices for each of the elements listed in paragraph (B) of this rule. The specific actions taken by an eligible academic entity to implement each element in "Part II" of the LMP may vary from the procedures described in the LMP without constituting a violation of rules 3745-52-200 to 3745-52-216 of the Administrative Code. "Part II" of the LMP may include additional elements and best management practices.

(A) The eligible academic entity shall implement and comply with the following specific provisions of "Part I" of the LMP. "Part I" of the LMP shall be done by the eligible academic entity:

(1) Describe procedures for container labeling in accordance with paragraph (A) of rule 3745-52-206 of the Administrative Code, as follows:

(a) Identifying whether the eligible academic entity ~~will~~shall use the term "unwanted material" on the containers in the laboratory. If not, identify an equally effective term that ~~will~~shall be used in lieu of "unwanted material" and consistently by the eligible academic entity. The equally effective term, if used, has the same meaning and is subject to the same requirements as "unwanted material."

(b) Identifying the manner in which information that is "associated with the container" ~~will~~shall be imparted.

(2) Identify whether the eligible academic entity ~~will~~shall comply with paragraph (A)(1) or (A)(2) of rule 3745-52-208 of the Administrative Code for regularly scheduled removals of unwanted material from the laboratory.

(B) "Part II" of the LMP shall be done by an eligible academic entity:

- (1) Describe the intended best practices for container labeling and management (see the required standards in rule 3745-52-206 of the Administrative Code).
- (2) Describe the intended best practices for providing training for laboratory workers and students commensurate with the duties of the laboratory workers and students [see the required standards in paragraph (A) of rule 3745-52-207 of the Administrative Code].
- (3) Describe the intended best practices for providing training to ensure safe on-site transfers of unwanted material and hazardous waste by trained professionals [see the required standards in paragraph (D)(1) of rule 3745-52-207 of the Administrative Code].
- (4) Describe the intended best practices for removing unwanted material from the laboratory, including:
 - (a) For regularly scheduled removals. Develop a regular schedule for identifying and removing unwanted materials from the laboratories [see the required standards in paragraphs (A)(1) and (A)(2) of rule 3745-52-208 of the Administrative Code].
 - (b) For removals when maximum volumes are exceeded:
 - (i) Describe the intended best practices for removing unwanted materials from the laboratory within ten calendar days ~~when~~after maximum volumes of unwanted materials have been exceeded [see the required standards in paragraph (D) of rule 3745-52-208 of the Administrative Code].
 - (ii) Describe the intended best practices for communicating that maximum volumes of unwanted materials have been exceeded.
- (5) Describe the intended best practices for making hazardous waste determinations, including specifying the duties of the individuals involved in the process (see the required standards in ~~rules~~paragraphs (A) to (D) of rule 3745-52-11 and rules 3745-52-209 to 3745-52-212 of the Administrative Code).
- (6) Describe the intended best practices for laboratory clean-outs, if the eligible academic entity plans to use the incentives for laboratory clean-outs provided in rule 3745-52-213 of the Administrative Code, including both:
 - (a) Procedures for conducting laboratory clean-outs [see the required standards in paragraphs (A)(1) to (A)(3) of rule 3745-52-213 of the Administrative Code].

- (b) Procedures for documenting laboratory clean-outs [see the required standards in paragraph (A)(4) of rule 3745-52-213 of the Administrative Code].
- (7) Describe the intended best practices for emergency prevention, including all of the following:
- (a) Procedures for emergency prevention, notification, and response, appropriate to the hazards in the laboratory.
 - (b) A list of chemicals that the eligible academic entity has, or is likely to have, that become more dangerous when the expiration date of those chemicals is exceeded or as those chemicals degrade.
 - (c) Procedures to safely dispose of chemicals that become more dangerous when the expiration date of those chemicals is exceeded or as those chemicals degrade.
 - (d) Procedures for the timely characterization of unknown chemicals.
- (C) An eligible academic entity shall make the LMP available to laboratory workers, students, or any others at the eligible academic entity who request it.
- (D) An eligible academic entity shall review and revise the LMP as needed.

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3745-52-216

Non-laboratory hazardous waste generated at an eligible academic entity.

An eligible academic entity that generates hazardous waste outside of a laboratory is not eligible to manage that hazardous waste ~~under~~ in accordance with rules 3745-52-200 to 3745-52-216 of the Administrative Code, ~~and~~ one of the following applies:

- (A) ~~Remains~~ Such eligible academic entity remains subject to the generator requirements of ~~rule~~ rules 3745-52-11 and ~~paragraph (C) of rule 3745-52-34~~ 3745-52-15 of the Administrative Code for large quantity generators and small quantity generators (if the hazardous waste is managed in a satellite accumulation area), and all other applicable generator requirements of Chapter 3745-52 of the Administrative Code with respect to that hazardous waste; ~~or~~.
- (B) ~~Remains~~ Such eligible academic entity remains subject to the conditional exemption of ~~paragraph (B) of rule 3745-51-05~~ 3745-52-14 of the Administrative Code for ~~conditionally exempt~~ very small quantity generators, with respect to that hazardous waste.

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3745-52-230

Applicability - alternative standards for episodic generation.

Rules 3745-52-230 to 3745-52-233 of the Administrative Code are applicable to "very small quantity generators" and "small quantity generators" as defined in rule 3745-50-10 of the Administrative Code.

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3745-52-231**Definitions - alternative standards for episodic generation.**

- (A) "Episodic event" means an activity or activities, either planned or unplanned, that does not normally occur during generator operations, resulting in an increase in the generation of hazardous wastes that exceeds the calendar month quantity limits for the generator's usual category.
- (B) "Planned episodic event" means an episodic event that the generator planned and prepared for, including regular maintenance, tank cleanouts, short-term projects, and removal of excess chemical inventory.
- (C) "Unplanned episodic event" means an episodic event that the generator did not plan or reasonably did not expect to occur, including production process upsets, product recalls, accidental spills, or "acts of nature," such as tornado, hurricane, or flood.

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3745-52-232**Conditions for generators that manage hazardous waste from an episodic event.**

(A) Very small quantity generator. A very small quantity generator may maintain the generator's existing generator category for hazardous waste generated during an episodic event provided that the generator complies with all of the following conditions:

(1) The very small quantity generator is limited to one episodic event per calendar year, unless a petition is granted under rule 3745-52-233 of the Administrative Code.

(2) Notification. The very small quantity generator shall notify Ohio EPA no later than thirty calendar days prior to initiating a planned episodic event using Ohio EPA form 9029. In the event of an unplanned episodic event, the generator shall notify Ohio EPA within seventy-two hours after the unplanned event via telephone, email, or fax and subsequently submit Ohio EPA form 9029. The generator shall include the start date and end date of the episodic event, the reason for the event, and types and estimated quantities of hazardous waste expected to be generated as a result of the episodic event, and shall identify a facility contact and emergency coordinator with twenty-four-hour telephone access to discuss the notification submittal or respond to an emergency in compliance with paragraph (B)(9)(a) of rule 3745-52-16 of the Administrative Code.

(3) U.S. EPA identification number. The very small quantity generator shall have a U.S. EPA identification number or obtain a U.S. EPA identification number using Ohio EPA form 9029.

(4) Accumulation. A very small quantity generator is prohibited from accumulating hazardous waste generated from an episodic event on drip pads and in containment buildings. When accumulating hazardous waste in containers and tanks, all of the following conditions apply:

(a) Containers. A very small quantity generator accumulating in containers shall mark or label the containers with the following:

(i) The words "Episodic Hazardous Waste."

(ii) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding);

a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) The date upon which the episodic event began, clearly visible for inspection on each container.

(b) Tanks. A very small quantity generator accumulating episodic hazardous waste in tanks shall do all of the following:

(i) Mark or label the tank with the words "Episodic Hazardous Waste."

(ii) Mark or label the tanks with an indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].

(iii) Use inventory logs, monitoring equipment or other records to identify the date upon which each episodic event begins.

(iv) Keep on-site and readily available for inspections the inventory logs or records with the information required in paragraph (A)(4)(b) of this rule.

(c) Hazardous waste shall be managed in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water, including the following:

(i) Containers shall be in good condition and compatible with the hazardous waste being accumulated therein. Containers shall be kept closed except to add or remove waste.

(ii) Tanks shall be in good condition and compatible with the hazardous waste accumulated therein. Tanks shall have procedures in place to prevent the overflow (e.g., be equipped with a means to stop inflow with systems such as a waste feed cutoff system or bypass system to a standby tank when hazardous waste is continuously

fed into the tank). Tanks shall be inspected at least once each operating day to ensure all applicable discharge control equipment, such as waste feed cutoff systems, bypass systems, and drainage systems are in good working order and to ensure the tank is operated according to the tank's design by reviewing the data gathered from monitoring equipment such as pressure and temperature gauges from the inspection.

- (5) The very small quantity generator shall comply with the hazardous waste manifest rules 3745-52-20 to 3745-52-27 of the Administrative Code when the very small quantity generator sends the very small quantity generator's episodic event hazardous waste off-site to a "designated facility," as defined in rule 3745-50-10 of the Administrative Code.
- (6) The very small quantity generator has up to sixty calendar days from the start of the episodic event to manifest and send the very small quantity generator's hazardous waste generated from the episodic event to a "designated facility," as defined in rule 3745-50-10 of the Administrative Code.
- (7) Very small quantity generators shall maintain all of the following records for three years after the end date of the episodic event:
- (a) Beginning and end dates of the episodic event.
 - (b) A description of the episodic event.
 - (c) A description of the types and quantities of hazardous wastes generated during the event.
 - (d) A description of how the hazardous waste was managed as well as the name of the RCRA-designated facility that received the hazardous waste.
 - (e) Names of hazardous waste transporters.
 - (f) An approval letter from Ohio EPA if the generator petitioned to conduct one additional episodic event per calendar year.
- (B) Small quantity generators. A small quantity generator may maintain the small quantity generator's existing generator category during an episodic event provided that the small quantity generator complies with the following conditions:
- (1) The small quantity generator is limited to one episodic event per calendar year unless a petition is granted under rule 3745-52-233 of the Administrative Code.

- (2) Notification. The small quantity generator shall notify Ohio EPA no later than thirty calendar days prior to initiating a planned episodic event using Ohio EPA form 9029. In the event of an unplanned episodic event, the small quantity generator shall notify Ohio EPA within seventy-two hours after the unplanned event via telephone, email, or fax, and subsequently submit Ohio EPA form 9029. The small quantity generator shall include the start date and end date of the episodic event, the reason for the event, types and estimated quantities of hazardous wastes expected to be generated as a result of the episodic event, and identify a facility contact and emergency coordinator with twenty-four-hour telephone access to discuss the notification submittal or respond to emergency.
- (3) U.S. EPA identification number. The small quantity generator shall have a U.S. EPA identification number or obtain a U.S. EPA identification number using Ohio EPA form 9029.
- (4) Accumulation by small quantity generators. A small quantity generator is prohibited from accumulating hazardous wastes generated from an episodic event waste on drip pads and in containment buildings. When accumulating hazardous waste generated from an episodic event in containers and tanks, the following conditions apply:
- (a) Containers. A small quantity generator accumulating episodic hazardous waste in containers shall meet the standards in paragraph (B)(2) of rule 3745-52-16 of the Administrative Code and shall mark or label the small quantity generator's containers with all of the following:
- (i) The words "Episodic Hazardous Waste."
- (ii) An indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].
- (iii) The date upon which the episodic event began, clearly visible for inspection on each container.

- (b) Tanks. A small quantity generator accumulating episodic hazardous waste in tanks shall meet the standards in paragraph (B)(3) of rule 3745-52-16 of the Administrative Code and shall do all of the following:
- (i) Mark or label the tank with the words "Episodic Hazardous Waste."
 - (ii) Mark or label the tanks with an indication of the hazards of the contents [examples include, but are not limited to, the applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic); hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding); a hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200; or a chemical hazard label consistent with the national fire protection association code 704].
 - (iii) Use inventory logs, monitoring equipment, or other records to identify the date upon which each period of accumulation begins and ends.
 - (iv) Keep on-site and readily available for inspections the inventory logs or records with the information required in paragraph (B)(4)(b) of this rule.
- (5) The small quantity generator shall treat hazardous waste generated from an episodic event on-site or manifest and ship such hazardous waste off-site to a "designated facility," as defined in rule 3745-50-10 of the Administrative Code, within sixty calendar days after the start of the episodic event.
- (6) The small quantity generator shall maintain all of the following records for three years after the end date of the episodic event:
- (a) Beginning and end dates of the episodic event.
 - (b) A description of the episodic event.
 - (c) A description of the types and quantities of hazardous wastes generated during the event.
 - (d) A description of how the hazardous waste was managed as well as the name of the "designated facility," as defined by rule 3745-50-10 of the Administrative Code, that received the hazardous waste.

(e) Names of hazardous waste transporters.

(f) An approval letter from Ohio EPA if the generator petitioned to conduct one additional episodic event per calendar year.

[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."]

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3745-52-233

Petition to manage one additional episodic event per calendar year.

(A) A generator may petition the director for a second episodic event in a calendar year without impacting the generator's generator category under the following conditions:

(1) If a very small quantity generator or small quantity generator has already held a planned episodic event in a calendar year, the generator may petition Ohio EPA for an additional unplanned episodic event in that calendar year within seventy-two hours after the unplanned event.

(2) If a very small quantity generator or small quantity generator has already held an unplanned episodic event in a calendar year, the generator may petition Ohio EPA for an additional planned episodic event in that calendar year.

(B) The petition shall include all of the following:

(1) The reasons why an additional episodic event is needed and the nature of the episodic event.

(2) The estimated amount of hazardous waste to be managed from the event.

(3) How the hazardous waste is to be managed.

(4) The estimated length of time needed to complete management of the hazardous waste generated from the episodic event, not to exceed sixty days.

(5) Information regarding the previous episodic event managed by the generator, including the nature of the event, whether the episodic event was a planned or unplanned event, and how the generator complied with the conditions.

(C) The petition shall be made to the director in writing, either on paper or electronically.

(D) The generator shall retain written approval in the generator's records for three years after the date the episodic event ended.

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3745-52-250

Applicability - preparedness, prevention, and emergency procedures for large quantity generators.

Rules 3745-52-250 to 3745-52-265 of the Administrative Code apply to those areas of a large quantity generator where hazardous waste is generated or accumulated on-site.

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3745-52-251

Maintenance and operation of facility - preparedness, prevention, and emergency procedures for large quantity generators.

A large quantity generator shall maintain and operate the large quantity generator's facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

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3745-52-252**Required equipment - preparedness, prevention, and emergency procedures for large quantity generators.**

All areas deemed applicable by rule 3745-52-250 of the Administrative Code shall be equipped with the following items in paragraphs (A) to (D) of this rule [unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified in paragraphs (A) to (D) of this rule or the actual hazardous waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified in paragraphs (A) to (D) of this rule]. A large quantity generator may determine the most appropriate locations within the large quantity generator's facility to locate equipment necessary to prepare for and respond to emergencies:

- (A) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.
- (B) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.
- (C) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment, and decontamination equipment.
- (D) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.

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3745-52-253

Testing and maintenance of equipment - preparedness, prevention, and emergency procedures for large quantity generators.

All communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure proper operation in time of emergency.

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3745-52-254

Access to communications or alarm system - preparedness, prevention, and emergency procedures for large quantity generators.

(A) When hazardous waste is being poured, mixed, spread, or otherwise handled, all personnel involved in the operation shall have immediate access (e.g., direct or unimpeded access) to an internal alarm or emergency communication device, either directly or through visual or voice contact with another employee, unless such a device is not required by rule 3745-52-252 of the Administrative Code.

(B) In the event there is just one employee on the premises while the facility is operating, the employee shall have immediate access (e.g., direct or unimpeded access) to a device, such as a telephone (immediately available at the scene of operation) or a hand-held two-way radio, capable of summoning external emergency assistance, unless such a device is not required by rule 3745-52-252 of the Administrative Code.

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3745-52-255

Required aisle space - preparedness, prevention, and emergency procedures for large quantity generators.

The large quantity generator shall maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

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3745-52-256

Arrangements with local authorities - preparedness, prevention, and emergency procedures for large quantity generators.

- (A) The large quantity generator shall attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, and local hospitals, taking into account the types and quantities of hazardous wastes handled at the facility. Arrangements may be made with the local emergency planning committee, if this organization is determined to be the appropriate organization with which to make arrangements.
- (1) A large quantity generator attempting to make arrangements with the local fire department shall determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers, and local hospitals.
- (2) As part of this coordination, the large quantity generator shall attempt to make arrangements, as necessary, to familiarize these organizations with the layout of the facility, the properties of the hazardous waste handled at the facility and associated hazards, places where personnel would normally be working, entrances to roads inside the facility, and possible evacuation routes, as well as the types of injuries or illnesses which could result from fires, explosions, or releases at the facility.
- (3) Where more than one police department or fire department might respond to an emergency, the large quantity generator shall attempt to make arrangements designating primary emergency authority to a specific fire department or police department, and arrangements with any others to provide support to the primary emergency authority.
- (B) The large quantity generator shall maintain records documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. This documentation shall include documentation in the operating record that either confirms such arrangements actively exist or, in cases where no arrangements exist, confirms that attempts to make such arrangements were made.
- (C) A facility possessing twenty-four-hour response capabilities may seek a waiver from the authority having jurisdiction over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided that the waiver is documented in the operating record.

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3745-52-260

Purpose and implementation of contingency plan - preparedness, prevention, and emergency procedures for large quantity generators.

(A) A large quantity generator shall have a contingency plan for the facility. The contingency plan shall be designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.

(B) The provisions of the contingency plan shall be carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

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3745-52-261**Content of contingency plan - preparedness, prevention, and emergency procedures for large quantity generators.**

- (A) The contingency plan shall describe the actions facility personnel shall take to comply with rules 3745-52-260 and 3745-52-265 of the Administrative Code in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.
- (B) If the generator has already prepared a "Spill Prevention, Control, and Countermeasures Plan" in accordance with 40 C.F.R. Part 112, or some other emergency or contingency plan, the generator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the standards of Chapter 3745-52 of the Administrative Code. The generator may develop one contingency plan that meets all regulatory standards. Ohio EPA recommends that the plan be based on the "National Response Team's Integrated Contingency Plan Guidance" ("One Plan").
- (C) The contingency plan shall describe arrangements agreed to with the local police department, fire department, other emergency response teams, emergency response contractors, equipment suppliers, local hospitals or, if applicable, the local emergency planning committee, pursuant to rule 3745-52-256 of the Administrative Code.
- (D) The contingency plan shall list names and emergency telephone numbers of all persons qualified to act as emergency coordinator (see rule 3745-52-264 of the Administrative Code) and this list shall be kept up to date. Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which the emergency coordinators shall assume responsibility as alternates. In situations where the generator facility has an emergency coordinator continuously on duty because the facility operates twenty-four hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times.
- (E) The contingency plan shall include a list of all emergency equipment at the facility [such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment], where this equipment is required. This list shall be kept up to date. In addition, the contingency plan shall include the location and a physical description of each item on the list, and a brief outline of the capabilities.
- (F) The contingency plan shall include an evacuation plan for generator personnel where there is a possibility that evacuation could be necessary. This evacuation plan shall describe signals to be used to begin evacuation, evacuation routes, and alternate

evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

[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."]

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3745-52-262

Copies of contingency plan - preparedness, prevention, and emergency procedures for large quantity generators.

A copy of the contingency plan and all revisions to the contingency plan shall be maintained at the large quantity generator. Additional requirements include the following:

(A) The large quantity generator shall submit a copy of the contingency plan and all revisions to all local emergency responders (i.e., police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services). This document may also be submitted to the local emergency planning committee, as appropriate.

(B) A large quantity generator that first becomes subject to these provisions after the first effective date of this rule or a large quantity generator that is otherwise amending the generator's contingency plan shall at that time submit a quick reference guide of the contingency plan to the local emergency responders identified at paragraph (A) of this rule or, as appropriate, the local emergency planning committee. The quick reference guide shall include all of the following elements:

(1) The types or names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid).

(2) The estimated maximum amount of each hazardous waste that may be present at any one time.

(3) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff.

(4) A map of the facility showing where hazardous wastes are generated, accumulated, and treated and routes for accessing these wastes.

(5) A street map of the facility in relation to surrounding businesses, schools, and residential areas to understand how best to get to the facility and how best to evacuate citizens and workers.

(6) The locations of water supply (e.g., fire hydrant and the flow rate).

(7) The identification of on-site notification systems (e.g., a fire alarm that rings off-site, smoke alarms).

(8) The name of the emergency coordinator and seven days a week, twenty-four-hour emergency telephone number or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

(C) If necessary, generators shall update the quick reference guides, when the contingency plan is amended, and shall submit these documents to the local emergency responders identified in paragraph (A) of this rule or, as appropriate, to the local emergency planning committee.

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3745-52-263

Amendment of contingency plan - preparedness, prevention, and emergency procedures for large quantity generators.

The contingency plan shall be reviewed, and immediately amended if necessary, when any of the following occur:

- (A) Applicable regulations are revised.
- (B) The contingency plan fails in an emergency.
- (C) The generator facility changes - in the generator facility's design, construction, operation, maintenance, or other circumstances - in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.
- (D) The list of emergency coordinators changes.
- (E) The list of emergency equipment changes.

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3745-52-264**Emergency coordinator - preparedness, prevention, and emergency procedures for large quantity generators.**

At all times, there shall be at least one employee either on the generator's premises or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility to coordinate all emergency response measures and implement the necessary emergency procedures outlined in rule 3745-52-265 of the Administrative Code. Although responsibilities may vary depending on factors such as type and variety of hazardous waste handled by the generator, as well as type and complexity of the facility, this emergency coordinator shall be thoroughly familiar with all aspects of the generator's contingency plan, all operations and activities at the facility, the location and characteristics of hazardous waste handled, the location of all records within the facility, and the facility's layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

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3745-52-265

Emergency procedures - preparedness, prevention, and emergency procedures for large quantity generators.

(A) When there is an imminent or actual emergency situation, the emergency coordinator (or the emergency coordinator's designee when the emergency coordinator is on call) shall immediately do the following:

(1) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel.

(2) Notify appropriate state or local agencies with designated response roles if help is needed.

(B) When there is a release, fire, or explosion, the emergency coordinator shall immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or by review of the generator's records or manifests and, if necessary, by chemical analysis.

(C) Concurrently, the emergency coordinator shall assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment shall consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-offs from water or chemical agents used to control fire and heat-induced explosions).

(D) If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall report all of the findings as follows:

(1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator shall immediately notify appropriate local authorities. The emergency coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.

(2) The emergency coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, or the Ohio EPA spill hotline at 800/282-9378. The report shall include all of the following:

(a) Name and telephone number of the person making the report.

(b) Name and address of the generator.

(c) Time and type of incident (e.g., release, fire).

- (d) Name and quantity of material involved, to the extent known.
 - (e) The extent of injuries, if any.
 - (f) The possible hazards to human health or the environment outside the facility.
- (E) During an emergency, the emergency coordinator shall take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the generator's facility. These measures shall include, where applicable, stopping processes and operations, collecting and containing released hazardous waste, and removing or isolating containers.
- (F) If the generator stops operations in response to a fire, explosion or release, the emergency coordinator shall monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- (G) Immediately after an emergency, the emergency coordinator shall provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility. Unless the generator can demonstrate, in accordance with paragraphs (C) or (D) of rule 3745-51-03 of the Administrative Code, that the recovered material is not a hazardous waste, the recovered material is a newly generated hazardous waste that shall be managed in accordance with Chapters 3745-52, 3745-53, 3745-65 to 3745-69, and 3745-256 of the Administrative Code.
- (H) The emergency coordinator shall ensure that, in the affected areas of the facility:
- (1) No hazardous waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed.
 - (2) All emergency equipment listed in the contingency plan is cleaned and fit for the emergency equipment's intended use before operations are resumed.
 - (a) The generator shall note in the operating record the time, date, and details of any incident that requires implementation of the contingency plan. Within fifteen days after the incident, the generator shall submit a written report on the incident to the director. The report shall include all of the following:
 - (i) Name, address, and telephone number of the generator.
 - (ii) Date, time, and type of incident (e.g., fire, explosion).
 - (iii) Name and quantity of material involved.

(iv) The extent of injuries, if any.

(v) An assessment of actual or potential hazards to human health or the environment, where this is applicable.

(vi) Estimated quantity and disposition of recovered material that resulted from the incident.

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3745-53-10

Applicability- transporter standards.

- (A) Chapter 3745-53 of the Administrative Code establishes standards which apply to persons transporting hazardous waste within the state of Ohio if the transportation requires a hazardous waste manifest under Chapter 3745-52 of the Administrative Code.
- (B) Chapter 3745-53 of the Administrative Code does not apply to on-site transportation of hazardous waste by generators or by owners or operators of permitted hazardous waste management facilities.
- (C) A transporter of hazardous waste also shall comply with Chapter 3745-52 of the Administrative Code; if the transporter does either of the following:
- (1) Transports hazardous waste into the state of Ohio from a foreign country.
 - (2) Mixes hazardous wastes of different United States department of transportation shipping descriptions by placing the hazardous wastes into a single container.
- (D) A transporter of hazardous waste that is being imported or exported to any other country for purposes of recovery or disposal is subject to rules 3745-53-10 to 3745-53-12 of the Administrative Code and to all relevant requirements of rule 3745-52-80 of the Administrative Code and 40 ~~CFR~~C.F.R. Part 262 subpart H, including, but not limited to, 40 ~~CFR~~C.F.R. 262.83(d) and 262.84(d) for movement documents.
- [Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]
- (E) Chapter 3745-53 of the Administrative Code does not apply to transportation during an explosives or munitions emergency response, conducted in accordance with paragraph (G)(8)(a)(iv) or (G)(8)(d) of rule 3745-54-01 of the Administrative Code or paragraph (C)(11)(a)(iv) or (C)(11)(d) of rule 3745-65-01 of the Administrative Code and paragraph (D)(1)(d) or (D)(3) of rule 3745-50-45 of the Administrative Code.
- (F) Rule 3745-266-203 of the Administrative Code identifies how Chapter 3745-53 of the Administrative Code applies to military munitions classified as waste under rule 3745-266-202 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."]

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3745-53-11

U.S. EPA identification number- transporters.

(A) A transporter shall not transport hazardous wastes without having received a U.S. EPA identification number.

(B) A transporter who has a mailing address in Ohio and who has not received a U.S. EPA identification number may obtain one by applying to Ohio EPA using Ohio EPA form EPA 9029. Upon receiving the request, Ohio EPA will assign a U.S. EPA identification number to the transporter.

~~[Comment 1: 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." Refer to 3734.15 of the Revised Code for additional requirements for registration and liability of transporters and acceptors of hazardous waste.]~~

[Comment 2: 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."]

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03/17/2012, 02/12/2018

3745-53-12**Transfer facility requirements.**

(A) A transporter who stores manifested shipments of hazardous waste in containers that meet the requirements of rule 3745-52-30 of the Administrative Code at a transfer facility for a period of ten days or less is not subject to regulation under rules 3745-50-40 to 3745-50-235 or Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, or 3745-270 of the Administrative Code with respect to the storage of those wastes.

(B) When consolidating the contents of two or more containers with the same hazardous waste into a new container, or when combining and consolidating two different hazardous wastes that are compatible with each other, the transporter shall mark the transporter's containers of one hundred nineteen gallons or less with all of the following information:

(1) The words "Hazardous Waste."

(2) The applicable EPA hazardous waste numbers in rules 3745-51-20 to 3745-51-24 and 3745-51-30 to 3745-51-35 of the Administrative Code, or in compliance with paragraph (C) of rule 3745-52-32 of the Administrative Code.

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TO BE RESCINDED

3745-53-12 **Transfer facility requirements.**

A transporter who stores manifested shipments of hazardous waste in containers meeting the requirements of rule 3745-52-30 of the Administrative Code at a transfer facility for a period of ten days or less is not subject to regulation under rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-270 of the Administrative Code, with respect to the storage of those wastes.

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3745-53-20**The manifest system and acceptance and handling of hazardous waste.****(A) Requirements for transporters prior to accepting hazardous waste.**

(1) Manifest requirement. A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest form (U.S. EPA form 8700-22, and if necessary, U.S. EPA form 8700-22A) signed in accordance with rule 3745-52-23 of the Administrative Code, or is provided with an electronic manifest that is obtained, completed, and transmitted in accordance with paragraph (A)(3) of rule 3745-52-20 of the Administrative Code, and signed with a valid and enforceable electronic signature as described in 40 C.F.R. 262.25.

(2) Exports. For exports of hazardous waste subject to 40 C.F.R. Part 262 subpart H, a transporter may not accept hazardous waste without a manifest signed by the generator in accordance with this rule, as appropriate, and for exports occurring under the terms of a consent issued by U.S. EPA on or after December 31, 2016, a movement document that includes all information required by 40 C.F.R. 262.83(d).

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(3) Compliance date for form revisions. The revised manifest form and procedures in 40 C.F.R. 260.10, 261.7, 263.20, and 263.21, had an effective date of September 5, 2006. The manifest form and procedures in 40 C.F.R. 260.10, 261.7, 263.20, and 263.21, in the 40 C.F.R. Parts 260 to 265, edition revised as of July 1, 2004, were applicable until September 5, 2006.

(4) Use of electronic manifest legal equivalence to paper forms for participating transporters. Electronic manifests that are obtained, completed, and transmitted in accordance with paragraph (A)(3) of rule 3745-52-20 of the Administrative Code, and used in accordance with this rule in lieu of U.S. EPA forms 8700-22 and 8700-22A, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in the hazardous waste rules to obtain, complete, sign, carry, provide, give, use, or retain a manifest.

(a) Any requirement in the hazardous waste rules to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied

by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 C.F.R. 262.25(a).

- (b) Any requirement in the hazardous waste rules to give, provide, send, forward, or return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person by submittal to the system.
 - (c) Any requirement in the hazardous waste rules for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment, except that to the extent that the hazardous materials regulation on shipping papers for carriage by public highway requires transporters of hazardous materials to carry a paper document to comply with 49 C.F.R. 177.817, a hazardous waste transporter shall carry one printed copy of the electronic manifest on the transport vehicle.
 - (d) Any requirement in the hazardous waste rules for a transporter to keep or retain a copy of a manifest is satisfied by the retention of an electronic manifest in the transporter's account on the e-manifest system, provided that such copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector.
 - (e) No transporter may be held liable for the inability to produce an electronic manifest for inspection under this rule if that transporter can demonstrate that the inability to produce the electronic manifest is exclusively due to a technical difficulty with the U.S. EPA system for which the transporter bears no responsibility.
- (5) A transporter may participate in the electronic manifest system either by accessing the electronic manifest system from the transporter's own electronic equipment, or by accessing the electronic manifest system from the equipment provided by a participating generator, by another transporter, or by a designated facility.
- (6) Special procedures when electronic manifest is not available. If after a manifest has been originated electronically and signed electronically by the initial transporter, and the electronic manifest system becomes unavailable for any reason, then the transporter shall do the following:
- (a) The transporter in possession of the hazardous waste when the electronic manifest becomes unavailable shall reproduce sufficient copies of the printed manifest that is carried on the transport vehicle pursuant to

paragraph (A)(4)(c) of this rule, or obtain and complete another paper manifest for this purpose. The transporter shall reproduce sufficient copies to provide the transporter and all subsequent waste handlers with a copy for the files of the transporter and all subsequent waste handlers, plus two additional copies to be delivered to the designated facility with the hazardous waste.

(b) On each printed copy, the transporter shall include a notation in the special handling and additional description space (item 14) that the paper manifest is a replacement manifest for a manifest originated in the electronic manifest system, shall include (if not pre-printed on the replacement manifest) the manifest tracking number of the electronic manifest that is replaced by the paper manifest, and also shall include a brief explanation why the electronic manifest was not available to complete the tracking of the shipment electronically.

(c) A transporter signing a replacement manifest to acknowledge receipt of the hazardous waste shall ensure that each paper copy is individually signed and that a legible handwritten signature appears on each copy.

(d) From the point at which the electronic manifest is no longer available for tracking the waste shipment, the paper replacement manifest copies shall be carried, signed, retained as records, and given to a subsequent transporter or to the designated facility, following the instructions, procedures, and requirements that apply to the use of all other paper manifests.

(7) Special procedures for electronic signature methods undergoing tests. If a transporter using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the transporter shall sign the electronic manifest electronically and also sign with an ink signature the transporter acknowledgement of receipt of materials on the printed copy of the manifest that is carried on the vehicle in accordance with paragraph (A)(4)(c) of this rule. This printed copy bearing the generator's and transporter's ink signatures also shall be presented by the transporter to the designated facility to sign in ink to indicate the receipt of the waste materials or to indicate discrepancies. After the owner or operator of the designated facility has signed this printed manifest copy with the owner or operator of the designated facility's ink signature, the printed manifest copy shall be delivered to the designated facility with the waste materials.

(8) [Reserved.]

- (9) Post-receipt manifest data corrections. After the owner or operator of designated facilities have certified to the receipt of hazardous wastes by signing item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) named on the manifest. Transporters may participate electronically in the post-receipt data corrections process by following the process described in paragraph (L) of rule 3745-54-71 of the Administrative Code, which applies to corrections made to either paper or electronic manifest records.
- (B) Before transporting the hazardous waste, the transporter shall sign and date the manifest acknowledging acceptance of the hazardous waste from the generator. The transporter shall return a signed copy to the generator before leaving the generator's property.
- (C) The transporter shall ensure that the manifest accompanies the hazardous waste. In the case of exports occurring under the terms of a consent issued by U.S. EPA to the exporter on or after December 31, 2016, the transporter shall ensure that a movement document that includes all information required by 40 C.F.R. 262.83(d) also accompanies the hazardous waste. In the case of imports occurring under the terms of a consent issued by U.S. EPA to the country of export or the importer on or after December 31, 2016, the transporter shall ensure that a movement document that includes all information required by 40 C.F.R. 262.84(d) also accompanies the hazardous waste.
- (D) A transporter who delivers a hazardous waste to another transporter or to the designated facility shall do all of the following:
- (1) Obtain the date of delivery and the handwritten signature of that transporter or of the owner or operator of the designated facility on the manifest.
 - (2) Retain one copy of the manifest in accordance with rules 3745-53-22 of the Administrative Code.
 - (3) Give the remaining copies of the manifest to the accepting transporter or designated facility.
- (E) Paragraphs (C), (D), and (F) of this rule do not apply to water (bulk shipment) transporters if the following occur:
- (1) The hazardous waste is delivered by water (bulk shipment) to the designated facility.
 - (2) A shipping paper that contains all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports or imports occurring under the terms of a consent

issued by U.S. EPA on or after December 31, 2016, a movement document that includes all information required by 40 C.F.R. 262.83(d) or 262.84(d) accompanies the hazardous waste.

(3) The delivering transporter obtains the date of delivery and handwritten signature of the owner or operator of the designated facility on either the manifest or the shipping paper.

(4) The person who delivers the hazardous waste to the initial water (bulk shipment) transporter obtains the date of delivery and signature of the water (bulk shipment) transporter on the manifest and forwards the manifest to the designated facility.

(5) A copy of the shipping paper or manifest is retained by each water (bulk shipment) transporter in accordance with rule 3745-53-22 of the Administrative Code.

(F) For shipments that involve rail transportation, paragraphs (C), (D) and (E) of this rule do not apply and the following requirements do apply:

(1) When accepting hazardous waste from a non-rail transporter, the initial rail transporter shall do the following:

(a) Sign and date the manifest acknowledging acceptance of the hazardous waste.

(b) Return a signed copy of the manifest to the non-rail transporter.

(c) Forward at least three copies of the manifest to one of the following:

(i) The next non-rail transporter, if any.

(ii) The designated facility, if the shipment is delivered to that facility by rail.

(iii) The last rail transporter designated to handle the waste in the United States.

(d) Retain one copy of the manifest and rail shipping paper in accordance with rule 3745-53-22 of the Administrative Code.

(2) Rail transporters shall ensure that a shipping paper that contains all the information required on the manifest (excluding the EPA identification numbers, generator certification, and signatures) and, for exports or imports occurring under the terms of a consent issued by U.S. EPA on or after December 31, 2016,

a movement document that includes all information required by 40 C.F.R. 262.83(d) or 262.84(d) accompanies the hazardous waste at all times.

[Comment: Intermediate rail transporters are not required to sign the manifest, movement document, or shipping paper.]

(3) When delivering hazardous waste to the designated facility, a rail transporter shall do the following:

(a) Obtain the date of delivery and handwritten signature of the owner or operator of the designated facility on the manifest or the shipping paper (if the manifest has not been received by the facility).

(b) Retain a copy of the manifest or signed shipping paper in accordance with rule 3745-53-22 of the Administrative Code.

(4) When delivering hazardous waste to a non-rail transporter a rail transporter shall do the following:

(a) Obtain the date of delivery and the handwritten signature of the next non-rail transporter on the manifest.

(b) Retain a copy of the manifest in accordance with rule 3745-53-22 of the Administrative Code.

(5) Before accepting hazardous waste from a rail transporter, a non-rail transporter shall sign and date the manifest and provide a copy to the rail transporter.

(G) Transporters who transport hazardous waste out of the United States shall do all of the following:

(1) Sign and date the manifest in the international shipments block to indicate the date that the shipment left the United States.

(2) Retain one copy in accordance with paragraph (D) of rule 3745-53-22 of the Administrative Code.

(3) Return a signed copy of the manifest to the generator.

(4) For paper manifests only:

(a) Send a copy of the manifest to the e-manifest system in accordance with the allowable methods specified in paragraph (A)(2)(e) of rule 3745-54-71 of the Administrative Code.

(b) For shipments initiated prior to December 31, 2017 [the automated export system filing compliance date], when instructed by the exporter to do so, give a copy of the manifest to a U.S. customs official at the point of departure from the United States.

(H) A transporter transporting hazardous waste from a generator who generates greater than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month need not comply with the requirements of this rule or rule 3745-53-22 of the Administrative Code provided that all of the following requirements are met:

(1) The waste being transported pursuant to a reclamation agreement as provided for in paragraph (E) of rule 3745-52-20 of the Administrative Code.

(2) The transporter records, on a log or shipping paper, all of the following information for each shipment:

(a) The name, address, and U.S. EPA identification number of the generator of the waste.

(b) The quantity of waste accepted.

(c) All department of transportation required shipping information.

(d) The date the waste is accepted.

(3) The transporter carries this record when transporting waste to the reclamation facility.

(4) The transporter retains these records for a period of at least three years after termination or expiration of the agreement.

[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."]

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03/17/2012, 02/12/2018

TO BE RESCINDED

3745-53-20 **Acceptance and handling of hazardous waste and the manifest system.**

(A) Manifest requirement. A transporter may not accept hazardous waste from a generator unless the transporter is also provided with a manifest signed in accordance with rule 3745-52-23 of the Administrative Code.

(B) Imports and exports. Imports and exports of hazardous waste are subject to 40 CFR Part 262 subpart H.

[Comment 1: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

[Comment 2: 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."]

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3745-53-21

Compliance with the manifest.

(A) ~~The~~ Except as provided in paragraph (B) of this rule, the transporter ~~must~~ shall deliver the entire quantity of hazardous waste which ~~he~~ the transporter has accepted from a generator or transporter to any of the following:

- (1) The designated facility listed on the manifest; ~~;~~
- (2) The alternate designated facility, if the hazardous waste cannot be delivered to the designated facility because an emergency prevents delivery; ~~;~~
- (3) The next designated transporter; ~~or.~~
- (4) The place outside the United States designated by the generator.

(B) Exceptions to delivery to specified locations.

(1) Emergency condition. If the hazardous waste cannot be delivered in accordance with paragraph ~~(A)~~(A)(1), (A)(2), or (A)(4) of this rule because of an emergency condition other than rejection of the waste by the designated facility or alternate designated facility, then the transporter ~~must~~ shall contact the generator for further directions and ~~must~~ shall revise the manifest according to the generator's instructions.

(2) Transporters without agency authority. If the hazardous waste is not delivered to the next designated transporter in accordance with paragraph (A)(3) of this rule, and the current transporter is without contractual authorization from the generator to act as the generator's agent with respect to transporter additions or substitutions, then the current transporter shall contact the generator for further instructions prior to making any revisions to the transporter designations on the manifest. The current transporter may thereafter make such revisions if:

(a) The hazardous waste is not delivered in accordance with paragraph (A)(3) of this rule because of an emergency condition; or

(b) The current transporter proposes to change the transporter designated on the manifest by the generator, or to add a new transporter during transportation, to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety; and

(c) The generator authorizes the revision.

(3) Transporters with agency authority. If the hazardous waste is not delivered to the next designated transporter in accordance with paragraph (A)(3) of this rule, and the current transporter has authorization from the generator

to act as the generator's agent, then the current transporter may change the transporter designated on the manifest, or add a new transporter, during transportation without the generator's prior, explicit approval, provided that all of the following are met:

(a) The current transporter is authorized by a contractual provision that provides explicit agency authority for the transporter to make such transporter changes on behalf of the generator.

(b) The transporter enters in item 14 of each manifest for which such a change is made, the following statement of the transporter's agency authority: "contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf."

(c) The change in designated transporters is necessary to respond to an emergency, or for purposes of transportation efficiency, convenience, or safety.

(4) Generator liability. The grant by a generator of authority to a transporter to act as the agent of the generator with respect to changes to transporter designations under paragraph (B)(3) of this rule does not affect the generator's liability or responsibility to comply with any applicable requirement under Chapter 3745. of the Revised Code, or grant any additional authority to the transporter to act on behalf of the generator.

~~(2)~~(C) If hazardous waste is rejected by the designated facility while the transporter is on the facility's premises, then the transporter ~~must~~shall obtain the following:

~~(a)~~(1) For a partial load rejection or for regulated quantities of container residues, a copy of the original manifest that includes the facility's date and signature, and the manifest tracking number of the new manifest that will accompany the shipment, and a description of the partial rejection or container residue in the ~~"Discrepancy"~~discrepancy block of the original manifest. The transporter ~~must~~shall retain a copy of this manifest in accordance with rule 3745-53-22 of the Administrative Code, and give the remaining copies of the original manifest to the rejecting designated facility. If the transporter is forwarding the rejected part of the shipment or a regulated container residue to an alternate facility or returning ~~it~~the rejected part of the shipment or regulated container residue to the generator, the transporter ~~must~~shall obtain a new manifest to accompany the shipment, and the new manifest ~~must~~shall include all of the information required in either paragraphs (E)(1) to (E)(6) or (F)(1) to (F)(6) of

rule 3745-54-72 of the Administrative Code or paragraphs (E)(1) to (E)(6) or (F)(1) to (F)(6) of rule 3745-65-72 of the Administrative Code.

- (b)(2) For a full load rejection that will be taken back by the transporter, a copy of the original manifest that includes the rejecting facility's signature and date attesting to the rejection, the description of the rejection in the "~~Discrepancy~~" discrepancy block of the manifest, and the name, address, ~~phone~~ telephone number, and U.S. EPA identification number for the alternate facility or generator to whom the shipment ~~must~~ shall be delivered. The transporter ~~must~~ shall retain a copy of the manifest in accordance with rule 3745-53-22 of the Administrative Code, and give a copy of the manifest ~~containing~~ that contains this information to the rejecting designated facility. If the original manifest is not used, then the transporter ~~must~~ shall obtain a new manifest for the shipment and comply with either paragraphs (E)(1) to (E)(6) of rule 3745-54-72 of the Administrative Code or paragraphs (E)(1) to (E)(6) of rule 3745-65-72 of the Administrative Code.

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3745-53-25

Electronic manifest signatures.

Electronic manifest signatures shall meet the criteria described in 40 C.F.R. 262.25(a).

[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."]

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3745-54-01

Purpose, scope, and applicability of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.

(A) The purpose of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code is to establish minimum standards which define the acceptable management of hazardous waste.

(B) Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to owners and operators of all facilities which treat, store, or dispose of hazardous waste, except as specifically provided otherwise in Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code or in Chapter 3745-51 of the Administrative Code.

(C) [Reserved.]

(D) Underground injection. Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to a person disposing of hazardous waste by means of underground injection subject to a permit issued under an underground injection control program approved or promulgated under the Safe Drinking Water Act, only to the extent specified in rule 3745-34-09 of the Administrative Code.

[Comment: Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to the above-ground treatment or storage of hazardous waste before ~~the~~ hazardous waste is injected underground.]

(E) Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to the owner or operator of a publicly owned treatment works (POTW) which treats, stores, or disposes of hazardous waste only to the extent such activities are included in a permit by rule granted to such a person under rule 3745-50-46 of the Administrative Code.

(F) [Reserved.]

(G) Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code do not apply to the following:

(1) [Reserved.]

(2) The owner or operator of a facility managing recyclable materials described in paragraphs (A)(2), (A)(3), and (A)(4) of rule 3745-51-06 of the Administrative Code, except to the extent ~~Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code~~ recyclable materials are referred to in Chapter 3745-279 or rules 3745-266-20 to 3745-266-23, 3745-266-70, 3745-266-80 or 3745-266-100 to 3745-266-112 of the Administrative Code.

- (3) A generator accumulating or conducting treatment of hazardous waste that is generated on-site in compliance with ~~rule 3745-52-34~~rule 3745-52-14, 3745-52-15, 3745-52-16, or 3745-52-17 of the Administrative Code.
- (4) A farmer disposing of waste pesticides from the farmer's own use in compliance with rule 3745-52-70 of the Administrative Code.
- (5) The owner or operator of a "totally enclosed treatment facility," as defined in rule 3745-50-10 of the Administrative Code.
- (6) The owner or operator of an "elementary neutralization unit" or a "wastewater treatment unit" as defined in rule 3745-50-10 of the Administrative Code, provided that if the owner or operator is diluting hazardous ignitable waste (D001) [other than the D001 high total organic carbon (TOC) subcategory described in rule 3745-270-40 of the Administrative Code in the table of treatment standards for hazardous waste], or reactive waste (D003), to remove the characteristic before land disposal, the owner or operator shall comply with paragraph (B) of rule 3745-54-17 of the Administrative Code.
- (7) [Reserved.]
- (8) Regarding response situations.
 - (a) Except as provided in paragraph (G)(8)(b) of this rule, a person engaged in treatment or containment activities during immediate response to any of the following situations:
 - (i) A discharge of a hazardous waste.
 - (ii) An imminent and substantial threat of a discharge of hazardous waste.
 - (iii) A discharge of a material which, when discharged, becomes a hazardous waste.
 - (iv) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an "explosives or munitions emergency response specialist" as defined in rule 3745-50-10 of the Administrative Code.
 - (b) An owner or operator of a facility otherwise regulated by Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code shall comply

with all applicable requirements of rules 3745-54-30 to 3745-54-37 and 3745-54-50 to 3745-54-56 of the Administrative Code.

- (c) Any person who is covered by paragraph (G)(8)(a) of this rule and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code and ~~40 CFR Parts~~ C.F.R. Part 122, Part 123, and Part 124 for those activities.
- (d) In the case of an explosives or munitions emergency response, if a federal, state, or local official acting within the scope of ~~his~~ the official's official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have U.S. EPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit shall retain records for three years identifying the dates of the response, the names of the responsible persons responding, the type and description of material addressed, and ~~its~~ the disposition of the material.
- (9) A transporter storing manifested shipments of hazardous waste in containers that ~~meet the requirements of~~ comply with rule 3745-52-30 of the Administrative Code at a transfer facility for a period of ten days or less.
- (10) The addition of sorbent material to waste in a "container," (as defined in rule 3745-50-10 of the Administrative Code), or the addition of waste to sorbent material in a container, provided that these actions occur at the time waste is first placed in the container; and rules 3745-55-71 and 3745-55-72 and paragraph (B) of rule 3745-54-17 of the Administrative Code are complied with.
- (11) "Universal waste handlers" and "universal waste transporters," (as defined in rule 3745-50-10 of the Administrative Code), handling the wastes listed in paragraphs (G)(11)(a) to (G)(11)(d) and (G)(11)(e) of this rule, except to the extent Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code are referred to in Chapter 3745-273 of the Administrative Code. These handlers are subject to regulation under Chapter 3745-273 of the Administrative Code when handling the following universal wastes:
- (a) Batteries as described in rule 3745-273-02 of the Administrative Code.

- (b) Pesticides as described in rule 3745-273-03 of the Administrative Code.
 - (c) Mercury-containing equipment as described in rule 3745-273-04 of the Administrative Code.
 - (d) Lamps as described in rule 3745-273-05 of the Administrative Code.
 - (e) Ohio-specific universal wastes, which include the following:
 - (i) Aerosol containers as described in paragraph (A) of rule 3745-273-89 of the Administrative Code.
 - (ii) Antifreeze as described in paragraph (B) of rule 3745-273-89 of the Administrative Code.
 - (iii) Paint and paint-related waste as described in paragraph (C) of rule 3745-273-89 of the Administrative Code.
- (12) [Reserved.]
- (13) Reverse distributors accumulating "potentially creditable hazardous waste pharmaceuticals" and "evaluated hazardous waste pharmaceuticals," as defined in rule 3745-266-500 of the Administrative Code. Reverse distributors are subject to regulation under rules 3745-266-500 to 3745-266-510 of the Administrative Code in lieu of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.
- (H) Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to owners or operators of all facilities which treat, store, or dispose of hazardous wastes referred to in Chapter 3745-270 of the Administrative Code.
- (I) Rule 3745-266-205 of the Administrative Code identifies when Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code apply to the storage of military munitions classified as waste under rule 3745-266-202 of the Administrative Code. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.
- (J) Rules 3745-54-10 to 3745-54-19, 3745-54-30 to 3745-54-37, 3745-54-50 to 3745-54-56, and 3745-54-101 of the Administrative Code do not apply to remediation waste management sites. (However, some remediation waste management sites may

be a part of a facility that is subject to an Ohio hazardous waste permit because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes. In these cases, rules 3745-54-10 to 3745-54-19, 3745-54-30 to 3745-54-37, 3745-54-50 to 3745-54-56, and 3745-54-101 of the Administrative Code do apply to the facility subject to the Ohio hazardous waste permit.) Instead of rules 3745-54-10 to 3745-54-19, 3745-54-30 to 3745-54-37, and 3745-54-50 to 3745-54-56 of the Administrative Code, owners or operators of remediation waste management sites shall do the following:

- (1) Obtain a U.S. EPA identification number by applying to Ohio EPA using Ohio EPA form EPA 9029.
- (2) Obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis shall contain all of the information which is required to be known to treat, store, or dispose of the waste according to Chapters 3745-54 to 3745-57, 3745-205, and 3745-270 of the Administrative Code, and shall be kept accurate and up to date.
- (3) Prevent people who are unaware of the danger from entering, and minimize the possibility for livestock or unauthorized people to enter onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate to the director that both:
 - (a) Physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure livestock or people who may enter the active portion of the remediation waste management site.
 - (b) Disturbance of the waste or equipment by livestock or people who enter onto the active portion of the remediation waste management site will not cause a violation of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.
- (4) Inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing, or may lead to, a release of hazardous waste constituents to the environment, or a threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct the problems before the problems harm human health or the environment, and shall remedy the problem before the problem leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner or operator shall take remedial action immediately.

- (5) Provide personnel with classroom or on-the-job training on how to perform ~~their~~the personnel's duties in a way that ensures the remediation waste management site complies with Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code, and on how to respond effectively to emergencies.
- (6) Take precautions to prevent accidental ignition or reaction of ignitable waste or reactive waste, and prevent threats to human health and the environment from ignitable waste, reactive waste, and incompatible waste.
- (7) For remediation waste management sites subject to regulation under rules 3745-55-70 to 3745-55-78, 3745-55-90 to 3745-55-99, 3745-57-02 to 3745-57-17, 3745-57-40 to 3745-57-51, 3745-57-90 to 3745-57-93, and Chapter 3745-56 of the Administrative Code, the owner or operator shall design, construct, operate, and maintain a unit within a one-hundred-year floodplain to prevent washout of any hazardous waste by a one-hundred-year flood, unless the owner or operator can meet the demonstration of paragraph (B) of rule 3745-54-18 of the Administrative Code.
- (8) Not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave.
- (9) Develop and maintain a construction quality assurance program for all surface impoundments, waste piles, and landfill units that are required to comply with paragraphs (C) and (D) of rule 3745-56-21, paragraphs (C) and (D) of rule 3745-56-51, and paragraphs (C) and (D) of rule 3745-57-03 of the Administrative Code at the remediation waste management site, according to rule 3745-54-19 of the Administrative Code.
- (10) Develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures shall address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan shall be to minimize the possibility of, and the hazards from, a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan shall explain specifically how to treat, store, and dispose of the hazardous remediation waste in question, and shall be implemented immediately ~~whenever~~when a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment occurs.
- (11) Designate at least one employee, either on the facility premises or on call (that is available to respond to an emergency by reaching the facility quickly), to

coordinate all emergency response measures. This emergency coordinator shall be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this person shall have the authority to commit the resources needed to carry out the contingency plan.

- (12) Develop, maintain, and implement a plan to ~~meet the requirements in~~comply with paragraphs (J)(2) to (J)(6) and (J)(9) to (J)(10) of this rule.
- (13) Maintain records documenting compliance with paragraphs (J)(1) to (J)(12) of this rule.

[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."]

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Five Year Review (FYR) Dates: 7/13/2020 and 10/05/2025

CERTIFIED ELECTRONICALLY

Certification

09/21/2020

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10/31/2015, 12/21/2017

3745-54-12**Required notices.**

(A) The owner or operator of a facility that is arranging or has arranged to receive hazardous waste subject to 40 C.F.R. Part 262 subpart H from a foreign source shall comply with 40 C.F.R. 264.12(a).

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) The owner or operator of a facility that receives hazardous waste from an off-site source (except where the owner or operator is also the generator) shall inform the generator in writing that the owner or operator of the receiving facility has the appropriate permits for, and shall accept, the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record.

(C) Before transferring ownership or operation of a facility during the facility's operating life, or of a disposal facility during the post-closure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.

[Comment: An owner's or operator's failure to notify the new owner or operator of the requirements of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code does not relieve the new owner or operator of the obligation to comply with all applicable requirements.]

[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."]

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TO BE RESCINDED

3745-54-12 **Required notices.****(A) Prior notice.**

- (1) The owner or operator of a facility who has arranged to receive hazardous waste from a foreign source shall notify the regional administrator in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

- (2) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR Part 262 subpart H shall provide a copy of the movement document bearing all required signatures to the foreign exporter, to the "Office of Federal Activities, International Compliance Assurance Division (2254A), United States Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC" 20460, and to the competent authorities of all other countries concerned. This shall occur within three working days after receipt of the shipment. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of signature. In addition, such owner or operator, as soon as possible but no later than thirty days after the completion of recovery and no later than one calendar year after the receipt of the hazardous waste, shall submit a certificate of recovery to the foreign exporter, to the competent authority of the country of export, and to U.S. EPA's "Office of Enforcement and Compliance Assurance" at the above address. This submittal may be by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

- (B) The owner or operator of a facility that receives hazardous waste from an off-site source, except where the owner or operator is also the generator, shall inform the generator in writing that the owner or operator of the receiving facility has the appropriate permits for, and will accept, the waste the generator is shipping. The owner or operator shall keep a copy of this written notice as part of the operating record.**

(C) Before transferring ownership or operation of a facility during the facility's operating life, or of a disposal facility during the post-closure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of rules 3745-50-40 to 3745-50-235 and Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code.

[Comment 1: An owner's or operator's failure to notify the new owner or operator of the requirements of Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code does not relieve the new owner or operator of the obligation to comply with all applicable requirements.]

[Comment 2: 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."]

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3745-54-15

General inspection requirements.

(A) The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to either of the following:

- (1) Release of hazardous waste constituents to the environment.
- (2) A threat to human health. The owner or operator shall conduct these inspections with such regularity as to be able to identify problems in time to correct ~~them~~ the problems before such problems harm human health or the environment.

(B) Inspection schedule.

- (1) The owner or operator shall develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
- (2) The owner or operator shall keep this schedule at the facility.
- (3) The schedule shall identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, and other such problems).
- (4) The frequency of inspection may vary for the items on the schedule. However, the frequency of inspection should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the terms and frequencies called for in rules 3745-55-74, 3745-55-93, 3745-55-95, 3745-56-26, 3745-56-54, 3745-56-78, 3745-57-05, 3745-57-47, and 3745-57-92 of the Administrative Code, where applicable.

~~Comment:~~ Rules 3745-50-40 to 3745-50-235 of the Administrative Code require the inspection schedule to be submitted with "Part B" of the permit application. Ohio EPA ~~will~~ shall evaluate the schedule along with the rest of the application to ensure that the inspection schedule is adequately protective of human health and the environment. As part of this review, Ohio EPA may modify or amend the schedule as may be necessary.}

(5) [Reserved.]

- (C) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.
- (D) The owner or operator shall record inspections in an inspection log or summary. The owner or operator shall keep these records for at least three years after the date of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

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3745-54-71

Use of manifest system.**(A) Receipt of a shipment of hazardous waste accompanied by a manifest.**

(1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator or the owner's or operator's agent shall sign and date the manifest, as indicated in paragraph (A)(2) of this rule, to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the discrepancy space of the manifest.

(2) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner or operator or the owner's or operator's agent shall do all of the following:

(a) Sign and date, by hand, each copy of the manifest.

(b) Note any discrepancies [as described in paragraph (A) of rule 3745-54-72 of the Administrative Code] on each copy of the manifest.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-54-13 of the Administrative Code include waste analysis shall perform that analysis before signing the manifest and giving the manifest to the transporter. Paragraph (C) of rule 3745-54-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(c) Immediately give the transporter at least one copy of the manifest.

(d) Within thirty days after delivery, send a copy (page 1) of the manifest to the generator.

(e) Paper manifest submittal requirements are as follows:

(i) Options for compliance on June 30, 2018. Beginning on June 30, 2018, send the top copy (page 1) of any paper manifest and any paper continuation sheet to the U.S. EPA's e-manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to U.S. EPA, the owner or operator may transmit to the U.S. EPA system an image file of page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to page 1 of the manifest and any continuation sheet, within thirty days after the date of delivery. Submittals of copies to the e-manifest system shall be made at the mailing address or electronic mail or submittal

address specified at the e-manifest program website's directory of services. Beginning on June 30, 2021, U.S. EPA shall not accept mailed paper manifests from facilities for processing in e-manifest.

(ii) Options for compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy (page 1) of the paper manifest and any paper continuation sheet to the e-manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the U.S. EPA system an image file of page 1 of the manifest and any continuation sheet, or by transmitting to the U.S. EPA system both a data file and the image file corresponding to page 1 of the manifest and any continuation sheet, within thirty days after the date of delivery. Submittals of copies to the e-manifest system shall be made to the electronic mail or submittal address specified at the e-manifest program website's directory of services.

(f) Retain at the facility a copy of each manifest for at least three years after the date of delivery.

(3) The owner or operator of a facility receiving hazardous waste subject to 40 C.F.R. Part 262 subpart H from a foreign source shall do all of the following:

(a) Additionally list the relevant consent number from consent documentation supplied by U.S. EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a continuation sheet (U.S. EPA form 8700-22A).

(b) Send a copy of the manifest within thirty days after delivery to U.S. EPA using the addresses listed in 40 C.F.R. 262.82(e) until the facility can submit such a copy to the e-manifest system in accordance with paragraph (A)(2)(e) of this rule.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest, excluding the U.S. EPA identification numbers, generator's

certification, and signatures, the owner or operator, or the owner's or operator's agent, shall do all of the following:

- (1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received.
- (2) Note any significant discrepancies [as described in paragraph (A) of rule 3745-54-72 of the Administrative Code] in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-54-13 of the Administrative Code include waste analysis shall perform that analysis before signing the shipping paper and giving the shipping paper to the transporter. Paragraph (C) of rule 3745-54-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

- (3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper if the manifest has not been received.
- (4) Within thirty days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) to the generator; however, if the manifest has not been received within thirty days after delivery, the owner or operator, or the owner's or operator's agent, shall send a copy of the shipping paper signed and dated to the generator.

[Comment: Paragraph (C) of rule 3745-52-23 of the Administrative Code requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

- (5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years after the date of delivery.

- (C) When a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with Chapter 3745-52 of the Administrative Code. Rules 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, rules 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code apply only to owners or operators who are shipping hazardous waste which the owners or operators generated at that facility or are operating as a large quantity generator consolidating hazardous waste from very small quantity generators under paragraph (F) of rule 3745-52-17 of the Administrative Code.
- (D) Pursuant to 40 C.F.R. 262.84(d)(2)(xv), within three working days after the receipt of a shipment subject to 40 C.F.R. Part 262 subpart H, the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the foreign exporter; to competent authorities of the countries of export and transit that control the shipment as an export and transit of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to U.S. EPA electronically using U.S. EPA's waste import export tracking system (WIETS) or the successor system. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on U.S. EPA's WIETS, or the successor system, provided that copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this rule if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with U.S. EPA's WIETS, or the successor system, for which the owner or operator of a facility bears no responsibility.
- (E) An owner or operator of a facility shall determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by U.S. EPA) as hazardous wastes under the consignment state's hazardous waste program. Owners or operators of facilities also shall determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.
- (F) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with paragraph (A)(3) of rule 3745-52-20 of the Administrative Code, and used in accordance with this rule in lieu of the paper manifest form, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in the hazardous waste rules to obtain, complete, sign, provide, use, or retain a manifest.

- (1) Any requirement in the hazardous waste rules for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 C.F.R. 262.25.
 - (2) Any requirement in the hazardous waste rules to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.
 - (3) Any requirement in the hazardous waste rules for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.
 - (4) Any requirement in the hazardous waste rules for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in the facility's account on the e-manifest system, provided that such copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector.
 - (5) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this rule if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- (G) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- (H) Special procedures applicable to replacement manifests. If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, all of the following procedures apply to the delivery of the hazardous waste by the final transporter:
- (1) Upon delivery of the hazardous waste to the designated facility, the owner or operator shall sign and date each copy of the paper replacement manifest by hand in item 20 (designated facility certification of receipt) and note any discrepancies in item 18 (discrepancy indication space) of the paper replacement manifest.

- (2) The owner or operator of the facility shall give back to the final transporter one copy of the paper replacement manifest.
- (3) Within thirty days after delivery of the waste to the designated facility, the owner or operator of the facility shall send one signed and dated copy of the paper replacement manifest to the generator, and shall send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system.
- (4) The owner or operator of the facility shall retain at the facility one copy of the paper replacement manifest for at least three years after the date of delivery.
- (I) Special procedures applicable to electronic signature methods undergoing tests. If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing the ink signature on this printed copy, the owner or operator shall retain this original copy in the facility's records for at least three years after the date of delivery of the waste.
- (J) Imposition of user fee for manifest submittals.

 - (1) As prescribed in 40 C.F.R. 264.1311, and determined in 40 C.F.R. 264.1312, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by U.S. EPA for the submittal and processing of each electronic and paper manifest. U.S. EPA shall update the schedule of user fees and publish these updates to the user community, as provided in 40 C.F.R. 264.1313.
 - (2) An owner or operator subject to user fees under this rule shall make user fee payments in accordance with 40 C.F.R. 264.1314, subject to the informal fee dispute resolution process of 40 C.F.R. 264.1316, and subject to the sanctions for delinquent payments under 40 C.F.R. 264.1315.
- (K) Electronic manifest signatures. Electronic manifest signatures shall meet the criteria described in 40 C.F.R. 262.25.
- (L) Post-receipt manifest data corrections. After owners or operators of facilities have certified to the receipt of hazardous wastes by signing item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest.

- (1) Interested persons shall make all corrections to manifest data by electronic submittal, either by directly entering corrected data to the web based service provided in the e-manifest system for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.
- (2) Each correction submittal shall include all of the following:
 - (a) The manifest tracking number and date of receipt by the facility of the original manifest for which data are being corrected.
 - (b) The item number of the original manifest that is the subject of the submitted correction.
 - (c) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submittal.
- (3) Each correction submittal shall include a statement that the person submitting the corrections certifies that to the best of the submitter's knowledge or belief, the corrections that are included in the submittal shall cause the information reported about the previously received hazardous wastes to be true, accurate, and complete including both of the following:
 - (a) The certification statement shall be executed with a valid electronic signature.
 - (b) A batch upload of data corrections may be submitted under one certification statement.
- (4) Upon receipt by the system of any correction submittal, other interested persons shown on the manifest shall be provided electronic notice of the submitter's corrections.
- (5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in paragraph (L)(3) of this rule, and with notice of the corrections to other interested persons shown on the manifest.

[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."]

Replaces: 3745-54-71 rescinded
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03/17/2012, 02/12/2018

TO BE RESCINDED

3745-54-71 **Use of manifest system.**

(A) Receipt of a shipment of hazardous waste accompanied by a manifest.

(1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator or the owner's or operator's agent shall sign and date the manifest, as indicated in paragraphs (A)(2) to (A)(2)(e) of this rule, to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the discrepancy space of the manifest.

(2) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner or operator or the owner's or operator's agent shall do all of the following:

(a) Sign and date, by hand, each copy of the manifest.

(b) Note any discrepancies [as described in paragraphs (A) and (B) of rule 3745-54-72 of the Administrative Code] on each copy of the manifest.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-54-13 of the Administrative Code include waste analysis shall perform that analysis before signing the manifest and giving the manifest to the transporter. Paragraph (B) of rule 3745-54-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(c) Immediately give the transporter at least one copy of the manifest.

(d) Within thirty days after delivery, send a copy of the manifest to the generator.

(e) Retain at the facility a copy of each manifest for at least three years after the date of delivery.

(3) If a facility receives hazardous waste imported from a foreign source, the receiving facility shall mail a copy of the manifest and documentation confirming U.S. EPA's consent to the import of hazardous waste to the following address within thirty days after delivery: "Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), United States Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC" 20460-

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest, excluding the U.S. EPA identification numbers, generator's certification, and signatures, the owner or operator, or the owner's or operator's agent, shall do all of the following:

- (1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received.
- (2) Note any significant discrepancies [as described in paragraphs (A) and (B) of rule 3745-54-72 of the Administrative Code] in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-54-13 of the Administrative Code include waste analysis shall perform that analysis before signing the shipping paper and giving the shipping paper to the transporter. Paragraph (B) of rule 3745-54-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

- (3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper if the manifest has not been received.
- (4) Within thirty days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) to the generator; however, if the manifest has not been received within thirty days after delivery, the owner or operator, or his agent, must send a copy of the shipping paper signed and dated to the generator.

[Comment: Paragraph (C) of rule 3745-52-23 of the Administrative Code requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

(5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years after the date of delivery.

(C) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with Chapter 3745-52 of the Administrative Code.

[Comment: Rule 3745-52-34 of the Administrative Code is applicable to the on-site accumulation of hazardous wastes by generators. Therefore, rule 3745-52-34 of the Administrative Code applies only to owners or operators who are shipping hazardous waste which is generated at that facility.]

(D) Within three working days after the receipt of a shipment subject to 40 CFR Part 262 subpart H, the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the exporter, to the "Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), United States Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC" 20460, and to competent authorities of all other concerned countries. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of signature.

(E) A facility shall determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by U.S. EPA) as hazardous wastes under the consignment state's hazardous waste program. Facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

[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."]

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3745-54-75

Biennial report.

The owner or operator shall complete and submit to the director the biennial report, on the forms supplied by the director, by March first of the following even numbered year, and shall cover activities during the previous year.

Replaces: 3745-54-75 rescinded
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(Emer.), 08/29/1985, 12/08/1988, 12/30/1989,
03/13/2002, 05/13/2007, 02/05/2013

TO BE RESCINDED

3745-54-75 **Biennial report.**

The owner or operator must prepare and submit a single copy of a biennial report to the director by March first of each even numbered year. The biennial report must be submitted on the form and instructions supplied by the director. The report must cover facility activities during the previous calendar year and must include the following information:

- (A) The U.S. EPA identification number, name, and address of the facility;
- (B) The calendar year covered by the report;
- (C) For off-site facilities, U.S. EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;
- (D) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by U.S. EPA identification number of each generator;
- (E) The method of treatment, storage, or disposal for each hazardous waste;
- (F) Reserved;
- (G) The most recent closure cost estimate under rule 3745-55-42 of the Administrative Code, and, for hazardous waste disposal facilities, the most recent post-closure cost estimate under rule 3745-55-44 of the Administrative Code;
- (H) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
- (I) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984; and
- (J) The certification signed by the owner or operator of the facility or his authorized representative.

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3745-55-70

Applicability - use and management of containers.

Rules 3745-55-70 to 3745-55-78 of the Administrative Code apply to owners and operators of all hazardous waste facilities that store ~~containers of hazardous waste~~ in containers, except as rule 3745-54-01 of the Administrative Code provides otherwise.

[Comment: Under rule 3745-51-07 of the Administrative Code and paragraph (C) of rule 3745-51-33 of the Administrative Code, if a hazardous waste is emptied from a container the residue remaining in the container is not considered a hazardous waste if the container is "empty" as defined in rule 3745-51-07 of the Administrative Code. In that event, management of the container is exempt from ~~the requirements of rules 3745-55-70 to 3745-55-78~~ of the Administrative Code.]

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3745-55-74

Inspections- containers.

At least once during each period from Sunday to Saturday, the owner or operator shall inspect areas where containers are stored. The owner or operator shall look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors. See paragraph (C) of rule 3745-54-15 and rule 3745-55-71 of the Administrative Code for remedial action required if deterioration or leaks are detected.

~~[Comment: See paragraph (C) of rule 3745-54-15 and rule 3745-55-71 of the Administrative Code for remedial action required if deterioration or leaks are detected.]~~

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3745-55-91

Assessment of existing tank systems'system's integrity.

- (A) For each existing tank system that does not have secondary containment ~~meeting the requirements of~~ that is in compliance with rule 3745-55-93 of the Administrative Code, the owner or operator ~~must~~shall determine that the tank system is not leaking or is ~~unfit~~ for use. Except as provided in paragraph (C) of this rule, within thirty days after December 8, 1988, the owner or operator ~~must~~shall obtain and keep on file at the facility a written assessment that has been reviewed and certified by a qualified professional engineer, in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code, that attests to the tank system's integrity ~~within thirty days after December 8, 1988.~~
- (B) This assessment ~~must~~shall determine that the tank system is adequately designed and has sufficient structural strength and compatibility with the ~~waste(s)~~wastes to be stored or treated, to ensure that ~~it will~~the tank system shall not collapse, rupture, or fail. At a minimum, this assessment ~~must~~shall consider all of the following:
- (1) Design ~~standard(s)~~standards, if available, according to which the tank and ancillary equipment were constructed~~;~~;
 - (2) Hazardous characteristics of the ~~waste(s)~~wastes that have been and ~~will~~shall be handled~~;~~;
 - (3) Existing corrosion protection measures~~;~~;
 - (4) Documented age of the tank system, if available (otherwise, an estimate of the age)~~;~~; ~~and~~;
 - (5) Results of a leak test, internal inspection, or other tank integrity examination such that:
 - (a) For non-enterable underground tanks, the assessment ~~must~~shall include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects~~;~~; ~~and~~;
 - (b) For other than non-enterable underground tanks and for ancillary equipment, this assessment ~~must~~shall include either a leak test, as described ~~above~~in this rule, or other integrity examination that is certified by a qualified professional engineer in accordance with paragraph (D) of rule 3745-50-42 of the Administrative Code, that addresses cracks, leaks, corrosion, and erosion.

[Comment: The practices described in the "American Petroleum Institute (API)" publication, "Guide for Inspection of Refinery Equipment," chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," fourth edition, 1981, may be used, where applicable, as guidelines in conducting other than a leak test.]

- (C) Tank systems that store or treat materials that became hazardous wastes subsequent to July 14, 1986 ~~must~~shall conduct this assessment within twelve months after the date that the waste becomes a hazardous waste.
- (D) If, as a result of the assessment conducted in accordance with paragraph (A) of this rule, a tank system is found to be leaking or unfit for use, the owner or operator ~~must~~shall comply with ~~the requirements of~~ rule 3745-55-96 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."]

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3745-65-01

Purpose, scope, and applicability of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code.

- (A) The purpose of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code is to establish minimum standards which define the acceptable management of hazardous waste during the period of a permit by rule pursuant to paragraph (C) of rule 3745-50-40 of the Administrative Code until certification of final closure and Ohio EPA acceptance through written acknowledgment of the change in facility status, or, if the facility is subject to post-closure requirements, until post-closure responsibilities are fulfilled.
- (B) Chapters 3745-65 to 3745-69 and 3745-256 and 3745-57-70 to 3745-57-75 of the Administrative Code apply to the following:
- (1) Owners and operators of facilities that treat, store, or dispose of hazardous waste and are subject to the permit requirements under rules 3745-50-40 to 3745-50-235 of the Administrative Code, until final administrative disposition of the permit application is made pursuant to the "Part B" permit requirements. These standards apply to all treatment, storage, and disposal of hazardous waste at these facilities.
 - (2) Owners and operators of facilities who have fully complied with the requirements of paragraph (C) of rule 3745-50-40 of the Administrative Code until final administrative disposition of the permit application is made pursuant to the "Part B" permit requirements. These standards apply to all treatment, storage and disposal of hazardous waste at these facilities.
- (C) Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code do not apply to the following:
- (1) [Reserved.]
 - (2) [Reserved.]
 - (3) The owner or operator of a publicly owned treatment works (POTW) which treats, stores, or disposes of hazardous waste.

[Comment: The owner or operator of a facility in paragraphs (C)(1) to (C)(3) of this rule is subject to Chapters 3745-54 to 3745-57 and 3745-205 of the Administrative Code to the extent such rules are included in a permit by rule granted to such a person under rule 3745-50-46 of the Administrative Code.]
 - (4) [Reserved.]
 - (5) [Reserved.]

- (6) The owner or operator of a facility that manages recyclable materials described in paragraphs (A)(2), (A)(3), and (A)(4) of rule 3745-51-06 of the Administrative Code (except to the extent that ~~the requirements~~ recyclable materials are referred to in Chapter 3745-279 or rules 3745-266-20 to 3745-266-23, 3745-266-70, 3745-266-80, or 3745-266-100 to 3745-266-112 of the Administrative Code).
- ~~(7) A generator accumulating or conducting treatment of hazardous waste that is generated on-site in compliance with rule 3745-52-34 of the Administrative Code, except to the extent the requirements are included in rule 3745-52-34 of the Administrative Code.~~
- (7) A generator accumulating or conducting treatment of hazardous waste that is generated on-site in compliance with applicable conditions for exemption in rules 3745-52-14 to 3745-52-17, 3745-52-200 to 3745-52-216, and 3745-52-230 to 3745-52-233 of the Administrative Code, except to the extent the requirements of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code are included in rules 3745-52-14 to 3745-52-17, 3745-52-200 to 3745-52-216, and 3745-52-230 to 3745-52-233 of the Administrative Code.
- (8) A farmer disposing of waste pesticides from the farmer's own use in compliance with rule 3745-52-70 of the Administrative Code.
- (9) The owner or operator of a "totally enclosed treatment facility," as defined in rule 3745-50-10 of the Administrative Code.
- (10) The owner or operator of an "elementary neutralization unit" or a "wastewater treatment unit," as defined in rule 3745-50-10 of the Administrative Code, provided that if the owner or operator is diluting hazardous ignitable waste (D001) [other than the D001 high total organic carbon (TOC) subcategory defined in rule 3745-270-40 of the Administrative Code in the table of treatment standards for hazardous waste], or reactive waste (D003), to remove the characteristic before land disposal, the owner or operator shall comply with paragraph (B) of rule 3745-65-17 of the Administrative Code.
- (11) Immediate or emergency response situations.
- (a) Except as provided in paragraph (C)(11)(b) of this rule, a person engaged in treatment or containment activities during the immediate response to any of the following situations:
- (i) A discharge of a hazardous waste.

- (ii) An imminent and substantial threat of a discharge of a hazardous waste.
 - (iii) A discharge of a material which, when discharged, becomes a hazardous waste.
 - (iv) An immediate threat to human health, public safety, property, or the environment, from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an "explosives or munitions emergency response specialist" as defined in rule 3745-50-10 of the Administrative Code.
- (b) An owner or operator of a facility otherwise regulated by Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code shall comply with rules 3745-65-30 to 3745-65-37 and 3745-65-50 to 3745-65-56 of the Administrative Code.
- (c) Any person who is covered by paragraph (C)(11)(a) of this rule and who continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of Chapters 3745-50, 3745-65 to 3745-69, and 3745-256 of the Administrative Code and 40 C.F.R. Part 122, Part 123, and Part 124 for those activities.
- (d) In the case of an explosives or munitions emergency response, if a federal, state, or local official acting within the scope of official responsibilities, or an explosives or munitions emergency response specialist, determines that immediate removal of the material or waste is necessary to protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters who do not have a U.S. EPA identification number and without the preparation of a manifest. In the case of emergency responses involving military munitions, the responding explosives or munitions emergency response specialist's organizational unit shall retain records for three years identifying the dates of the response, the names of the responsible persons responding, the type and description of material addressed, and the disposition of such material.
- (12) A transporter storing manifested shipments of hazardous waste in containers that comply with rule 3745-52-30 of the Administrative Code at a transfer facility for a period of ten days or less.

- (13) The addition of sorbent material to waste in a "container," (as defined in rule 3745-50-10 of the Administrative Code), or the addition of waste to the sorbent material in a container provided that these actions occur at the time waste is first placed in the containers, and rules 3745-66-71 and 3745-66-72 and paragraph (B) of rule 3745-65-17 of the Administrative Code are complied with.
- (14) "Universal waste handlers" and "universal waste transporters," (as defined in rule 3745-50-10 of the Administrative Code), handling the wastes listed in paragraphs (C)(14)(a) to (C)(14)(d) and (C)(14)(e) of this rule, except to the extent Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code are referred to in Chapter 3745-273 of the Administrative Code this paragraph. These handlers and transporters are subject to regulation under Chapter 3745-273 of the Administrative Code when handling the following universal wastes:
- (a) Batteries as described in rule 3745-273-02 of the Administrative Code.
 - (b) Pesticides as described in rule 3745-273-03 of the Administrative Code.
 - (c) Mercury-containing equipment as described in rule 3745-273-04 of the Administrative Code.
 - (d) Lamps as described in rule 3745-273-05 of the Administrative Code.
 - (e) Ohio-specific universal wastes, which include the following:
 - (i) Aerosol containers as described in paragraph (A) of rule 3745-273-89 of the Administrative Code.
 - (ii) Antifreeze as described in paragraph (B) of rule 3745-273-89 of the Administrative Code.
 - (iii) Paint and paint-related wastes as described in paragraph (C) of rule 3745-273-89 of the Administrative Code.
- (15) [Reserved.]
- (16) Reverse distributors accumulating "potentially creditable hazardous waste pharmaceuticals" and "evaluated hazardous waste pharmaceuticals" as defined in rule 3745-266-500 of the Administrative Code. Reverse distributors are subject to regulation under rules 3745-266-500 to 3745-266-510 of the Administrative Code in lieu of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code for the accumulation of potentially

creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

- (D) Hazardous waste having EPA hazardous waste number F020, F021, F022, F023, F026, or F027 shall not be managed at facilities subject to regulation under Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code unless the hazardous waste is managed in one or more of the following hazardous waste management units:
- (1) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system.
 - (2) The waste is stored in tanks or containers.
 - (3) The waste is stored or treated in waste piles that comply with paragraph (C) of rule 3745-56-50 of the Administrative Code as well as all other applicable requirements of rules 3745-67-50 to 3745-67-60 of the Administrative Code.
 - (4) The waste is burned in incinerators that are certified pursuant to the standards in rule 3745-68-52 of the Administrative Code.
 - (5) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in rule 3745-68-83 of the Administrative Code.
- (E) Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code apply to the owners or operators of all facilities which treat, store, or dispose of hazardous waste referred to in Chapter 3745-270 of the Administrative Code, and the standards in Chapter 3745-270 of the Administrative Code are considered material conditions or requirements in Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code.
- (F) Rule 3745-266-205 of the Administrative Code identifies when Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code apply to the storage of military munitions classified as waste under rule 3745-266-202 of the Administrative Code. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.

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3745-65-12

Required notices.

(A) The owner or operator of a facility that is arranging or has arranged to receive hazardous waste subject to 40 C.F.R. Part 262 subpart H from a foreign source shall submit the following required notices:

- (1) Pursuant to 40 C.F.R. 262.84(b), for imports where the competent authority of the country of export does not require the foreign exporter to submit to the competent authority of the country of export a notification proposing export and obtain consent from U.S. EPA and the competent authorities for the countries of transit, such owner or operator of the facility, if acting as the importer, shall provide notification of the proposed transboundary movement in English to U.S. EPA using the allowable methods listed in 40 C.F.R. 262.84(b)(1) at least sixty days before the first shipment is expected to depart the country of export. The notification may cover up to one year of shipments of wastes having similar physical and chemical characteristics, the same United Nations classification, the same RCRA waste codes and "Organisation for Economic Co-operation and Development" (OECD) waste codes, and being sent from the same foreign exporter.
- (2) Pursuant to 40 C.F.R. 262.84(d)(2)(xv), a copy of the movement document bearing all required signatures within three working days after receipt of the shipment to the foreign exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit shipment of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to U.S. EPA electronically using U.S. EPA's waste import export tracking system (WIETS), or the successor system. The original of the signed movement document shall be maintained at the facility for at least three years. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on U.S. EPA's WIETS, or the successor system, provided that copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this rule if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with U.S. EPA's WIETS, or the successor system, for which the owner or operator of a facility bears no responsibility.

- (3) Pursuant to 40 C.F.R. 262.84(f)(4), if the owner or operator of a facility has physical control of the waste and the waste must be sent to an alternate facility or returned to the country of export, such owner or operator of the facility shall inform U.S. EPA, using the allowable methods listed in 40 C.F.R. 262.84(b)(1) of the need to return or arrange alternate management of the shipment.
- (4) Pursuant to 40 C.F.R. 262.84(g), such owner or operator shall do all of the following:
- (a) Send copies of the signed and dated confirmation of recovery or disposal, as soon as possible, but no later than thirty days after completing recovery or disposal of the waste in the shipment and no later than one calendar year after receipt of the waste, to the foreign exporter, to the competent authority of the country of export that controls the shipment as an export of hazardous waste, and on or after the electronic import-export reporting compliance date, to U.S. EPA electronically using U.S. EPA's WIETS, or the successor system.
- (b) If the owner or operator of a facility performed any of recovery operations R12, R13, or RC16, or disposal operations D13 to D15, or DC17, promptly send copies of the confirmation of recovery or disposal that the facility receives from the final recovery or disposal facility within one year after shipment delivery to the final recovery or disposal facility that performed one of recovery operations R1 to R11, or RC16, or one of disposal operations D1 to D12, or DC15 to DC16, to the competent authority of the country of export that controls the shipment as an export of hazardous waste, and on or after the electronic import-export reporting compliance date, to U.S. EPA electronically using U.S. EPA's WIETS, or the successor system. The recovery and disposal operations in this paragraph are defined in 40 C.F.R. 262.81.

[Comment 1: An owner's or operator's failure to notify the new owner or operator of the requirements of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code does not relieve the new owner or operator of the obligation to comply with all applicable requirements.]

[Comment 2: 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."]

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TO BE RESCINDED

3745-65-12 **Required notices.**

(A) Prior notice.

- (1) The owner or operator of a facility who has arranged to receive hazardous waste from a foreign source shall notify the regional administrator in writing at least four weeks in advance of the date the waste is expected to arrive at the facility. Notice of subsequent shipments of the same waste from the same foreign source is not required.

- (2) The owner or operator of a recovery facility that has arranged to receive hazardous waste subject to 40 CFR Part 262 subpart H shall provide a copy of the movement document bearing all required signatures to the foreign exporter, to the "Office of Federal Activities, International Compliance Assurance Division (2254A), United States Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC" 20460, and to the competent authorities of all other countries concerned. This shall occur within three working days after receipt of the shipment. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of the signature. In addition, such owner or operator, as soon as possible but no later than thirty days after the completion of recovery and no later than one calendar year after the receipt of the hazardous waste, shall submit a certificate of recovery to the foreign exporter, to the competent authority of the country of export, and to U.S. EPA's "Office of Enforcement and Compliance Assurance" at the above address. This submittal may be by mail, e-mail without a digital signature followed by mail, or fax followed by mail.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

- (B) Before transferring ownership or operation of a facility during the facility's operating life, or of a disposal facility during the post-closure care period, the owner or operator shall notify the new owner or operator in writing of the requirements of Chapters 3745-65 to 3745-69 and 3745-256 and rules 3745-50-40 to 3745-50-235 of the Administrative Code.

[Comment 1: An owner's or operator's failure to notify the new owner or operator of the requirements of Chapters 3745-65 to 3745-69 and 3745-256 of the Administrative Code does not relieve the new owner or operator of the obligation to comply with all applicable requirements.]

[Comment 2: 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."]

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3745-65-15

General inspection requirements.

(A) The owner or operator shall inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to either:

- (1) Release of hazardous waste constituents to the environment.
- (2) A threat to human health. The owner or operator shall conduct these inspections often enough to identify problems in time to correct ~~them~~the problems before ~~they~~the problems harm human health or the environment.

(B) Inspection schedule.

- (1) The owner or operator shall develop and follow a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
- (2) The owner or operator shall keep this schedule at the facility.
- (3) The schedule shall identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
- (4) The frequency of inspection may vary for the items on the schedule. However, the frequency of inspection should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration or malfunction or any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, shall be inspected daily when in use. At a minimum, the inspection schedule shall include the items and frequencies in rules 3745-66-74, 3745-66-93, 3745-66-95, 3745-67-26, 3745-67-60, 3745-67-78, 3745-68-04, 3745-68-47, 3745-68-77, and 3745-69-03 of the Administrative Code, where applicable.

~~(5) Reserved.~~

(C) The owner or operator shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals. Such remedies shall be on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action shall be taken immediately.

(D) The owner or operator shall record inspections in an inspection log or summary. The owner or operator shall keep these records for at least three years after the date

of inspection. At a minimum, these records shall include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

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10/31/2015

3745-65-71Use of manifest system.(A) Receipt of a shipment of hazardous waste accompanied by a manifest.

(1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or the owner's or operator's agent, shall sign and date the manifest as indicated in paragraph (A)(2) of this rule to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy block of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy block.

(2) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner or operator, or the owner's or operator's agent, shall do all of the following:

(a) Sign and date, by hand, each copy of the manifest.

(b) Note any significant discrepancies [as described in paragraph (A) of rule 3745-65-72 of the Administrative Code] on each copy of the manifest.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-65-13 of the Administrative Code include waste analysis shall perform that analysis before signing the manifest and giving the manifest to the transporter. Paragraph (C) of rule 3745-65-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(c) Immediately give the transporter at least one copy of the manifest.

(d) Within thirty days after the delivery, send a copy of the manifest to the generator.

(e) Paper manifest submittal requirements are as follows:

(i) Options for compliance on June 30, 2018. Beginning on June 30, 2018, send the top copy (page 1) of any paper manifest and any paper continuation sheet to the U.S. EPA's e-manifest system for purposes of data entry and processing, or in lieu of submitting the paper copy to U.S. EPA, the owner or operator may transmit to the U.S. EPA system an image file of page 1 of the manifest and any continuation sheet, or both a data file and image file corresponding to page 1 of the manifest and any continuation sheet, within thirty days after the date of delivery. Submittals of copies to the e-manifest system

shall be made at the mailing address or electronic mail or submittal address specified at the e-manifest program website's directory of services. Beginning on June 30, 2021, U.S. EPA shall not accept mailed paper manifests from facilities for processing in e-manifest.

(ii) Options for compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy (page 1) of the paper manifest and any paper continuation sheet to the e-manifest system for purposes of data entry and processing may be met by the owner or operator only by transmitting to the U.S. EPA system an image file of page 1 of the manifest and any continuation sheet, or by transmitting to the U.S. EPA system both a data file and the image file corresponding to page 1 of the manifest and any continuation sheet, within thirty days after the date of delivery. Submittals of copies to the e-manifest system shall be made to the electronic mail or submittal address specified at the e-manifest program website's directory of services.

(f) Retain at the facility a copy of each manifest for at least three years after the date of delivery.

(3) The owner or operator of a facility that receives hazardous waste subject to 40 C.F.R. Part 262 subpart H from a foreign source shall:

(a) Additionally list the relevant consent number from consent documentation supplied by U.S. EPA to the facility for each waste listed on the manifest, matched to the relevant list number for the waste from block 9b. If additional space is needed, the owner or operator should use a continuation sheet (U.S. EPA form 8700-22A).

(b) Send a copy of the manifest to U.S. EPA using the addresses listed in 40 C.F.R. 262.82(e) within thirty days after delivery until the facility can submit such a copy to the e-manifest system in accordance with paragraph (A)(2)(e) of this rule.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information

required on the manifest (excluding the U.S. EPA identification numbers, generator's certification, and signatures), the owner or operator, or the owner's or operators's agent, shall do all of the following:

(1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received.

(2) Note any significant discrepancies [as described in paragraph (A) of rule 3745-65-72 of the Administrative Code] in the manifest or shipping paper, (if the manifest has not been received) on each copy of the manifest or shipping paper.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-65-13 of the Administrative Code include waste analysis shall perform that analysis before signing the shipping paper and giving the manifest to the transporter. Paragraph (C) of rule 3745-65-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received).

(4) Within thirty days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) to the generator.

[Comment: Paragraph (C) of rule 3745-52-23 of the Administrative Code requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

(5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years after the date of delivery.

(C) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with Chapter 3745-52 of the Administrative Code. Rules 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, rules 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code apply only to owners or operators who are shipping hazardous waste which is generated at that facility or operating as a large quantity generator consolidating hazardous waste

from very small quantity generators under paragraph (F) of rule 3745-52-17 of the Administrative Code.

(D) Pursuant to 40 C.F.R. 262.84(d)(2)(xv), within three working days after the receipt of a shipment subject to 40 C.F.R. Part 262 subpart H, the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the exporter; to the competent authorities of the countries of export and transit that control the shipment as an export and transit shipment of hazardous waste respectively; and on or after the electronic import-export reporting compliance date, to U.S. EPA electronically using U.S. EPA's waste import export tracking system (WIETS), or the successor system. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on U.S. EPA's WIETS, or the successor system, provided that copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this rule if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with U.S. EPA's WIETS, or the successor system, for which the owner or operator of a facility bears no responsibility.

(E) An owner or operator of a facility shall determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by U.S. EPA) as hazardous wastes under the consignment state's hazardous waste program. Owners or operators of facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

(F) Legal equivalence to paper manifests. Electronic manifests that are obtained, completed, and transmitted in accordance with paragraph (A)(3) of rule 3745-52-20 of the Administrative Code, and used in accordance with this rule in lieu of the paper manifest form, are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in the hazardous waste rules to obtain, complete, sign, provide, use, or retain a manifest.

(1) Any requirement in the hazardous waste rules for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 40 C.F.R. 262.25.

(2) Any requirement in the hazardous waste rules to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an electronic manifest is transmitted to the other person.

- (3) Any requirement in the hazardous waste rules for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an electronic manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the waste shipment.
- (4) Any requirement in the hazardous waste rules for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's electronic manifest copies in the facility's account on the e-manifest system, provided that such copies are readily available to view and produce if requested by any U.S. EPA or Ohio EPA inspector.
- (5) No owner or operator may be held liable for the inability to produce an electronic manifest for inspection under this rule if the owner or operator can demonstrate that the inability to produce the electronic manifest is due exclusively to a technical difficulty with the electronic manifest system for which the owner or operator bears no responsibility.
- (G) An owner or operator may participate in the electronic manifest system either by accessing the electronic manifest system from the owner's or operator's electronic equipment, or by accessing the electronic manifest system from portable equipment brought to the owner's or operator's site by the transporter who delivers the waste shipment to the facility.
- (H) Special procedures applicable to replacement manifests. If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, all of the following procedures apply to the delivery of the hazardous waste by the final transporter:
- (1) Upon delivery of the hazardous waste to the designated facility, the owner or operator shall sign and date each copy of the paper replacement manifest by hand in item 20 (designated facility certification of receipt) and note any discrepancies in item 18 (discrepancy indication space) of the paper replacement manifest.
 - (2) The owner or operator of the facility shall give back to the final transporter one copy of the paper replacement manifest.
 - (3) Within thirty days after delivery of the waste to the designated facility, the owner or operator of the facility shall send one signed and dated copy of the paper replacement manifest to the generator, and shall send an additional signed and dated copy of the paper replacement manifest to the electronic manifest system.

- (4) The owner or operator of the facility shall retain at the facility one copy of the paper replacement manifest for at least three years after the date of delivery.
- (I) Special procedures applicable to electronic signature methods undergoing tests. If an owner or operator using an electronic manifest signs this manifest electronically using an electronic signature method which is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, then the owner or operator shall also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing the owner or operator's ink signature on this printed copy, the owner or operator shall retain this original copy in the owner or operator's records for at least three years after the date of delivery of the waste.
- (J) Imposition of user fee for electronic manifest use.
- (1) As prescribed in 40 C.F.R. 265.1311 and determined in 40 C.F.R. 265.1312, an owner or operator who is a user of the electronic manifest system shall be assessed a user fee by U.S. EPA for the submittal and processing of each electronic and paper manifest. U.S. EPA shall update the schedule of user fees and publish these updates to the user community, as provided in 40 C.F.R. 265.1313.
- (2) An owner or operator subject to user fees under this rule shall make user fee payments in accordance with 40 C.F.R. 265.1314, subject to the informal fee dispute resolution process of 40 C.F.R. 265.1316, and subject to the sanctions for delinquent payments under 40 C.F.R. 265.1315.
- (K) Electronic manifest signatures. Electronic manifest signatures shall meet the criteria described in 40 C.F.R. 262.25.
- (L) Post-receipt manifest data corrections. After owners and operators of facilities have certified to the receipt of hazardous wastes by signing item 20 of the manifest, any post-receipt data corrections may be submitted at any time by any interested person (e.g., waste handler) shown on the manifest.
- (1) Interested persons shall make all corrections to manifest data by electronic submittal, either by directly entering corrected data to the web based service provided in e-manifest for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.
- (2) Each correction submission shall include all of the following information:

- (a) The manifest tracking number and date of receipt by the facility of the original manifest for which data are being corrected.
 - (b) The item number of the original manifest that is the subject of the submitted correction.
 - (c) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submittal.
- (3) Each correction submittal shall include a statement that the person submitting the corrections certifies that to the best of the person submitting the corrections' knowledge or belief, the corrections that are included in the submittal shall cause the information reported about the previously received hazardous wastes to be true, accurate, and complete including both of the following:
 - (a) The certification statement shall be executed with a valid electronic signature.
 - (b) A batch upload of data corrections may be submitted under one certification statement.
- (4) Upon receipt by the system of any correction submittal, other interested persons shown on the manifest shall be provided electronic notice of the submitter's corrections.
- (5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the system, certified by the respondent as specified in paragraph (L)(3) of this rule, and with notice of the corrections to other interested persons shown on the manifest.

[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."]

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TO BE RESCINDED

3745-65-71 **Use of manifest system.**

(A) Receipt of a shipment of hazardous waste accompanied by a manifest.

(1) If a facility receives hazardous waste accompanied by a manifest, the owner or operator, or the owner's or operator's agent, shall sign and date the manifest as indicated in paragraph (A)(2) of this rule to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the "Discrepancy" block of the manifest, or that the hazardous waste was rejected as noted in the "Manifest Discrepancy" block.

(2) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner or operator, or the owner's or operator's agent, shall do all of the following:

(a) Sign and date, by hand, each copy of the manifest.

(b) Note any significant discrepancies [as described in paragraphs (A) and (B) of rule 3745-65-72 of the Administrative Code] on each copy of the manifest.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-65-13 of the Administrative Code include waste analysis shall perform that analysis before signing the manifest and giving the manifest to the transporter. Paragraph (B) of rule 3745-65-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

(c) Immediately give the transporter at least one copy of the manifest.

(d) Within thirty days after the delivery, send a copy of the manifest to the generator.

(e) Retain at the facility a copy of each manifest for at least three years after the date of delivery.

(3) If a facility receives hazardous waste imported from a foreign source, the receiving facility shall mail a copy of the manifest and documentation confirming U.S. EPA's consent to the import of hazardous waste to the following address within thirty days after delivery: "Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division

(2254A), United States Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC" 20460.

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states, Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(B) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste which is accompanied by a shipping paper containing all the information required on the manifest (excluding the U.S. EPA identification numbers, generator's certification, and signatures), the owner or operator, or the owner's or operators's agent, shall do all of the following:

- (1) Sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received.
- (2) Note any significant discrepancies [as described in paragraphs (A) and (B) of rule 3745-65-72 of the Administrative Code] in the manifest or shipping paper, (if the manifest has not been received) on each copy of the manifest or shipping paper.

[Comment: It is not the intent of Ohio EPA that the owner or operator of a facility whose procedures under paragraph (C) of rule 3745-65-13 of the Administrative Code include waste analysis shall perform that analysis before signing the shipping paper and giving the manifest to the transporter. Paragraph (B) of rule 3745-65-72 of the Administrative Code, however, requires reporting an unreconciled discrepancy discovered during later analysis.]

- (3) Immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received).
- (4) Within thirty days after the delivery, send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within thirty days after delivery) to the generator.

[Comment: Paragraph (C) of rule 3745-52-23 of the Administrative Code requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).]

(5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years after the date of delivery.

(C) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility shall comply with Chapter 3745-52 of the Administrative Code.

[Comment: Rule 3745-52-34 of the Administrative Code is applicable to the on-site accumulation of hazardous wastes by generators. Therefore, rule 3745-52-34 of the Administrative Code applies only to owners or operators who are shipping hazardous waste which is generated at that facility.]

(D) Within three working days after the receipt of a shipment subject to 40 CFR Part 262 subpart H, the owner or operator of a facility shall provide a copy of the movement document bearing all required signatures to the exporter, to the "Office of Enforcement and Compliance Assurance, Office of Federal Activities, International Compliance Assurance Division (2254A), United States Environmental Protection Agency, 1200 Pennsylvania Ave., NW., Washington, DC" 20460, and to competent authorities of all other concerned countries. The original signed copy of the movement document shall be maintained at the facility for at least three years after the date of signature.

(E) A facility shall determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated by U.S. EPA) as hazardous wastes under the consignment state's hazardous waste program. Facilities shall also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to these states.

[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."]

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3745-65-75

Biennial report.

The owner or operator shall complete and submit to the director the biennial report, on the forms supplied by the director, by March first of the following even numbered year, and shall cover activities during the previous year.

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TO BE RESCINDED

3745-65-75 **Biennial report.**

The owner or operator must prepare and submit a single copy of a biennial report to the director by March first of each even numbered year. The biennial report must be submitted on the form and instructions supplied by the director. The report must cover facility activities during the previous calendar year and must include the following information:

- (A) The U.S. EPA identification number, name, and address of the facility;
- (B) The calendar year covered by the report;
- (C) For off-site facilities, the U.S. EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year; for imported shipments, the report must give the name and address of the foreign generator;
- (D) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by U.S. EPA identification number of each generator;
- (E) The method of treatment, storage, or disposal for each hazardous waste;
- (F) Monitoring data under paragraphs (A)(2)(b), (A)(2)(c) and (B)(2) of rule 3745-65-94 of the Administrative Code, where required;
- (G) The most recent closure cost estimate under rule 3745-66-42 of the Administrative Code, and, for disposal facilities, the most recent post-closure cost estimate under rule 3745-66-44 of the Administrative Code;
- (H) For generators who treat, store, or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated;
- (I) For generators who treat, store, or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years to the extent such information is available for the years prior to 1984; and

(J) The certification signed by the owner or operator of the facility or his authorized representative.

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05/13/2007, 02/05/2013

3745-66-74

Inspections- containers.

At least once during each period from Sunday to Saturday, the owner or operator shall inspect areas where containers are stored. The owner or operator shall look for leaking containers and for deterioration of containers caused by corrosion or other factors. The owner or operator shall record inspections in an inspection log or summary. See rule 3745-66-71 of the Administrative Code for remedial action required if deterioration or leaks are detected.

~~[Comment: See rule 3745-66-71 of the Administrative Code for remedial action required if deterioration or leaks are detected.]~~

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02/12/2018

3745-66-90

Applicability- tanks.

Rules 3745-66-90 to ~~3745-66-101~~3745-66-100 of the Administrative Code apply to owners ~~or~~and operators of facilities that use tank systems ~~for storing to store or treating treat~~ hazardous waste except as otherwise provided in paragraphs (A), (B), and (C) of this rule or in rule 3745-65-01 of the Administrative Code.

- (A) Tank systems that are used to store or treat hazardous waste which contains no free liquids and that are situated inside a building with an impermeable floor are exempted from ~~the requirements of~~ rule 3745-66-93 of the Administrative Code. To demonstrate the absence or presence of free liquids in the ~~stored/treated~~stored or treated waste, the following test ~~must~~shall be used: method 9095B ("Paint Filter Liquids Test") as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA publication SW-846.
- (B) Tank systems, including "sumps," as defined in rule 3745-50-10 of the Administrative Code, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes, are exempted from ~~the requirements in~~ paragraph (A) of rule 3745-66-93 of the Administrative Code.
- (C) Tanks, sumps, and other collection devices used in conjunction with "drip pads," as defined in rule 3745-50-10 of the Administrative Code, and regulated under rules 3745-69-40 to 3745-69-45 of the Administrative Code, ~~must meet the requirements of~~shall comply with rules 3745-66-90 to ~~3745-66-101~~3745-66-100 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."]~~

[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."]

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3745-66-93

Containment and detection of releases- tanks.

(A) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that complies with this rule shall be provided [except as provided in paragraphs (F) and (G) of this rule] for the following:

- (1) For all new and existing tank systems or components, prior to ~~their~~ being put into service; ~~and~~.
- (2) For tank systems that store or treat materials that become hazardous wastes, within two years after the hazardous waste listing, or when the tank system has reached fifteen years of age, whichever comes later.

(B) Secondary containment systems shall be as follows:

- (1) Designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, ground water, or surface water at any time during the use of the tank system; ~~and~~.
- (2) Capable of detecting and collecting releases and accumulated liquids until the collected material is removed.

(C) To comply with paragraph (B) of this rule, secondary containment systems shall be, at a minimum, the following:

- (1) Constructed of or lined with materials that are compatible with the wastes to be placed in the tank system, and shall have sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which ~~they~~ the containment systems are exposed, climatic conditions, the stress of installation, and the stress of daily operation (including stresses from nearby vehicular traffic); ~~and~~.
- (2) Placed on a foundation or base capable of providing support to the secondary containment system and resistance to pressure gradients above and below the system and capable of preventing failure due to settlement, compression, or uplift; ~~and~~.
- (3) Provided with a leak detection system that is designed and operated so that ~~it will~~ the leak detection system shall detect the failure of either the primary and secondary containment structure or any release of hazardous waste or accumulated liquid in the secondary containment system within twenty-four hours, or at the earliest practicable time if the existing detection technology

or site conditions ~~will~~does not allow detection of a release within twenty-four hours~~;~~.

- (4) Sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation shall be removed from the secondary containment system within twenty-four hours, or in as timely a manner as is possible to prevent harm to human health or the environment, if removal of the released waste or accumulated precipitation cannot be accomplished within twenty-four hours.

[Comment: If the collected material is hazardous under Chapter 3745-51 of the Administrative Code, ~~it~~the collected material is subject to management as a hazardous waste in accordance with all applicable requirements of Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code. If the collected material is discharged through a point source to waters of Ohio, ~~it~~the collected material is subject to rule 3745-33-04 and Chapters 3745-3 and 3745-33 of the Administrative Code. If discharged to publicly owned treatment works (POTW), ~~it~~the collected material is subject to Chapters 3745-1 and 3745-3 of the Administrative Code. If the collected material is released to the environment, ~~it~~the collected material may be subject to the reporting requirements of 40 ~~CFR~~C.F.R. Part 302.]

(D) Secondary containment for tanks shall include one or more of the following devices:

- (1) A liner (external to the tank)~~;~~.
- (2) A vault~~;~~.
- (3) A double-walled tank~~;~~ ~~or~~.
- (4) An equivalent device as approved by the director.

(E) In addition to paragraphs (B), (C), and (D) of this rule, secondary containment systems shall satisfy the following requirements:

- (1) External liner systems shall be all of the following:
 - (a) Designed or operated to contain one hundred per cent of the capacity of the largest tank within ~~it~~the external liner system's boundary~~;~~.
 - (b) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such

additional capacity shall be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event~~;~~

- (c) Free of cracks or gaps~~;~~
- (d) Designed and installed to completely surround the tank and to cover all surrounding earth likely to come into contact with the waste if released from the tanks (i.e., capable of preventing lateral as well as vertical migration of the waste)~~;~~~~and~~
- (e) Constructed with chemical-resistant water stops in place at all joints, if any (for concrete liners only)~~;~~~~and~~
- (f) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that ~~will prevent~~prevents migration of waste into the concrete (for concrete liners only).

(2) Vault systems shall be all of the following:

- (a) Designed or operated to contain one hundred per cent of the capacity of the largest tank within ~~its~~the vault system's boundary~~;~~
- (b) Designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity shall be sufficient to contain precipitation from a twenty-five-year, twenty-four-hour rainfall event~~;~~
- (c) Constructed with chemical-resistant water stops in place at all joints (if any)~~;~~
- (d) Provided with an impermeable interior coating or lining that is compatible with the stored waste and that ~~will prevent~~prevents migration of waste into the concrete~~;~~
- (e) Provided with means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated, is either of the following:
 - (i) Meets the description of ignitable waste under rule 3745-51-21 of the Administrative Code~~;~~~~or~~

(ii) Meets the description of reactive waste under rule 3745-51-23 of the Administrative Code and may form an ignitable or explosive vapor; ~~and.~~

(f) Provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.

(3) Double-walled tanks shall be all of the following:

(a) Designed as an integral structure (i.e., an inner tank within an outer shell) so that any release from the inner tank is contained by the outer shell; ~~.~~

(b) ~~Protected, if~~ constructed of metal, protected from both corrosion of the primary tank interior and the external surface of the outer shell; ~~and.~~

(c) Provided with a built-in, continuous leak detection system capable of detecting a release within twenty-four hours or at the earliest practicable time, if the owner or operator can demonstrate to the director, and the director concurs, that the existing leak detection technology or site conditions ~~will do~~ not allow detection of a release within twenty-four hours.

[Comment: The provisions outlined in the "Steel Tank Institute's (STI) Standard for Dual Wall Underground Steel Storage Tank" may be used as guidelines for aspects of design of underground steel double-walled tanks.]

(F) Ancillary equipment shall be provided with full secondary containment (e.g., trench, jacketing double-walled piping) that complies with paragraphs (B) and (C) of this rule, except for all of the following:

(1) Aboveground piping (exclusive of flanges, joints, valves, and connections) that are visually inspected for leaks on a daily basis; ~~.~~

(2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis; ~~.~~

(3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; ~~and.~~

(4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure-actuated shut-off devices) that are visually inspected for leaks on a daily basis.

(G) The owner or operator may obtain a variance from ~~the requirements of this rule if the director finds~~, as a result of a demonstration by the owner or operator, if the director finds either: that alternative design and operating practices, together with location characteristics, ~~will~~ prevent the migration of hazardous waste or hazardous constituents into the ground water or surface water at least as effectively as secondary containment during the active life of the tank system; or that in the event of a release that does migrate to ground water or surface water, no substantial present or potential hazard ~~will be~~ posed to human health or the environment. New underground tank systems ~~may not~~, per a demonstration in accordance with paragraph (G)(2) of this rule, may not be exempted from the secondary containment requirements of this rule. Application for a variance as allowed in this paragraph does not waive the requirement to comply with rules 3745-66-90 to ~~3745-66-101~~3745-66-100 of the Administrative Code for new tank systems.

(1) In deciding whether to grant a variance based on a demonstration of equivalent protection of ground water and surface water, the director ~~will~~shall consider all of the following:

- (a) The nature and quantity of the waste_;
- (b) The proposed alternate design and operation_;
- (c) The hydrogeologic setting of the facility, including the thickness of soils between the tank system and ground water_; ~~and~~
- (d) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for ~~them~~the hazardous constituents to migrate to ground water or surface water.

(2) In deciding whether to grant a variance, based on a demonstration of no substantial or present or potential hazard, the director ~~will~~shall consider all of the following:

- (a) The potential adverse effects on ground water, surface water, and land quality taking into account the following:
 - (i) The physical and chemical characteristics of the waste in the tank system, including ~~its~~the waste's potential for migration_;
 - (ii) The hydrogeological characteristics of the facility and surrounding land_;
 - (iii) The potential for health risks caused by human exposure to waste constituents_;

- (iv) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; ~~and.~~
 - (v) The persistence and permanence of the potential adverse effects.
- (b) The potential adverse effects of a release on ground water quality, taking into account the following:
- (i) The quantity and quality of ground water and the direction of ground water flow; ~~and.~~
 - (ii) The proximity and withdrawal rates of water in the area; ~~and.~~
 - (iii) The current and future uses of ground water in the area; ~~and.~~
 - (iv) The existing quality of ground water, including other sources of contamination and ~~the~~ the cumulative impact of contamination on the ground water quality; ~~and.~~
- (c) The potential adverse effects of a release on surface water quality, taking into account the following:
- (i) The quantity and quality of ground water and the direction of ground water flow; ~~and.~~
 - (ii) The patterns of rainfall in the region; ~~and.~~
 - (iii) The proximity of the tank system to surface waters; ~~and.~~
 - (iv) The current and future uses of surface waters in the area and any water quality standards established for those surface waters; ~~and.~~
 - (v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality; ~~and.~~
- (d) The potential adverse effects of a release on the land surrounding the tank system, taking into account both of the following:
- (i) The patterns of rainfall in the region; ~~and.~~
 - (ii) The current and future uses of the surrounding land.
- (3) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with paragraph (G)(1) of this

rule, at which a release of hazardous waste has occurred from the primary tank system but has not migrated beyond the zone of engineering control (as established in the variance), shall comply with all of the following:

- (a) Comply with paragraphs (A), (B), (C), (E), and (F) of rule 3745-66-96 of the Administrative Code; ~~and,~~
 - (b) Decontaminate or remove contaminated soil to the extent necessary to do all of the following:
 - (i) Enable the tank system, for which the variance was granted, to resume operation with the capability for the detection of and response to releases at least equivalent to the capability it had prior to the release; ~~and,~~
 - (ii) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water; ~~and,~~
 - (c) If contaminated soil cannot be removed or decontaminated in accordance with paragraph (G)(3)(b) of this rule, comply with paragraph (B) of rule 3745-66-97 of the Administrative Code; ~~,~~
- (4) The owner or operator of a tank system, for which a variance from secondary containment had been granted in accordance with paragraph (G)(1) of this rule, at which a release of hazardous waste has occurred from the primary tank system and has migrated beyond the zone of engineering control (as established in the variance), shall comply with all of the following:
- (a) Comply with paragraphs (A), (B), (C), and (D) of rule 3745-66-96 of the Administrative Code; ~~and,~~
 - (b) Prevent the migration of hazardous waste or hazardous constituents to ground water or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if ground water has been contaminated, the owner or operator shall comply with paragraph (B) of rule 3745-66-97 of the Administrative Code; ~~,~~
 - (c) If repairing, replacing, or reinstalling the tank system, provide secondary containment in accordance with paragraphs (A) to (F) of this rule or reapply for a variance from secondary containment and meet the requirements for new tank systems in rule 3745-66-92 of the Administrative Code if the tank system is replaced. The owner or operator shall comply with these requirements even if contaminated soil can be

decontaminated or removed, and ground water or surface water has not been contaminated.

(H) The following procedures shall be followed in order to request a variance from secondary containment:

- (1) The director shall be notified in writing by the owner or operator that the owner or operator intends to conduct and submit a demonstration for a variance from secondary containment as allowed in paragraph (G) of this rule according to the following schedule:
 - (a) For existing tank systems, at least twenty-four months prior to the date that the secondary containment shall be provided in accordance with paragraph (A) of this rule; ~~and~~
 - (b) For new tank systems, at least thirty days prior to entering into a contract for installation of the tank system.
- (2) As part of the notification, the owner or operator also shall submit to the director a description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration shall address each of the factors listed in paragraph (G)(1) or (G)(2) of this rule.
- (3) The demonstration for a variance shall be completed and submitted to the director within one hundred eighty days after notifying the director of intent to conduct the demonstration.
- (4) The director ~~will~~shall inform the public, through a newspaper notice, of the availability of the demonstration for a variance. The notice shall be placed in a daily or weekly major local newspaper of general circulation and shall provide at least thirty days ~~from~~after the date of the notice for the public to review and comment on the demonstration for a variance. The director ~~will~~shall also hold a public hearing in response to a request or at the director's discretion, whenever such a hearing might clarify one or more issues concerning the demonstration for a variance. Public notice of the hearing ~~will~~shall be given at least thirty days prior to the date of the hearing and may be given at the same time as notice of the opportunity for the public to review and comment on the demonstration. These two notices may be combined.
- (5) The director ~~will~~shall approve or disapprove the request for a variance within ninety days after receipt of the demonstration from the owner or operator and ~~will~~shall notify in writing the owner or operator and each person who submitted written comments or requested notice of the variance decision. If

the demonstration for a variance is incomplete or does not include sufficient information, the ninety-day time period ~~will~~shall begin when the director receives a complete demonstration, including all information necessary to make a final determination. If the public comment period in paragraph (H)(4) of this rule is extended, the ninety-day time period ~~will~~shall be similarly extended.

(I) All tank systems, until such time as secondary containment that complies with this rule is provided, shall comply with all of the following:

- (1) For non-enterable underground tanks, a leak test that complies with paragraph (B) (5) of rule 3745-66-91 of the Administrative Code shall be conducted at least annually.
- (2) For other than non-enterable underground tanks, and for all ancillary equipment, the owner or operator shall either conduct a leak test, as described in paragraph (I)(1) of this rule or an internal inspection or other tank integrity examination by a qualified professional engineer that addresses cracks, leaks, and corrosion, or erosion at least annually. The owner or operator shall remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed.

[Comment: The practices described in the "American Petroleum Institute (API)" publication, "Guide for Inspection of Refinery Equipment," chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," fourth edition, 1981, may be used, when applicable, as guidelines for assessing the overall condition of the tank system.]

- (3) The owner or operator shall maintain on file at the facility a record of the results of the assessments conducted in accordance with paragraphs (I)(1) to (I)(3) of this rule.
- (4) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in paragraphs (I)(1) to (I)(3) of this rule, the owner or operator shall comply with rule 3745-66-96 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."]

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10/31/2015

TO BE RESCINDED

3745-66-101 **Special requirements for generators of between one hundred and one thousand kilograms per month that accumulate hazardous waste in tanks.**

(A) This rule applies to small quantity generators of more than one hundred kilograms but less than one thousand kilograms of hazardous waste in a calendar month, that accumulate hazardous waste in tanks for less than one hundred eighty days (or two hundred seventy days if the generator shall ship the waste greater than two hundred miles), and do not accumulate over six thousand kilograms on-site at any time.

(B) Generators of between one hundred and one thousand kilograms per calendar month of hazardous waste shall comply with the following general operating requirements:

(1) Treatment or storage of hazardous waste in tanks shall comply with paragraph (B) of rule 3745-65-17 of the Administrative Code.

(2) Hazardous wastes or treatment reagents shall not be placed in a tank if such wastes or reagents could cause the tank or the tank's inner liner to rupture, leak, corrode, or otherwise fail before the end of the tank's intended life.

(3) Uncovered tanks shall be operated to ensure at least sixty centimeters (two feet) of freeboard, unless the tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank) with a capacity that equals or exceeds the volume of the top sixty centimeters (two feet) of the tank.

(4) Where hazardous waste is continuously fed into a tank, the tank shall be equipped with a means to stop this inflow (e.g., waste-feed cutoff system or by-pass system to a stand-by tank).

[Comment: These systems are intended to be used in the event of a leak or overflow from the tank due to a system failure (e.g., a malfunction in the treatment process, a crack in the tank, etc.).]

(C) Except as noted in paragraph (D) of this rule, generators of between one hundred and one thousand kilograms per calendar month that accumulate hazardous waste in tanks shall inspect, where present:

(1) Discharge control equipment (e.g., waste-feed cutoff systems, by-pass systems, and drainage systems) at least once each operating day, to ensure that the discharge control equipment is in good working order.

- (2) Data gathered from monitoring equipment (e.g., pressure and temperature gauges) at least once each operating day to ensure that the tank is being operated according to the tank's design.
- (3) The level of waste in the tank at least once each operating day to ensure compliance with paragraph (B)(3) of this rule.
- (4) The construction materials of the tank at least weekly to detect corrosion or leaking of fixtures or seams.
- (5) The construction materials of, and the area immediately surrounding, discharge confinement structures (e.g., dikes) at least weekly to detect erosion or obvious signs of leakage (e.g., wet spots or dead vegetation).

[Comment: As required by paragraph (C) of rule 3745-65-15 of the Administrative Code, the owner or operator shall remedy any deterioration or malfunction the owner or operator finds.]

- (D) Generators that accumulate between one hundred and one thousand kilograms per calendar month of hazardous waste in tanks or in tank systems that have full secondary containment and that either use leak detection equipment to alert facility personnel to leaks, or that implement established workplace practices to ensure leaks are promptly identified, shall inspect at least weekly, where applicable, the areas identified in paragraphs (C)(1) to (C)(5) of this rule. Use of the alternate inspection schedule shall be documented in the facility's operating record. This documentation shall include a description of the established workplace practices at the facility.

(E) [Reserved.]

- (F) Generators of between one hundred and one thousand kilograms per calendar month that accumulate hazardous waste in tanks shall, upon closure of the facility, remove all hazardous waste in tanks, discharge control equipment, and discharge confinement structures.

[Comment: At closure, as throughout the operating period, unless the owner or operator can demonstrate, in accordance with paragraph (C) or (D) of rule 3745-51-03 of the Administrative Code, that any waste removed from the owner's or operator's tank is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and shall manage the hazardous waste in accordance with all applicable requirements of Chapters 3745-52, 3745-53, 3745-65 to 3745-69, and 3745-256 of the Administrative Code.]

(G) Generators of between one hundred and one thousand kilograms per calendar month shall comply with the following special requirements for ignitable waste or reactive waste:

(1) Ignitable waste or reactive waste shall not be placed in a tank, unless one of the following occurs:

(a) The waste is treated, rendered, or mixed before or immediately after placement in a tank so that:

(i) The resulting waste, mixture, or dissolution of material no longer meets the description of ignitable waste or reactive waste under rule 3745-51-21 or 3745-51-23 of the Administrative Code.

(ii) Paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(b) The waste is stored or treated in such a way that the waste is protected from any material or conditions that may cause the waste to ignite or react.

(c) The tank is used solely for emergencies.

(2) The owner or operator of a facility which treats or stores ignitable waste or reactive waste in covered tanks shall comply with the buffer zone requirements for tanks provided in the national fire protection association's (NFPA) "Flammable and Combustible Liquids Code."

(H) Generators of between one hundred and one thousand kilograms per calendar month shall comply with the following special requirements for incompatible wastes:

(1) Incompatible wastes, or incompatible wastes and materials (see the appendix to rule 3745-66-99 of the Administrative Code for examples), shall not be placed in the same tank, unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

(2) Hazardous waste shall not be placed in an unwashed tank which previously held an incompatible waste or material, unless paragraph (B) of rule 3745-65-17 of the Administrative Code is complied with.

[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."]

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3745-69-01

General operating requirements and applicability- chemical, physical, and biological treatment.

- (A) Chemical, physical, or biological treatment of hazardous waste ~~must~~shall comply with paragraph (B) of rule 3745-65-17 of the Administrative Code.
- (B) Hazardous wastes or treatment reagents ~~must~~shall not be placed in the treatment process or equipment if ~~they~~the hazardous wastes or treatment reagents could cause the treatment process or equipment to rupture, leak, corrode, or otherwise fail before the end of the treatment process' or equipment's intended life.
- (C) Where hazardous waste is continuously fed into a treatment process or equipment, the process or equipment ~~must~~shall be equipped with a means to stop this inflow (e.g., a waste feed cut-off system or by-pass system to a standby containment device).
- [Comment: ~~these~~These systems are intended to be used in the event of a malfunction in the treatment process or equipment.]
- (D) ~~The requirements in rules~~Rules 3745-69-01 to 3745-69-06 of the Administrative Code apply to owners and operators of facilities which treat hazardous wastes by chemical, physical, or biological methods in other than tanks, surface impoundments, and land treatment facilities, except as rule 3745-65-01 of the Administrative Code provides otherwise. Chemical, physical, and biological treatment of hazardous waste in tanks, surface impoundments, and land treatment facilities ~~must~~shall be conducted in accordance with rules 3745-66-90 to ~~3745-66-101~~3745-66-100, 3745-67-20 to 3745-67-30, and 3745-67-70 to 3745-67-82 of the Administrative Code, respectively.

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3745-256-200

Applicability- military munitions.

~~The requirements of rules~~ Rules 3745-256-200 to 3745-256-202 of the Administrative Code apply to owners or operators who store hazardous waste munitions and hazardous waste explosives, except as rule 3745-65-01 of the Administrative Code provides otherwise.

[Comment: Depending on explosive hazards, hazardous waste munitions and hazardous waste explosives may also be managed in other types of storage units, including containment buildings (rules 3745-256-100 to 3745-256-102 of the Administrative Code), tanks (rules 3745-66-90 to ~~3745-66-101~~3745-66-100 of the Administrative Code), or containers (rules 3745-66-70 to 3745-66-77 of the Administrative Code). See rule 3745-266-205 of the Administrative Code for storage of waste military munitions.]

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3745-266-70

Applicability and requirements- recyclable materials utilized for precious metal recovery.

(A) This rule applies to recyclable materials that are reclaimed to recover economically significant amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these.

(B) Persons who generate, transport, or store recyclable materials that are regulated under this rule are subject to the following:

(1) The requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.

(2) Rules 3745-52-20 to 3745-52-27 of the Administrative Code (for generators), rules 3745-53-20 and 3745-53-21 of the Administrative Code (for transporters), and rules 3745-65-71 and 3745-65-72 of the Administrative Code (for persons who store).

(3) For precious metals exported to or imported from other countries for recovery, 40 ~~CFR~~C.F.R. Part 262 subpart H and ~~paragraph (A)(2) of rule 3745-65-12 of the Administrative Code.~~

[Comment: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

(C) Persons who store recycled materials that are regulated under this rule shall keep the following records to document that such persons are not accumulating these materials speculatively [as defined in paragraph (C) of rule 3745-51-01 of the Administrative Code]:

(1) Records showing the volume of these materials stored at the beginning of the calendar year.

(2) The amount of these materials generated or received during the calendar year.

(3) The amount of materials remaining at the end of the calendar year.

(D) Recyclable materials that are regulated under this rule that are "accumulated speculatively" [as defined in paragraph (C) of rule 3745-51-01 of the Administrative Code] are subject to all applicable provisions of Chapters 3745-50, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256, ~~and rules 3745-50-40 to 3745-50-235~~ 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."]

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3745-266-80

Applicability and requirements- spent lead-acid batteries being reclaimed.

(A) Are spent lead-acid batteries exempt from hazardous waste management requirements?

If you generate, collect, transport, store, or regenerate lead-acid batteries for reclamation purposes, you may be exempt from certain hazardous waste management requirements. Use the following table to determine which requirements apply to you. Alternatively, you may choose to manage your spent lead-acid batteries under Chapter 3745-273 of the Administrative Code.

If your batteries...	And if you...	Then you...	And you...
(1) Will be <u>Are</u> reclaimed through regeneration (such as by electrolyte replacement)	--	Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative Code, Chapters <u>3745-50,</u> 3745-52 (except for rule 3745-52-11 of the Administrative Code), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266 (except for this rule), and 3745-270 of the Administrative Code	Are subject to Chapter 3745-51 and rule 3745-52-11 of the Administrative Code
(2) Will be <u>Are</u> reclaimed other than through regeneration	Generate, collect, or transport these batteries	Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative Code, Chapters <u>3745-50,</u> 3745-52 (except for rule 3745-52-11 of the Administrative Code), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266	Are subject to Chapter 3745-51 and rule 3745-52-11 of the Administrative Code, and applicable provisions in Chapter 3745-270 of the Administrative Code

		of the Administrative Code (except for this rule)	
(3) Will be <u>Are</u> reclaimed other than through regeneration	Store these batteries but you aren't the claimer	Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative Code, Chapters <u>3745-50</u> , 3745-52 (except for rule 3745-52-11 of the Administrative Code), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, and 3745-266 of the Administrative Code (except for this rule)	Are subject to Chapter 3745-51 and rule 3745-52-11 of the Administrative Code, and applicable provisions in Chapter 3745-270 of the Administrative Code
(4) Will be <u>Are</u> reclaimed other than through regeneration	Store these batteries before you reclaim these batteries	Shall comply with paragraph (B) of this rule, and as appropriate, other regulatory provisions described in paragraph (B) of this rule. <u>(See paragraph (A) [Comment 2] of this rule.)</u>	Are subject to Chapter 3745-51 and rule 3745-52-11 of the Administrative Code, and applicable provisions in Chapter 3745-270 of the Administrative Code
(5) Will be <u>Are</u> reclaimed other than through regeneration	Don't store these batteries before you reclaim these batteries	Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative Code, Chapters <u>3745-50</u> , 3745-52 (except for rule 3745-52-11 of the Administrative Code), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205,	Are subject to Chapter 3745-51 and rule 3745-52-11 of the Administrative Code, and applicable provisions in Chapter 3745-270 of the Administrative Code

		<p>3745-256, and 3745-266 of the Administrative Code (except for this rule)</p>	
<p>(6) Will be <u>Are</u> reclaimed other than through regeneration or any other means</p>	<p>Store spent lead-acid batteries for less than seventy-two hours before entering the spent lead-acid batteries into the reclaiming process at your facility <u>Export these batteries for reclamation in a foreign country</u></p>	<p>Are exempt from rules 3745-50-40 to 3745-50-235 of the Administrative Code, and shall comply with paragraph (C) of this rule, and as appropriate, shall comply with other rules referenced in paragraph (C) of this rule <u>the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, Chapters 3745-50, 3745-52 (except for rules 3745-52-11 and 3745-52-18 of the Administrative Code, and 40 C.F.R. Part 262 subpart H), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266 (except for this rule), and 3745-270 of the Administrative Code</u></p>	<p>Are subject to Chapter 3745-51 and rules <u>rules 3745-52-11 and 3745-52-18 of the Administrative Code, and applicable provisions of Chapter 3745-270 of the Administrative Code</u> <u>40 C.F.R. Part 262 subpart H</u></p>
<p>(7) Will be <u>Are</u> reclaimed through regeneration or any other means</p>	<p>Transport these batteries in the United States to export these batteries for reclamation in a foreign country</p>	<p>Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, and rules 3745-50-40 to 3745-50-235 of the Administrative Code, and Chapters 3745-50, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266 (except for this rule), and 3745-270 of the Administrative Code</p>	<p>Shall comply with applicable requirements in 40 CFR <u>40 C.F.R.</u> Part 262 subpart H</p>

<p>(8) Will be<u>Are</u> reclaimed other than through regeneration</p>	<p>Import these batteries from foreign country and store these batteries, but you aren't the claimer</p>	<p>Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative Code, Chapter 3745-50, 3745-52 of the Administrative Code (except for rules 3745-52-11 and 3745-52-12<u>3745-52-18</u> of the Administrative Code; and Chapters), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266 (except for this rule), and 3745-270 of the Administrative Code</p>	<p>Are subject to Chapter 3745-51 and rules 3745-52-11 and 3745-52-12 <u>3745-52-18</u> of the Administrative Code, applicable provisions of Chapter 3745-270 of the Administrative Code, and 40 CFR<u>C.F.R.</u> Part 262 subpart H</p>
<p>(9) Will be<u>Are</u> reclaimed other than through regeneration</p>	<p>Import these batteries from foreign country and store these batteries before you reclaim these batteries</p>	<p>Shall comply with paragraph (B) of this rule, and, as appropriate, other regulatory provisions described in paragraph (B) of this rule. <u>(See paragraph (A) [Comment 2] of this rule.)</u></p>	<p>Are subject to Chapter 3745-51 and rules 3745-52-11 and 3745-52-12 <u>3745-52-18</u> of the Administrative Code, applicable provisions of Chapter 3745-270 of the Administrative Code, and 40 CFR<u>C.F.R.</u> Part 262 subpart H</p>
<p>(10) Will be<u>Are</u> reclaimed other than through regeneration</p>	<p>Import these batteries from foreign country and don't store these batteries before you</p>	<p>Are exempt from the requirement to notify Ohio EPA or U.S. EPA of regulated waste activity, rules 3745-50-40 to 3745-50-235 of the Administrative</p>	<p>Are subject to Chapter 3745-51 and rules 3745-52-11 and 3745-52-12 <u>3745-52-18</u> of the Administrative Code, applicable</p>

	reclaim these batteries	Code, Chapter <u>Chapters 3745-50, 3745-52 of the Administrative Code</u> (except for rules 3745-52-11 and 3745-52-12 <u>3745-52-18</u> of the Administrative Code, and Chapters, and <u>40 C.F.R. Part 262 subpart H</u>), 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266 (except for this rule), and 3745-270 of the Administrative Code	provisions of Chapter 3745-270 of the Administrative Code, and 40 CFRC <u>C.F.R.</u> Part 262 subpart H
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[Comment 1: The exercise of foreign relations and international commerce powers is reserved to the federal government under the Constitution. These responsibilities are not delegable to the states. Therefore, the importation and exportation of hazardous waste into and out of the United States is solely regulated by the federal government.]

[Comment 2: Owners or operators who store lead acid batteries for less than seventy-two-hours prior to reclaiming as described in paragraphs (A)(4) and (A)(9) of this rule, may comply with paragraph (C)(3) of rule 3745-51-06 of the Administrative Code in lieu of paragraph (B) of this rule.]

(B) If I store spent lead-acid batteries before I reclaim the lead-acid batteries but not through regeneration, which requirements apply? Paragraph (B) of this rule applies to you if you store spent lead-acid batteries before you reclaim the lead-acid batteries, but you don't reclaim the lead-acid batteries through regeneration. The following requirements are slightly different, depending on your hazardous waste management permit status:

- (1) For facilities with a permit by rule, you shall comply with all of the following:
 - (a) The requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.
 - (b) All applicable provisions in rule 3745-65-01 of the Administrative Code.
 - (c) All applicable provisions in rules 3745-65-10 to 3745-65-19 of the Administrative Code ~~but not~~ except rule 3745-65-13 of the Administrative Code (waste analysis).

- (d) All applicable provisions in rules 3745-65-30 to 3745-65-37 and 3745-65-50 to 3745-65-56 of the Administrative Code.
 - (e) All applicable provisions in rules 3745-65-70 to 3745-65-77 of the Administrative Code ~~but not rule~~except rules 3745-65-71 ~~or~~and 3745-65-72 of the Administrative Code (dealing with the use of the manifest and manifest discrepancies)†.
 - (f) All applicable provisions in rules 3745-65-90 to 3745-65-94, 3745-67-20 to 3745-67-30, and 3745-67-50 to 3745-67-60, and Chapter 3745-66 of the Administrative Code.
 - (g) All applicable provisions in ~~rules 3745-50-40 to 3745-50-235~~Chapter 3745-50 of the Administrative Code.
 - (h) [Reserved.]
- (2) For permitted facilities, you shall comply with all of the following:
- (a) The requirement to notify Ohio EPA or U.S. EPA of regulated waste activity.
 - (b) All applicable provisions in rules 3745-54-01 to 3745-54-03 of the Administrative Code.
 - (c) All applicable provisions in rules 3745-54-10 to 3745-54-19 of the Administrative Code ~~but not~~except rule 3745-54-13 of the Administrative Code (waste analysis)†.
 - (d) All applicable provisions in rules 3745-54-30 to 3745-54-37 and 3745-54-50 to 3745-54-56 of the Administrative Code.
 - (e) All applicable provisions in rules 3745-54-70 to 3745-54-77 of the Administrative Code ~~but not~~except rule 3745-54-71 or 3745-54-72 of the Administrative Code (dealing with the use of the manifest and manifest discrepancies)†.
 - (f) All applicable provisions in rules 3745-54-90 to 3745-54-101, 3745-56-20 to 3745-56-31, and 3745-56-50 to 3745-56-59, and Chapter 3745-55 of the Administrative Code.
 - (g) All applicable provisions in ~~rules 3745-50-40 to 3745-50-235~~Chapter 3745-50 of the Administrative Code.

(h) [Reserved.]

~~(C) If I store spent lead-acid batteries received from off-site for less than seventy-two hours prior to entering the lead-acid batteries into the reclaiming process, but reclamation is not through regeneration, which requirements apply? You shall store spent lead-acid batteries received from off-site in tanks, containers, or containment buildings. You shall comply with the applicable requirements of paragraphs (C)(3) to (C)(3)(b) of rule 3745-51-06 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."]

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3745-266-108

Small quantity on-site burner exemption.

(A) Exempt quantities. Owners and operators of facilities that burn hazardous waste in an on-site boiler or industrial furnace are exempt from rules 3745-266-100 to 3745-266-112 of the Administrative Code provided that all of the following:

- (1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits in the table in this rule based on the terrain-adjusted effective stack height as determined in paragraph (B)(3) of rule 3745-266-106 of the Administrative Code:

Table: Exempt Quantities for Small Quantity Burner Exemption

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons per month)
0 to 3.9	0
4.0 to 5.9	13
6.0 to 7.9	18
8.0 to 9.9	27
10.0 to 11.9	40
12.0 to 13.9	48
14.0 to 15.9	59
16.0 to 17.9	69
18.0 to 19.9	76
20.0 to 21.9	84
22.0 to 23.9	93
24.0 to 25.9	100
26.0 to 27.9	110
28.0 to 29.9	130
30.0 to 34.9	140
35.0 to 39.9	170

40.0 to 44.9	210
45.0 to 49.9	260
50.0 to 54.9	330
55.0 to 59.9	400
60.0 to 64.9	490
65.0 to 69.9	610
70.0 to 74.9	680
75.0 to 79.9	760
80.0 to 84.9	850
85.0 to 89.9	960
90.0 to 94.9	1,100
95.0 to 99.9	1,200
100.0 to 104.9	1,300
105.0 to 109.9	1,500
110.0 to 114.9	1,700
115.0 or greater	1,900

- (2) The maximum hazardous waste firing rate does not exceed at any time one per cent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste.
- (3) The hazardous waste has a minimum heating value of five thousand British thermal units (Btu) per pound, as generated.
- (4) The hazardous waste fuel does not contain (and is not derived from) EPA hazardous waste numbers F020, F021, F022, F023, F026, or F027.

- (B) Mixing with nonhazardous fuels. If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with paragraph (A) of this rule.
- (C) Multiple stacks. If an owner or operator burns hazardous waste in more than one on-site boiler or industrial furnace exempt under this rule, the quantity limits provided by paragraph (A)(1) of this rule are implemented according to the following equation:

$$\sum_{i=1}^n \frac{\text{Actual Quantity Burned}_{(i)}}{\text{Allowable Quantity Burned}_{(i)}} \leq 1.0$$

where:

n = the number of stacks

Actual Quantity Burned = the waste quantity burned per month in device "i"

Allowable Quantity Burned = the maximum allowable exempt quantity for stack "i" from the table in this rule

[Comment: Hazardous wastes that are subject to the ~~special requirements for small quantity generators~~ generator category determination under rule ~~3745-51-05~~ 3745-52-13 of the Administrative Code may be burned in an off-site device under the exemption provided by this rule, but shall be included in the quantity determination for the exemption.]

- (D) Notification requirements. The owner or operator of facilities qualifying for the small quantity burner exemption under this rule shall provide a one-time signed, written notice to Ohio EPA that indicates all of the following:
- (1) The combustion unit is operating as a small quantity burner of hazardous waste.
 - (2) The owner and operator are in compliance with this rule.
 - (3) The maximum quantity of hazardous waste that the facility may burn per month as provided by paragraph (A)(1) of this rule.
- (E) Recordkeeping requirements. The owner or operator shall maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limits of this rule. At a minimum, these

records shall indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month, and the heating value of the hazardous waste.

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3745-266-111

Standards for direct transfer.

(A) Applicability. This rule applies to owners and operators of boilers and industrial furnaces subject to rule 3745-266-102 or 3745-266-103 of the Administrative Code if hazardous waste is directly transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit.

(B) Definitions.

(1) When used in this rule, the following terms have the following meanings:

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

(b) "Container" means any portable device in which hazardous waste is transported, stored, treated, or otherwise handled, and includes transport vehicles that are containers themselves (e.g., tank trucks, tanker-trailers, and rail tank cars), and containers placed on or in a transport vehicle.

(2) This rule references several requirements in rules 3745-55-70 to 3745-55-78, 3745-55-90 to 3745-55-99, 3745-66-70 to 3745-66-77, and 3745-66-90 to ~~3745-66-101~~3745-66-100 of the Administrative Code. For purposes of this rule, the term "tank systems" in those referenced requirements means "direct transfer equipment" as defined in paragraph (B)(1)(a) of this rule.

(C) General operating requirements.

(1) No direct transfer of a pumpable hazardous waste shall be conducted from an open-top container to a boiler or industrial furnace.

(2) Direct transfer equipment used for pumpable hazardous waste shall always be closed, except when necessary to add or remove the waste, and shall not be opened, handled, or stored in a manner that may cause any rupture or leak.

(3) The direct transfer of hazardous waste to a boiler or industrial furnace shall be conducted so that ~~it~~the direct transfer does not do any of the following:

(a) Generate extreme heat or pressure, fire, explosion, or violent reaction.

(b) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health.

- (c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.
 - (d) Damage the structural integrity of the container or direct transfer equipment containing the waste.
 - (e) Adversely affect the capability of the boiler or industrial furnace to meet the standards in rules 3745-266-104 to 3745-266-107 of the Administrative Code.
 - (f) Threaten human health or the environment.
- (4) Hazardous waste shall not be placed in direct transfer equipment, if ~~it~~the hazardous waste could cause the equipment or ~~its~~the equipment's secondary containment system to rupture, leak, corrode, or otherwise fail.
- (5) The owner or operator of the facility shall use appropriate controls and practices to prevent spills and overflows from the direct transfer equipment or ~~its~~the equipment's secondary containment systems. These include, at a minimum, both of the following:
- (a) Spill prevention controls (e.g., check valves, dry discount couplings).
 - (b) Automatic waste feed cutoff to use if a leak or spill occurs from the direct transfer equipment.
- (D) Areas where direct transfer vehicles (containers) are located. Applying the definition of "container" under this rule, owners and operators shall comply with all of the following:
- (1) The containment requirements of rule 3745-55-75 of the Administrative Code.
 - (2) The use and management requirements of rules 3745-66-70 to 3745-66-77 of the Administrative Code, except for rules 3745-66-70 and 3745-66-74 of the Administrative Code, and except that in lieu of the special requirements of rule 3745-66-76 of the Administrative Code for ignitable waste or reactive waste, the owner or operator may comply with the requirements for the maintenance of protective distances between the waste management area and any public ways, streets, alleys, or an adjacent property line that can be built upon as required in the national fire protection association's (NFPA) "Flammable and Combustible Liquids Code." The owner or operator shall obtain and keep on file at the facility a written certification by the local fire marshal that the installation meets the subject NFPA codes.

(3) The closure requirements of rule 3745-55-78 of the Administrative Code.

(E) Direct transfer equipment. Direct transfer equipment shall meet all of the following:

(1) Secondary containment. Owners and operators shall comply with the secondary containment requirements of rule 3745-66-93 of the Administrative Code, except for paragraphs (A), (D), (E), and (I) of rule 3745-66-93 of the Administrative Code, as follows:

(a) For all new direct transfer equipment, prior to the equipment being put into service.

(b) For existing direct transfer equipment, within two years after December 7, 2004.

(2) Requirements prior to meeting secondary containment requirements.

(a) For existing direct transfer equipment that does not have secondary containment, the owner or operator shall determine whether the equipment is leaking or is unfit for use. The owner or operator shall obtain and keep on file at the facility a written assessment reviewed and certified by a qualified professional engineer in accordance with paragraph (D) of rule 3745-50-41 of the Administrative Code that attests to the equipment's integrity.

(b) This assessment shall determine whether the direct transfer equipment is adequately designed and has sufficient structural strength and compatibility with the wastes to be transferred to ensure that ~~it will~~ the equipment does not collapse, rupture, or fail. At a minimum, this assessment shall consider all of the following:

(i) Design standards, if available, according to which the direct transfer equipment was constructed.

(ii) Hazardous characteristics of the wastes that have been or will be handled.

(iii) Existing corrosion protection measures.

(iv) Documented age of the equipment, if available, (otherwise, an estimate of the age).

(v) Results of a leak test or other integrity examination such that the effects of temperature variations, vapor pockets, cracks, leaks, corrosion, and erosion are accounted for.

(c) If, as a result of the assessment specified in paragraphs (E)(2)(a) to (E)(2)(b)(v) of this rule, the direct transfer equipment is found to be leaking or unfit for use, the owner or operator shall comply with paragraphs (A) and (B) of rule 3745-66-96 of the Administrative Code.

(3) Inspections and recordkeeping.

(a) The owner or operator shall inspect at least once each operating hour when hazardous waste is being transferred from the transport vehicle (container) to the boiler or industrial furnace all of the following:

(i) Overfill or spill control equipment (e.g., waste-feed cutoff systems, bypass systems, and drainage systems) to ensure that ~~it~~the equipment is in good working order.

(ii) The above ground portions of the direct transfer equipment to detect corrosion, erosion, or releases of waste (e.g., wet spots, dead vegetation).

(iii) Data gathered from monitoring equipment and leak-detection equipment, (e.g., pressure and temperature gauges) to ensure that the direct transfer equipment is being operated according to ~~its~~the equipment's design.

(b) The owner or operator shall inspect cathodic protection systems, if used, to ensure that the systems are functioning properly according to the schedule provided by paragraph (B) of rule 3745-66-95 of the Administrative Code.

(c) Records of inspections made ~~under~~in accordance with paragraphs (E)(3) to (E)(3)(c) of this rule shall be maintained in the operating record at the facility, and available for inspection for at least three years after the date of the inspection.

(4) Design and installation of new ancillary equipment. Owners and operators shall comply with rule 3745-66-92 of the Administrative Code.

(5) Response to leaks or spills. Owners and operators shall comply with rule 3745-66-96 of the Administrative Code.

- (6) Closure. Owners and operators shall comply with rule 3745-66-97 of the Administrative Code, except for paragraphs (C)(2) to (C)(4) of rule 3745-66-97 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."]

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3745-266-255

Re-entry of LLMW into regulation as a hazardous waste.

When is your low level mixed waste (LLMW) no longer eligible for the storage and treatment conditional exemption?

- (A) When your LLMW has met the requirements of your nuclear regulatory commission (NRC) or NRC agreement state license for decay-in-storage and can be disposed of as non-radioactive waste, then the conditional exemption for storage no longer applies. On that date, your waste is subject to hazardous waste regulation under the applicable rules in Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, and the time period for accumulation of a hazardous waste as specified in rule ~~3745-52-34~~3745-52-16 or 3745-52-17 of the Administrative Code begins.
- (B) When your conditionally exempt LLMW, which has been generated and stored under a single NRC or NRC agreement state license number, is removed from storage, ~~it~~the conditionally exempt LLMW is no longer eligible for the storage and treatment exemption. However, your waste may be eligible for the transportation and disposal conditional exemption in rule 3745-266-305 of the Administrative Code.

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3745-266-500**Definitions - hazardous waste pharmaceuticals.**

The following definitions apply to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(A) "Evaluated hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has been evaluated by a reverse distributor in accordance with paragraph (A)(3) of rule 3745-266-510 of the Administrative Code and will not be sent to another reverse distributor for further evaluation or verification of manufacture credit.

(B) "Hazardous waste pharmaceutical" means a pharmaceutical that is a waste, as defined in rule 3745-51-02 of the Administrative Code, and exhibits one or more characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code or is listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code. A pharmaceutical is not a waste, as defined in rule 3745-51-02 of the Administrative Code, and therefore not a hazardous waste pharmaceutical, if the pharmaceutical is legitimately used or reused (e.g., lawfully donated for the waste's intended purpose) or reclaimed. An over-the-counter pharmaceutical, dietary supplement, or homeopathic drug is not a waste, as defined in rule 3745-51-02 of the Administrative Code, and therefore not a hazardous waste pharmaceutical, if such item has a reasonable expectation of being legitimately used or reused (e.g., lawfully redistributed for the item's intended purpose) or reclaimed.

(C) "Healthcare facility" means any person that is lawfully authorized to do either of the following:

- (1) Provide preventative, diagnostic, therapeutic, rehabilitative, maintenance or palliative care, and counseling, service, assessment or procedure with respect to the physical or mental condition, or functional status, of a human or animal or that affects the structure or function of the human or animal body.
- (2) Distribute, sell, or dispense pharmaceuticals, including over-the-counter pharmaceuticals, dietary supplements, homeopathic drugs, or prescription pharmaceuticals. This definition includes, but is not limited to, wholesale distributors, third-party logistics providers that serve as forward distributors, military medical logistics facilities, hospitals, psychiatric hospitals, ambulatory surgical centers, health clinics, physicians' offices, optical and dental providers, chiropractors, long-term care facilities, ambulance services, pharmacies, long-term care pharmacies, mail-order pharmacies, retailers of pharmaceuticals, veterinary clinics, and veterinary hospitals. This definition does not include pharmaceutical manufacturers, reverse distributors, or reverse logistics centers.

- (D) "Household waste pharmaceutical" means a pharmaceutical that is a waste, as defined in rule 3745-51-02 of the Administrative Code, but is excluded from being a hazardous waste under paragraph (B)(1) of rule 3745-51-04 of the Administrative Code.
- (E) "Long-term care facility" means a licensed entity that provides assistance with activities of daily living, including managing and administering pharmaceuticals to one or more individuals at the facility. This definition includes, but is not limited to, hospice facilities, nursing facilities, skilled nursing facilities, and the nursing and skilled nursing care portions of continuing care retirement communities. Not included within the scope of this definition are group homes, independent living communities, assisted living facilities, and the independent and assisted living portions of continuing care retirement communities.
- (F) "Non-creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that does not have a reasonable expectation to be eligible for manufacturer credit or a nonprescription hazardous waste pharmaceutical that does not have a reasonable expectation to be legitimately used or reused or reclaimed. This includes but is not limited to, investigational drugs, free samples of pharmaceuticals received by healthcare facilities, residues of pharmaceuticals remaining in empty containers, contaminated personal protective equipment, floor sweepings, and clean-up material from the spills of pharmaceuticals.
- (G) "Non-hazardous waste pharmaceutical" means a pharmaceutical that is a "waste," as defined in rule 3745-51-02 of the Administrative Code, and is not listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code, and does not exhibit a characteristic identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.
- (H) "Non-pharmaceutical hazardous waste" means a waste, as defined in rule 3745-51-02 of the Administrative Code, that is listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code, or exhibits one or more characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code, but is not a pharmaceutical, as defined in this rule.
- (I) "Pharmaceutical" means any drug or dietary supplement for use by humans or other animals, any electronic nicotine delivery system (e.g., electronic cigarette or vaping pen), or any liquid nicotine (e-liquid) packaged for retail sale for use in electronic nicotine delivery systems (e.g., pre-filled cartridges or vials). This definition includes, but is not limited to, "dietary supplements," as defined by the Federal Food, Drug, and Cosmetic Act; "prescription drugs," as defined in 21 C.F.R. 203.3(y); over-the-counter drugs; homeopathic drugs; compounded drugs; investigational new drugs; pharmaceuticals remaining in non-empty containers; personal protective

equipment contaminated with pharmaceuticals; and clean-up material from spills of pharmaceuticals. This definition does not include dental amalgam or sharps.

(J) "Potentially creditable hazardous waste pharmaceutical" means a prescription hazardous waste pharmaceutical that has a reasonable expectation to receive manufacturer credit and is all of the following:

(1) In original manufacturer packaging (except pharmaceuticals that were subject to a recall).

(2) Undispensed.

(3) Unexpired or less than one year past expiration date. The term does not include evaluated hazardous waste pharmaceuticals or nonprescription pharmaceuticals including, but not limited to, over-the-counter drugs, homeopathic drugs, and dietary supplements.

(K) "Reverse distributor" means any person that receives and accumulates prescription pharmaceuticals that are potentially creditable hazardous waste pharmaceuticals for the purpose of facilitating or verifying manufacturer credit. Any person, including forward distributors, third-party logistics providers, and pharmaceutical manufacturers, that processes prescription pharmaceuticals for the facilitation or verification of manufacturer credit is considered a reverse distributor.

[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."]

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3745-266-501**Applicability - hazardous waste pharmaceuticals.**

- (A) A healthcare facility that is a very small quantity generator when counting all of the generator's hazardous waste, including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste, remains subject to rule 3745-52-14 of the Administrative Code and is not subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code, except for rules 3745-266-505 and 3745-266-507 of the Administrative Code and the optional provisions of rule 3745-266-504 of the Administrative Code.
- (B) A healthcare facility that is a very small quantity generator when counting all of the generator's hazardous waste, including both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste, has the option of complying with paragraph (D) of this rule for the management of the hazardous waste pharmaceuticals as an alternative to complying with rule 3745-52-14 of the Administrative Code and the optional provisions of rule 3745-266-504 of the Administrative Code.
- (C) A healthcare facility or reverse distributor remains subject to all applicable hazardous waste regulations with respect to the management of non-pharmaceutical hazardous waste.
- (D) With the exception of healthcare facilities identified in paragraph (A) of this rule, a healthcare facility is subject to the following in lieu of Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code:
- (1) Rules 3745-266-502 and 3745-266-505 to 3745-266-508 of the Administrative Code with respect to the management of both of the following:
 - (a) Non-creditable hazardous waste pharmaceuticals.
 - (b) Potentially creditable hazardous waste pharmaceuticals if the potentially creditable pharmaceuticals are not destined for a reverse distributor.
 - (2) Paragraph (A) of rule 3745-266-502 and rules 3745-266-503, 3745-266-505 to 3745-266-507, and 3745-266-509 of the Administrative Code with respect to the management of potentially creditable hazardous waste pharmaceuticals that are prescription pharmaceuticals and are destined for a reverse distributor.
- (E) A reverse distributor is subject to rules 3745-266-505 to 3745-266-510 of the Administrative Code in lieu of Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code with respect to the management of hazardous waste pharmaceuticals.

- (F) Hazardous waste pharmaceuticals generated or managed by entities other than healthcare facilities and reverse distributors (e.g., pharmaceutical manufacturers and reverse logistics centers) are not subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code. Other generators are subject to Chapter 3745-52 of the Administrative Code for the generation and accumulation of hazardous wastes, including hazardous waste pharmaceuticals.
- (G) The following are not subject to Chapters 3745-50, 3745-51, 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-273 of the Administrative Code, except as specified:
- (1) Pharmaceuticals that are not "waste," as defined in rule 3745-51-02 of the Administrative Code, because the pharmaceuticals are legitimately used or reused (e.g., lawfully donated for the pharmaceuticals' intended purpose) or reclaimed.
 - (2) Over-the-counter pharmaceuticals, dietary supplements, or homeopathic drugs that are not "wastes," as defined in rule 3745-51-02 of the Administrative Code, because the items have a reasonable expectation of being legitimately used or reused (e.g., lawfully redistributed for the items' intended purpose) or reclaimed.
 - (3) Pharmaceuticals being managed in accordance with a recall strategy that has been approved by the food and drug administration (FDA) in accordance with 21 C.F.R. Part 7 subpart C. Rules 3745-266-500 to 3745-266-510 of the Administrative Code do apply to the management of the recalled hazardous waste pharmaceuticals after the FDA approves the destruction of the recalled items.
 - (4) Pharmaceuticals being managed in accordance with a recall corrective action plan that has been accepted by the consumer product safety commission in accordance with 16 C.F.R. Part 1115. Rules 3745-266-500 to 3745-266-510 of the Administrative Code apply to the management of the recalled hazardous waste pharmaceuticals after the consumer product safety commission approves the destruction of the recalled items.
 - (5) Pharmaceuticals stored according to a preservation order or during an investigation or judicial proceeding until after the preservation order, investigation, or judicial proceeding has concluded or a decision is made to discard the pharmaceuticals.
 - (6) Investigational new drugs for which an investigational new drug application is in effect in accordance with the FDA's regulations in 21 C.F.R. Part 312.

Rules 3745-2636-500 to 3745-266-510 of the Administrative Code apply to the management of the investigational new drug after the decision is made to discard the investigational new drug or the FDA approves the destruction of the investigational new drug, if the investigational new drug is a hazardous waste.

(7) Household waste pharmaceuticals, including those that have been collected by an "authorized collector," as defined by the drug enforcement administration, provided the authorized collector complies with the conditional exemption in paragraphs (A)(2) and (B) of rule 3745-266-506 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."]

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3745-266-502**Standards for healthcare facilities that manage non-creditable hazardous waste pharmaceuticals.**

(A) Notification and withdrawal from rules 3745-266-500 to 3745-266-510 of the Administrative Code for healthcare facilities managing hazardous waste pharmaceuticals.

(1) Notification. A healthcare facility shall notify Ohio EPA, using Ohio EPA form EPA 9029, that the facility is a healthcare facility operating in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code. A healthcare facility is not required to fill out waste codes for federally regulated hazardous waste on the form with respect to the healthcare facility's hazardous waste pharmaceuticals. A healthcare facility shall submit a separate notification for each site or EPA identification number.

(a) A healthcare facility that already has an EPA identification number shall notify Ohio EPA, using Ohio EPA form EPA 9029, that the facility is a healthcare facility as part of the healthcare facility's next biennial report, if the healthcare facility is required to submit a biennial report; or if not required to submit a biennial report, within sixty days after the first effective date of rules 3745-266-500 to 3745-266-510 of the Administrative Code, or within sixty days after becoming subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(b) A healthcare facility that does not have an EPA identification number shall obtain one by notifying Ohio EPA, using Ohio EPA form EPA 9029, that the facility is a healthcare facility as part of the healthcare facility's next biennial report, if the healthcare facility is required to submit a biennial report; or if not required to submit a biennial report, within sixty days after the first effective date of rules 3745-266-500 to 3745-266-510 of the Administrative Code, or within sixty days after becoming subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(c) A healthcare facility shall keep a copy of the healthcare facility's notification on file for as long as the healthcare facility is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(2) Withdrawal. A healthcare facility that operated under rules 3745-266-500 to 3745-266-510 of the Administrative Code but is no longer subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code, because the healthcare facility is a very small quantity generator under rule 3745-52-14 of the Administrative Code, and elects to withdraw from rules 3745-266-500 to 3745-266-510 of the Administrative Code, shall notify Ohio EPA, using Ohio EPA form EPA 9029, that the healthcare facility is no longer operating

under rules 3745-266-500 to 3745-266-510 of the Administrative Code. A healthcare facility is not required to fill out the waste codes for federally regulated hazardous waste portion of Ohio EPA form EPA 9029 with respect to the healthcare facility's hazardous waste pharmaceuticals. A healthcare facility shall submit a separate Ohio EPA form EPA 9029 for each EPA identification number.

(a) A healthcare facility shall submit Ohio EPA form EPA 9029 notifying that the healthcare facility is withdrawing from rules 3745-266-500 to 3745-266-510 of the Administrative Code before the healthcare facility begins operating under the conditional exemption of rule 3745-52-14 of the Administrative Code.

(b) A healthcare facility shall keep a copy of the healthcare facility's withdrawal on file for three years after the date of signature on the notification of the healthcare facility's withdrawal.

(B) Training of personnel managing non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility shall ensure that all personnel that manage non-creditable hazardous waste pharmaceuticals are thoroughly familiar with proper waste handling and emergency procedures relevant to the personnel's responsibilities during normal facility operations and emergencies.

(C) Hazardous waste determination for non-creditable pharmaceuticals. A healthcare facility that generates a waste that is a non-creditable pharmaceutical shall determine whether that pharmaceutical is a hazardous waste pharmaceutical (i.e., the waste exhibits a characteristic identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code or is listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code) in order to determine whether the waste is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code. A healthcare facility may choose to manage non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals under rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(D) Standards for containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities.

(1) A healthcare facility shall place non-creditable hazardous waste pharmaceuticals in a container that is structurally sound, compatible with the contents, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

- (2) A healthcare facility that manages ignitable or reactive non-creditable hazardous waste pharmaceuticals, or that mixes or commingles incompatible non-creditable hazardous waste pharmaceuticals shall manage the container so that the container does not have the potential to do any of the following:
- (a) Generate extreme heat or pressure, fire or explosion, or violent reaction.
 - (b) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health.
 - (c) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.
 - (d) Damage the structural integrity of the container of non-creditable hazardous waste pharmaceuticals.
 - (e) Through other like means threaten human health or the environment.
- (3) A healthcare facility shall keep containers of non-creditable hazardous waste pharmaceuticals closed and secured in a manner that prevents unauthorized access to the contents.
- (4) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals and non-hazardous non-creditable waste pharmaceuticals in the same container, except that non-creditable hazardous waste pharmaceuticals prohibited from being combusted because of the dilution prohibition of paragraph (C) of rule 3745-270-03 of the Administrative Code shall be accumulated in separate containers and labeled with all applicable hazardous waste numbers.
- (E) Labeling containers used to accumulate non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility shall label or clearly mark each container of non-creditable hazardous waste pharmaceuticals with the phrase "Hazardous Waste Pharmaceuticals."
- (F) Maximum accumulation time for non-creditable hazardous waste pharmaceuticals at healthcare facilities.
- (1) A healthcare facility may accumulate non-creditable hazardous waste pharmaceuticals on-site for one year or less without an Ohio hazardous waste permit or a permit by rule.
 - (2) A healthcare facility that accumulates non-creditable hazardous waste pharmaceuticals on-site shall demonstrate the length of time that the non-

creditable hazardous waste pharmaceuticals have been accumulating, starting from the date the non-creditable hazardous waste pharmaceutical first becomes a waste. A healthcare facility may make this demonstration by any of the following methods:

- (a) Marking or labeling the container of non-creditable hazardous waste pharmaceuticals with the date that the non-creditable hazardous waste pharmaceuticals became a waste.
- (b) Maintaining an inventory system that identifies the date the non-creditable hazardous waste pharmaceuticals being accumulated first became a waste.
- (c) Placing the non-creditable hazardous waste pharmaceuticals in a specific area and identifying the earliest date that any of the non-creditable hazardous waste pharmaceuticals in the area became a waste.

(G) Land disposal restrictions for non-creditable hazardous waste pharmaceuticals. The non-creditable hazardous waste pharmaceuticals generated by a healthcare facility are subject to the land disposal restrictions of Chapter 3745-270 of the Administrative Code. A healthcare facility that generates non-creditable hazardous waste pharmaceuticals shall comply with the land disposal restrictions in accordance with paragraph (A) of rule 3745-270-07 of the Administrative Code, except that the healthcare facility is not required to identify the hazardous waste numbers on the land disposal restrictions notification.

(H) Procedures for healthcare facilities for managing rejected shipments of non-creditable hazardous waste pharmaceuticals. A healthcare facility that sends a shipment of non-creditable hazardous waste pharmaceuticals to a designated facility with the understanding that the designated facility can accept and manage the waste, and later receives that shipment back as a rejected load in accordance with the manifest discrepancy provisions of rule 3745-54-72 or 3745-65-72 of the Administrative Code, may accumulate the returned non-creditable hazardous waste pharmaceuticals on-site for up to an additional ninety days, provided the rejected or returned shipment is managed in accordance with paragraphs (D) and (E) of this rule. Upon receipt of the returned shipment, the healthcare facility shall do all of the following:

(1) Sign either of the following:

- (a) Item 18c of the original manifest, if the original manifest was used for the returned shipment.

(b) Item 20 of the new manifest, if a new manifest was used for the returned shipment.

(2) Provide the transporter a copy of the manifest.

(3) Within thirty days after receipt of the rejected shipment, send a copy of the manifest to the designated facility that returned the shipment to the healthcare facility.

(4) Within ninety days after receipt of the rejected shipment, transport or offer for transport the returned shipment in accordance with the shipping standards of paragraph (A) of rule 3745-266-508 of the Administrative Code.

(I) Reporting by healthcare facilities for non-creditable hazardous waste pharmaceuticals.

(1) Biennial reporting by healthcare facilities. Healthcare facilities are not subject to biennial reporting requirements in accordance with rule 3745-52-41 of the Administrative Code, with respect to non-creditable hazardous waste pharmaceuticals managed in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(2) Exception reporting by healthcare facilities for a missing copy of the manifest.

(a) For shipments from a healthcare facility to a designated facility:

(i) If a healthcare facility does not receive a copy of the manifest with the signature of the owner or operator of the designated facility within sixty days after the date the non-creditable hazardous waste pharmaceuticals were accepted by the initial transporter, the healthcare facility shall submit all of the following:

(a) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the director.

(b) A handwritten or typed note on the manifest or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals, and the results of those efforts.

(ii) [Reserved.]

(b) For shipments rejected by the designated facility and shipped to an alternate facility.

(i) If a healthcare facility does not receive a copy of the manifest for a rejected shipment of the non-creditable hazardous waste pharmaceuticals that is forwarded by the designated facility to an alternate facility (using appropriate manifest procedures), with the signature of the owner or operator of the alternate facility, within sixty days after the date the non-creditable hazardous waste was accepted by the initial transporter forwarding the shipment of non-creditable hazardous waste pharmaceuticals from the designated facility to the alternate facility, the healthcare facility shall submit all of the following:

(a) A legible copy of the original manifest, indicating that the healthcare facility has not received confirmation of delivery, to the director.

(b) A handwritten or typed note on the manifest or on an attached sheet of paper, stating that the return copy was not received and explaining the efforts taken to locate the non-creditable hazardous waste pharmaceuticals, and the results of those efforts.

(ii) [Reserved.]

(3) Additional reports. The director may require healthcare facilities to furnish additional reports concerning the quantities and disposition of non-creditable hazardous waste pharmaceuticals.

(J) Recordkeeping by healthcare facilities for non-creditable hazardous waste pharmaceuticals.

(1) A healthcare facility shall keep a copy of each manifest signed in accordance with paragraph (A) of rule 3745-52-23 of the Administrative Code for three years or until the healthcare facility receives a signed copy from the designated facility which received the non-creditable hazardous waste pharmaceuticals. This signed copy shall be retained as a record for at least three years after the date the waste was accepted by the initial transporter.

(2) A healthcare facility shall keep a copy of each exception report for a period of at least three years after the date of the report.

- (3) A healthcare facility shall keep records of any test results, waste analyses, or other determinations made to support the healthcare facility's hazardous waste determinations consistent with paragraph (F) of rule 3745-52-11 of the Administrative Code, for at least three years after the date the waste was last sent to on-site or off-site treatment, storage or disposal. A healthcare facility that manages all of the non-creditable non-hazardous waste pharmaceuticals as non-creditable hazardous waste pharmaceuticals is not required to keep documentation of hazardous waste determinations.
- (4) The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.
- (5) All records shall be readily available upon request by an inspector.
- (K) Response to spills of non-creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility shall immediately contain all spills of non-creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.
- (L) Accepting non-creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator. A healthcare facility may accept non-creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator in accordance with rule 3745-52-14 of the Administrative Code, without an Ohio hazardous waste permit or without having a permit by rule, provided the receiving healthcare facility meets all of the following:
- (1) Is under the control of the same "person," as defined in rule 3745-50-10 of the Administrative Code, as the very small quantity generator healthcare facility that is sending the non-creditable hazardous waste pharmaceuticals off-site or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility. ("Control," for the purposes of this rule, means the power to direct the policies of the healthcare facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate healthcare facilities on behalf of a different "person," as defined in rule 3745-50-10 of the Administrative Code, shall not be deemed to "control" such healthcare facilities.)
- (2) Is operating under rules 3745-266-500 to 3745-266-510 of the Administrative Code for the management of the healthcare facility's non-creditable hazardous waste pharmaceuticals.

(3) Manages the non-creditable hazardous waste pharmaceuticals that the healthcare facility receives from off-site in compliance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(4) Keeps records of the non-creditable hazardous waste pharmaceuticals shipments the healthcare facility receives from off-site for three years after the date that the shipment is received.

[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."]

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Standards for healthcare facilities that manage potentially creditable hazardous waste pharmaceuticals.

- (A) Hazardous waste determination for potentially creditable pharmaceuticals. A healthcare facility that generates a waste that is a potentially creditable pharmaceutical shall determine whether the potentially creditable pharmaceutical is a potentially creditable hazardous waste pharmaceutical (i.e., listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code or exhibits a characteristic identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code). A healthcare facility may choose to manage the healthcare facility's potentially creditable non-hazardous waste pharmaceuticals as potentially creditable hazardous waste pharmaceuticals in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.
- (B) Accepting potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator. A healthcare facility may accept potentially creditable hazardous waste pharmaceuticals from an off-site healthcare facility that is a very small quantity generator in accordance with rule 3745-52-14 of the Administrative Code, without a permit or without having a permit by rule, provided the receiving healthcare facility meets all of the following:
- (1) Is under the control of the same "person," as defined in rule 3745-50-10 of the Administrative Code, as the very small quantity generator healthcare facility that is sending the potentially creditable hazardous waste pharmaceuticals off-site, or has a contractual or other documented business relationship whereby the receiving healthcare facility supplies pharmaceuticals to the very small quantity generator healthcare facility.
 - (2) Is operating in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code for the management of the healthcare facility's potentially creditable hazardous waste pharmaceuticals.
 - (3) Manages the potentially creditable hazardous waste pharmaceuticals that the healthcare facility receives from off-site in compliance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.
 - (4) Keeps records of the potentially creditable hazardous waste pharmaceuticals shipments the healthcare facility receives from off-site for three years after the date that the shipment is received.
- (C) Prohibition. Healthcare facilities are prohibited from sending hazardous wastes other than potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (D) Biennial reporting by healthcare facilities. Healthcare facilities are not subject to biennial reporting requirements in accordance with rule 3745-52-41 of the

Administrative Code with respect to potentially creditable hazardous waste pharmaceuticals managed in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(E) Recordkeeping by healthcare facilities.

(1) A healthcare facility that initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor shall keep the following records (paper or electronic) for each shipment of potentially creditable hazardous waste pharmaceuticals for three years after the date of shipment:

(a) The confirmation of delivery.

(b) The shipping papers prepared in accordance with 49 C.F.R. Part 172 subpart C, if applicable.

(2) The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

(3) All records shall be readily available upon request by an inspector.

(F) Response to spills of potentially creditable hazardous waste pharmaceuticals at healthcare facilities. A healthcare facility shall immediately contain all spills of potentially creditable hazardous waste pharmaceuticals and manage the spill clean-up materials as non-creditable hazardous waste pharmaceuticals in accordance with rules 3745-266-500 to 3745-266-510 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."]

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Healthcare facilities that are very small quantity generators for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste.

- (A) Potentially creditable hazardous waste pharmaceuticals. A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send the healthcare facility's potentially creditable hazardous waste pharmaceuticals to a reverse distributor.
- (B) Off-site collection of hazardous waste pharmaceuticals generated by a healthcare facility that is a very small quantity generator. A healthcare facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste may send the healthcare facility's hazardous waste pharmaceuticals off-site to another healthcare facility, provided one of the following:
- (1) The receiving healthcare facility meets the conditions in paragraph (L) of rule 3745-266-502 of the Administrative Code and paragraph (B) of rule 3745-266-503 of the Administrative Code, as applicable.
 - (2) The very small quantity generator healthcare facility meets the conditions in paragraph (A)(5)(h) of rule 3745-52-14 of the Administrative Code and the receiving large quantity generator meets the conditions in paragraph (F) of rule 3745-52-17 of the Administrative Code.
- (C) Long-term care facilities that are very small quantity generators. Pharmaceutical hazardous waste generated by a long-term care facility that is a very small quantity generator for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste is exempt from rules 3745-50-40 to 3745-50-235 and Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, 3745-270, and 3745-273 of the Administrative Code provided the long-term care facility's hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste meet the following conditions:
- (1) The long-term care facility's hazardous waste pharmaceuticals (excluding contaminated personal protective equipment or clean-up materials) are placed in an on-site collection receptacle of an "authorized collector," as defined by the drug enforcement administration (DEA), that is registered with the DEA.
 - (2) The on-site collection receptacle contents are collected, stored, transported, destroyed, and disposed of in compliance with all applicable DEA regulations for controlled substances.
- (D) Long-term care facilities with twenty beds or fewer. A long-term care facility with twenty beds or fewer is presumed to be a very small quantity generator subject to rule

3745-52-14 of the Administrative Code for both hazardous waste pharmaceuticals and non-pharmaceutical hazardous waste and is not subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code, except for rules 3745-266-505 and 3745-266-507 of the Administrative Code and the other optional provisions of this rule. The director has the responsibility to demonstrate that a long-term care facility with twenty beds or fewer generates quantities of hazardous waste that are in excess of the "very small quantity generator" limits as defined in rule 3745-50-10 of the Administrative Code. A long-term care facility with more than twenty beds that operates as a very small quantity generator in accordance with rule 3745-52-14 of the Administrative Code shall demonstrate that the long-term care facility generates quantities of hazardous waste that are within the "very small quantity generator" limits as defined in rule 3745-50-10 of the Administrative Code.

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3745-266-505**Prohibition of sewerage hazardous waste pharmaceuticals.**

All healthcare facilities, including very small quantity generators operating in accordance with rule 3745-52-14 of the Administrative Code in lieu of rules 3745-266-500 to 3745-266-510 of the Administrative Code, and reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. Healthcare facilities and reverse distributors remain subject to the prohibitions in 40 C.F.R. 403.5(b)(1) and paragraph (B)(1) of rule 3745-3-04 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."]

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3745-266-506

Conditional exemptions for hazardous waste pharmaceuticals that are also controlled substances and household waste pharmaceuticals collected in a take-back event or program.

(A) Conditional exemptions. Provided the conditions of paragraph (B) of this rule are met, the following are exempt from rules 3745-50-40 to 3745-50-235 and Chapters 3745-52, 3745-53, 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, 3745-256, 3745-266, 3745-270, and 3745-273 of the Administrative Code:

- (1) Hazardous waste pharmaceuticals that are also listed on a schedule of controlled substances by the drug enforcement administration (DEA) in 21 C.F.R. Part 1308.
- (2) Household waste pharmaceuticals that are collected in a take-back event or program, including those that are collected by an "authorized collector," as defined by the DEA, registered with the DEA that commingles the household waste pharmaceuticals with controlled substances from an "ultimate user," as defined by the DEA.

(B) Conditions for exemption. The hazardous waste pharmaceuticals shall be all of the following:

- (1) Managed in compliance with the sewer prohibition of rule 3745-266-505 of the Administrative Code.
- (2) Collected, stored, transported, and disposed of in compliance with all applicable DEA regulations for controlled substances.
- (3) Destroyed by a method that the DEA has publicly deemed in writing to meet the DEA's non-retrievable standard of destruction or combusted at one of the following:
 - (a) A permitted large municipal waste combustor, subject to 40 C.F.R. Part 62 subpart FFF or applicable state plan for existing large municipal waste combustors, or 40 C.F.R. Part 60 subpart Eb for new large municipal waste combustors.
 - (b) A permitted small municipal waste combustor, subject to 40 C.F.R. Part 62 subpart JJJ or applicable state plan for existing small municipal waste combustors, or 40 C.F.R. Part 60 subpart AAAA for new small municipal waste combustors.
 - (c) A permitted hospital, medical, and infectious waste incinerator, subject to 40 C.F.R. Part 62 subpart HHH or applicable state plan for existing hospital.

medical, and infectious waste incinerators, or 40 C.F.R. Part 60 subpart Ec for new hospital, medical, and infectious waste incinerators.

(d) A permitted commercial and industrial solid waste incinerator, subject to 40 C.F.R. Part 62 subpart III or applicable state plan for existing commercial and industrial solid waste incinerators, or 40 C.F.R. Part 60 subpart CCCC for new commercial and industrial solid waste incinerators.

(e) A permitted hazardous waste combustor subject to 40 C.F.R. Part 63 subpart EEE.

[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."]

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3745-266-507**Residues of hazardous waste pharmaceuticals in empty containers.**

- (A) Stock, dispensing, and unit-dose containers. A stock bottle, dispensing bottle, vial, or ampule (not to exceed one liter or ten-thousand pills); or a unit-dose container (e.g., a unit-dose packet, cup, wrapper, blister pack, or delivery device) is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals have been removed from the stock bottle, dispensing bottle, vial, ampule, or the unit-dose container using the practices commonly employed to remove materials from that type of container.
- (B) Syringes. A syringe is considered empty and the residues are not regulated as hazardous waste in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code provided the contents have been removed by fully depressing the plunger of the syringe. If a syringe is not empty, the syringe shall be placed with the remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code and any applicable federal, state, and local requirements for sharps containers and medical waste.
- (C) Intravenous (IV) bags. An IV bag is considered empty and the residues are not regulated as hazardous waste provided the pharmaceuticals in the IV bag have been fully administered to a patient. If an IV bag is not empty, the IV bag shall be placed with the remaining hazardous waste pharmaceuticals into a container that is managed and disposed of as a non-creditable hazardous waste pharmaceutical in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code, unless the IV bag held non-acute hazardous waste pharmaceuticals and is "empty," as defined in paragraph (B)(1) of rule 3745-51-07 of the Administrative Code.
- (D) Other containers, including delivery devices. Hazardous waste pharmaceuticals remaining in all other types of unused, partially administered, or fully administered containers shall be managed as non-creditable hazardous waste pharmaceuticals in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code, unless the container held non-acute hazardous waste pharmaceuticals and is "empty," as defined in paragraph (B)(1) or (B)(2) of rule 3745-51-07 of the Administrative Code. This includes, but is not limited to, residues in inhalers, aerosol cans, nebulizers, tubes of ointments, gels, or creams.

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3745-266-508

Shipping non-creditable hazardous waste pharmaceuticals from a healthcare facility or evaluated hazardous waste pharmaceuticals from a reverse distributor.

(A) Shipping non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals. A healthcare facility shall ship non-creditable hazardous waste pharmaceuticals and a reverse distributor shall ship evaluated hazardous waste pharmaceuticals off-site to a designated facility (such as a permitted or interim standards treatment, storage, or disposal facility) in compliance with all of the following:

(1) The following pre-transport requirements, before transporting or offering for transport off-site:

(a) Packaging. Package the waste in accordance with the applicable department of transportation (DOT) regulations on hazardous materials under 49 C.F.R. Parts 173, 178, and 180.

(b) Labeling. Label each package in accordance with the applicable DOT regulations on hazardous materials under 49 C.F.R. Part 172 subpart E.

(c) Marking.

(i) Mark each package of hazardous waste pharmaceuticals in accordance with the applicable DOT regulations on hazardous materials under 49 C.F.R. Part 172 subpart D.

(ii) Mark each container of one hundred-nineteen gallons or less used in such transportation with the following words and information in accordance with 49 C.F.R. 172.304: "HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency. Healthcare Facility's or Reverse distributor's Name and Address _____. Healthcare Facility's or Reverse distributor's EPA Identification Number _____. Manifest Tracking Number _____."

(iii) Lab packs that will be incinerated in compliance with paragraph (C) of rule 3745-270-42 of the Administrative Code are not required to be marked with EPA hazardous waste numbers, except D004, D005, D006, D007, D008, D010, and D011, where applicable. A nationally recognized electronic system, such as bar coding or radio frequency identification, may be used to identify the EPA hazardous waste numbers.

- (d) Placarding. Placard or offer the initial transporter the appropriate placards according to DOT regulations for hazardous materials under 49 C.F.R. Part 172 subpart F.
- (2) The manifest requirements of rules 3745-52-20 to 3745-52-27 of the Administrative Code, except as follows:

 - (a) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals is not required to list all applicable hazardous waste numbers in item 13 of U.S. EPA form 8700-22.
 - (b) A healthcare facility shipping non-creditable hazardous waste pharmaceuticals shall write the word "PHARMS" in item 13 of U.S. EPA form 8700-22.
- (B) Exporting non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals. A healthcare facility or reverse distributor that exports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to 40 C.F.R. Part 262 subpart H.
- (C) Importing non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals. Any person who imports non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals is subject to 40 C.F.R. Part 262 subpart H. A healthcare facility or reverse distributor may not accept imported non-creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals unless the healthcare facility or reverse distributor has an Ohio hazardous waste permit or interim standards that allows the healthcare facility or reverse distributor to accept hazardous waste from off-site.

[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."]

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3745-266-509

Shipping potentially creditable hazardous waste pharmaceuticals from a healthcare facility or a reverse distributor to a reverse distributor.

- (A) Shipping potentially creditable hazardous waste pharmaceuticals. A healthcare facility or a reverse distributor who transports or offers for transport potentially creditable hazardous waste pharmaceuticals off-site to a reverse distributor shall comply with all applicable U.S. department of transportation (DOT) regulations in 49 C.F.R. Parts 171 to 180 for any potentially creditable hazardous waste pharmaceutical that meets the definition of "hazardous material" in 49 C.F.R. 171.8. For purposes of the DOT regulations, a material is considered a hazardous waste if the material is subject to the hazardous waste manifest requirements of U.S. EPA specified in 40 C.F.R. Part 262. Because a potentially creditable hazardous waste pharmaceutical does not require a manifest, the hazardous waste pharmaceutical is not considered hazardous waste under the DOT regulations.
- (B) Delivery confirmation. Upon receipt of each shipment of potentially creditable hazardous waste pharmaceuticals, the receiving reverse distributor shall provide confirmation (paper or electronic) to the healthcare facility or reverse distributor that initiated the shipment that the shipment of potentially creditable hazardous waste pharmaceuticals has arrived at the potentially creditable hazardous waste pharmaceuticals' destination and is under the custody and control of the reverse distributor.
- (C) Procedures for when delivery confirmation is not received within thirty-five calendar days. If a healthcare facility or reverse distributor initiates a shipment of potentially creditable hazardous waste pharmaceuticals to a reverse distributor and does not receive delivery confirmation within thirty-five calendar days after the date that the shipment of potentially creditable hazardous waste pharmaceuticals was sent, the healthcare facility or reverse distributor that initiated the shipment shall contact the carrier and the intended recipient (i.e., the reverse distributor) promptly to report that the delivery confirmation was not received and to determine the status of the potentially creditable hazardous waste pharmaceuticals.
- (D) Exporting potentially creditable hazardous waste pharmaceuticals. A healthcare facility or reverse distributor that sends potentially creditable hazardous waste pharmaceuticals to a foreign destination shall comply with the applicable sections of 40 C.F.R. Part 262 subpart H, except the manifesting requirement of 40 C.F.R. 262.83(c), in addition to paragraphs (A) to (C) of this rule.
- (E) Importing potentially creditable hazardous waste pharmaceuticals. Any person that imports potentially creditable hazardous waste pharmaceuticals into Ohio is subject to paragraphs (A) to (C) of this rule in lieu of 40 C.F.R. Part 262 subpart H. Immediately after the potentially creditable hazardous waste pharmaceuticals enter Ohio, the

hazardous waste pharmaceuticals are subject to all applicable requirements of rules 3745-266-500 to 3745-266-510 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."]

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3745-266-510

Standards for the management of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals at reverse distributors.

A reverse distributor may accept potentially creditable hazardous waste pharmaceuticals from off-site and accumulate potentially creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals on-site without an Ohio hazardous waste permit or without having permit by rule, provided that the reverse distributor complies with the following conditions:

(A) Standards for reverse distributors that manage potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

(1) Notification. A reverse distributor shall notify Ohio EPA, using Ohio EPA form EPA 9029, that the reverse distributor is a reverse distributor operating in accordance with rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(a) A reverse distributor that already has an EPA identification number shall notify Ohio EPA, using Ohio EPA form EPA 9029, that the reverse distributor is a "reverse distributor," as defined in rule 3745-266-500 of the Administrative Code, within sixty days after the first effective date of rules 3745-266-500 to 3745-266-510 of the Administrative Code, or within sixty days after becoming subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(b) A reverse distributor that does not have an EPA identification number shall obtain one by notifying Ohio EPA, using Ohio EPA form EPA 9029, that the reverse distributor is a "reverse distributor," as defined in rule 3745-266-500 of the Administrative Code, within sixty days after the first effective date of rules 3745-266-500 to 3745-266-510 of the Administrative Code, or within sixty days after becoming subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.

(2) Inventory by the reverse distributor. A reverse distributor shall maintain a current inventory of all the potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals that are accumulated on-site.

(a) A reverse distributor shall inventory each potentially creditable hazardous waste pharmaceutical within thirty calendar days of each waste arriving at the reverse distributor.

hazardous waste pharmaceuticals are destined for another reverse distributor (i.e., potentially creditable hazardous waste pharmaceuticals) or a permitted or interim standards treatment, storage, or disposal facility (i.e., evaluated hazardous waste pharmaceuticals).

(b) Aging pharmaceuticals. Unexpired pharmaceuticals that are otherwise creditable but are awaiting the expiration date (i.e., aging in a holding morgue) can be accumulated for up to one hundred eighty days after the expiration date, provided that the unexpired pharmaceuticals are managed in accordance with paragraph (A) of this rule and the container labeling and management standards in paragraph (C)(4) of this rule.

(6) Security at the reverse distributor facility. A reverse distributor shall prevent unknowing entry and minimize the possibility for the unauthorized entry into the portion of the facility where potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals are kept.

(a) Examples of methods that may be used to prevent unknowing entry and minimize the possibility for unauthorized entry include, but are not limited to, the following:

(i) A twenty-four-hour continuous monitoring surveillance system.

(ii) An artificial barrier such as a fence.

(iii) A means to control entry, such as keycard access.

(b) If the reverse distributor already meets the security requirements of this paragraph because of other regulatory requirements, such as drug enforcement administration or state board of pharmacy regulations, the reverse distributor is not required to provide separate security measures pursuant to this rule.

(7) Contingency plan and emergency procedures at a reverse distributor. A reverse distributor that accepts potentially creditable hazardous waste pharmaceuticals from off-site shall prepare a contingency plan and comply with rules 3745-52-250 to 3745-52-265 of the Administrative Code.

(8) Closure of a reverse distributor. When closing an area where a reverse distributor accumulates potentially creditable hazardous waste pharmaceuticals or evaluated hazardous waste pharmaceuticals, the reverse distributor shall comply with paragraphs (A)(8)(b) and (A)(8)(c) of rule 3745-52-17 of the Administrative Code.

(9) Reporting by a reverse distributor.

(a) Unauthorized waste report. A reverse distributor shall submit an unauthorized waste report if the reverse distributor receives waste from off-site that the reverse distributor is not authorized to receive (e.g., non-pharmaceutical hazardous waste, regulated medical waste). The reverse distributor shall prepare and submit an unauthorized waste report to the director within forty-five calendar days after the unauthorized waste arrives at the reverse distributor, and shall send a copy of the unauthorized waste report to the healthcare facility (or other entity) that sent the unauthorized waste. The reverse distributor shall manage the unauthorized waste in accordance with all applicable rules. The unauthorized waste report shall be signed by the owner or operator of the reverse distributor, or an authorized representative, and contain all of the following information:

(i) The U.S. EPA identification number, name, and address of the reverse distributor.

(ii) The date the reverse distributor received the unauthorized waste.

(iii) The U.S. EPA identification number, name, and address of the healthcare facility that shipped the unauthorized waste, if available.

(iv) A description and the quantity of each unauthorized waste the reverse distributor received.

(v) The method of treatment, storage, or disposal for each unauthorized waste.

(vi) A brief explanation of why the waste was unauthorized, if known.

(b) Additional reports. The director may require reverse distributors to submit additional reports concerning the quantities and disposition of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

(10) Recordkeeping by reverse distributors. A reverse distributor shall keep all of the following records (paper or electronic) readily available upon request by an inspector. The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

- (a) A copy of the reverse distributor's notification on file for as long as the facility is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.
 - (b) A copy of the delivery confirmation and the shipping papers for each shipment of potentially creditable hazardous waste pharmaceuticals that the reverse distributor receives, and a copy of each unauthorized waste report, for at least three years after the date the shipment arrives at the reverse distributor.
 - (c) A copy of the reverse distributor's current inventory for as long as the facility is subject to rules 3745-266-500 to 3745-266-510 of the Administrative Code.
- (B) Additional standards for reverse distributors that manage potentially creditable hazardous waste pharmaceuticals destined for another reverse distributor. A reverse distributor that does not have an Ohio hazardous waste permit or permit by rule shall comply with the following conditions, in addition to paragraph (A) of this rule, for the management of potentially creditable hazardous waste pharmaceuticals that are destined for another reverse distributor for further evaluation or verification of manufacturer credit:
- (1) A reverse distributor that receives potentially creditable hazardous waste pharmaceuticals from a healthcare facility shall send those potentially creditable hazardous waste pharmaceuticals to another reverse distributor within one hundred eighty days after the potentially creditable hazardous waste pharmaceuticals have been evaluated, or follow paragraph (C) of this rule for evaluated hazardous waste pharmaceuticals.
 - (2) A reverse distributor that receives potentially creditable hazardous waste pharmaceuticals from another reverse distributor shall send those potentially creditable hazardous waste pharmaceuticals to a reverse distributor that is a pharmaceutical manufacturer within one hundred eighty days after the potentially creditable hazardous waste pharmaceuticals have been evaluated, or follow paragraph (C) of this rule for evaluated hazardous waste pharmaceuticals.
 - (3) A reverse distributor shall ship potentially creditable hazardous waste pharmaceuticals destined for another reverse distributor in accordance with rule 3745-266-509 of the Administrative Code.
 - (4) Recordkeeping by reverse distributors. A reverse distributor shall keep all of the following records (paper or electronic) readily available upon request

by an inspector for each shipment of potentially creditable hazardous waste pharmaceuticals that the reverse distributor initiates to another reverse distributor, for at least three years after the date of shipment. The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

(a) The confirmation of delivery.

(b) The department of transportation (DOT) shipping papers prepared in accordance with 49 C.F.R. Part 172 subpart C, if applicable.

(C) Additional standards for reverse distributors that manage evaluated hazardous waste pharmaceuticals. A reverse distributor that does not have an Ohio hazardous waste permit or permit by rule shall comply with the following conditions, in addition to paragraph (A) of this rule, for the management of evaluated hazardous waste pharmaceuticals:

(1) Accumulation area at the reverse distributor. A reverse distributor shall designate an on-site accumulation area where the reverse distributor shall accumulate evaluated hazardous waste pharmaceuticals.

(2) Inspections of on-site accumulation area. A reverse distributor shall inspect the reverse distributor's on-site accumulation area at least once every seven days, looking at containers for leaks and for deterioration caused by corrosion or other factors, as well as for signs of diversion.

(3) Personnel training at a reverse distributor. Personnel at a reverse distributor who handle evaluated hazardous waste pharmaceuticals are subject to the training requirements of paragraph (A)(7) of rule 3745-52-17 of the Administrative Code.

(4) Labeling and management of containers at on-site accumulation areas. A reverse distributor accumulating evaluated hazardous waste pharmaceuticals in containers in an on-site accumulation area shall do all of the following:

(a) Label the containers with the words, "Hazardous Waste Pharmaceuticals."

(b) Ensure the containers are in good condition and managed to prevent leaks.

(c) Use containers that are made of or lined with materials which shall not react with, and are otherwise compatible with, the evaluated hazardous waste pharmaceuticals, so that the ability of the container to contain the waste is not impaired.

- (d) Keep containers closed, if holding liquid or gel evaluated hazardous waste pharmaceuticals. If the liquid or gel evaluated hazardous waste pharmaceuticals are in the original, intact, sealed packaging; or repackaged, intact, sealed packaging, the evaluated hazardous waste pharmaceuticals are considered to meet the closed container standard.
 - (e) Manage any container of ignitable or reactive evaluated hazardous waste pharmaceuticals, or any container of commingled incompatible evaluated hazardous waste pharmaceuticals, so that the container does not have the potential to do any of the following:
 - (i) Generate extreme heat or pressure, fire or explosion, or violent reaction.
 - (ii) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health.
 - (iii) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.
 - (iv) Damage the structural integrity of the container of hazardous waste pharmaceuticals.
 - (v) Through other like means threaten human health or the environment.
 - (f) Accumulate evaluated hazardous waste pharmaceuticals that are prohibited from being combusted because of the dilution prohibition of paragraph (C) of rule 3745-270-03 of the Administrative Code [e.g., arsenic trioxide (P012)] in separate containers from other evaluated hazardous waste pharmaceuticals at the reverse distributor.
- (5) EPA hazardous waste numbers. Prior to shipping evaluated hazardous waste pharmaceuticals off-site, all containers shall be marked with the applicable EPA hazardous waste numbers. A nationally recognized electronic system, such as bar coding or radio frequency identification, may be used to identify the EPA hazardous waste numbers.
- (6) Shipments. A reverse distributor shall ship evaluated hazardous waste pharmaceuticals that are destined for a permitted or interim standards treatment, storage, or disposal facility in accordance with the applicable shipping standards in paragraph (A) or (B) of rule 3745-266-508 of the Administrative Code.

(7) Procedures for a reverse distributor to manage rejected shipments. A reverse distributor that sends a shipment of evaluated hazardous waste pharmaceuticals to a designated facility with the understanding that the designated facility can accept and manage the waste, and later receives that shipment back as a rejected load in accordance with the manifest discrepancy provisions of rule 3745-54-72 or 3745-65-72 of the Administrative Code, may accumulate the returned evaluated hazardous waste pharmaceuticals on-site for up to an additional ninety days in the on-site accumulation area, provided the rejected or returned shipment is managed in accordance with paragraphs (A) and (C) of rule 3745-266-510 of the Administrative Code. Upon receipt of the returned shipment, the reverse distributor shall do all of the following:

(a) Sign either of the following:

(i) Item 18c of the original manifest, if the original manifest was used for the returned shipment.

(ii) Item 20 of the new manifest, if a new manifest was used for the returned shipment.

(b) Provide the transporter a copy of the manifest.

(c) Within thirty days after receipt of the rejected shipment of the evaluated hazardous waste pharmaceuticals, send a copy of the manifest to the designated facility that returned the shipment to the reverse distributor.

(d) Within ninety days after receipt of the rejected shipment, transport or offer for transport the returned shipment of evaluated hazardous waste pharmaceuticals in accordance with the applicable shipping standards of paragraph (A) or (B) of rule 3745-266-508 of the Administrative Code.

(8) Land disposal restrictions. Evaluated hazardous waste pharmaceuticals are subject to the land disposal restrictions of Chapter 3745-270 of the Administrative Code. A reverse distributor that accepts potentially creditable hazardous waste pharmaceuticals from off-site shall comply with the land disposal restrictions in accordance with paragraph (A) of rule 3745-270-07 of the Administrative Code.

(9) Reporting by a reverse distributor for evaluated hazardous waste pharmaceuticals.

(a) Biennial reporting by a reverse distributor. A reverse distributor that ships evaluated hazardous waste pharmaceuticals off-site shall prepare and submit a single copy of a biennial report to the director by March first

of each even numbered year in accordance with rule 3745-52-41 of the Administrative Code.

(b) Exception reporting by a reverse distributor for a missing copy of the manifest.

(i) For shipments from a reverse distributor to a designated facility, the reverse distributor shall do the following:

(a) If a reverse distributor does not receive a copy of the manifest with the signature of the owner or operator of the designated facility within thirty-five days after the date the evaluated hazardous waste pharmaceuticals were accepted by the initial transporter, the reverse distributor shall contact the transporter or the owner or operator of the designated facility to determine the status of the evaluated hazardous waste pharmaceuticals.

(b) A reverse distributor shall submit an exception report to the director if the reverse distributor has not received a copy of the manifest with the signature of the owner or operator of the designated facility within forty-five days after the date the evaluated hazardous waste pharmaceutical was accepted by the initial transporter. The exception report shall include both of the following:

(i) A legible copy of the manifest for which the reverse distributor does not have confirmation of delivery.

(ii) A cover letter signed by the reverse distributor, or an authorized representative, explaining the efforts taken to locate the evaluated hazardous waste pharmaceuticals and the results of those efforts.

(ii) For shipments rejected by the designated facility and shipped to an alternate facility, the reverse distributor shall do the following:

(a) A reverse distributor that does not receive a copy of the manifest with the signature of the owner or operator of the alternate facility within thirty-five days after the date the evaluated hazardous waste pharmaceuticals were accepted by the initial transporter shall contact the transporter or the owner or operator of the alternate facility to determine the status of

the hazardous waste. The thirty-five-day time frame begins the date the evaluated hazardous waste pharmaceuticals are accepted by the transporter forwarding the hazardous waste shipment from the designated facility to the alternate facility.

(b) A reverse distributor shall submit an exception report to the director if the reverse distributor has not received a copy of the manifest with the signature of the owner or operator of the alternate facility within forty-five days after the date the evaluated hazardous waste pharmaceuticals were accepted by the initial transporter. The forty-five-day timeframe begins the date the evaluated hazardous waste pharmaceuticals are accepted by the transporter forwarding the hazardous waste pharmaceutical shipment from the designated facility to the alternate facility. The exception report shall include both of the following:

(i) A legible copy of the manifest for which the generator does not have confirmation of delivery.

(ii) A cover letter signed by the reverse distributor, or an authorized representative, explaining the efforts taken to locate the evaluated hazardous waste pharmaceuticals and the results of those efforts.

(10) Recordkeeping by a reverse distributor for evaluated hazardous waste pharmaceuticals.

(a) A reverse distributor shall keep a log (written or electronic) of the inspections of the on-site accumulation area, required by paragraph (C) (2) of this rule. This log shall be retained as a record for at least three years after the date of the inspection.

(b) A reverse distributor shall keep a copy of each manifest signed in accordance with paragraph (A) of rule 3745-52-23 of the Administrative Code for three years or until the reverse distributor receives a signed copy from the designated facility that received the evaluated hazardous waste pharmaceutical. This signed copy shall be retained as a record for at least three years after the date the evaluated hazardous waste pharmaceutical was accepted by the initial transporter.

(c) A reverse distributor shall keep a copy of each biennial report for at least three years after the due date of the report.

(d) A reverse distributor shall keep a copy of each exception report for at least three years after the submittal of the report.

(e) A reverse distributor shall keep records to document personnel training, in accordance with paragraph (A)(7)(d) of rule 3745-52-17 of the Administrative Code.

(f) All records shall be readily available upon request by an inspector. The periods of retention referred to in this rule are extended automatically during the course of any unresolved enforcement action regarding the regulated activity, or as requested by the director.

(D) When a reverse distributor shall have a permit. A reverse distributor is an operator of a hazardous waste treatment, storage, or disposal facility and is subject to the requirements of Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 and rules 3745-50-40 to 3745-50-235 of the Administrative Code, if the reverse distributor does any of the following:

(1) Does not meet the conditions of this rule.

(2) Accepts manifested hazardous waste from off-site.

(3) Treats or disposes of hazardous waste pharmaceuticals on-site.

[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."]

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3745-270-01

Purpose, scope, and applicability - land disposal restrictions.

- (A) Chapter 3745-270 of the Administrative Code identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.
- (B) Except as specifically provided otherwise in Chapter ~~3745-270~~3745-51 or ~~3745-51~~3745-270 of the Administrative Code, Chapter 3745-270 of the Administrative Code applies to persons who generate or transport hazardous waste and owners and operators of hazardous waste treatment, storage, and disposal facilities.
- (C) Restricted wastes may continue to be land disposed as follows:
- (1) Where persons have been granted an extension to the effective date of a prohibition under rules 3745-270-20 to 3745-270-39 of the Administrative Code, or pursuant to rule 3745-270-05 of the Administrative Code, with respect to those wastes covered by the extension.
 - (2) Where persons have been granted an exemption from a prohibition pursuant to a petition under rule 3745-270-06 of the Administrative Code, with respect to those wastes and units covered by the exemption.
 - (3) Wastes that are hazardous only because ~~they~~the wastes exhibit a hazardous characteristic, and which are otherwise prohibited from land disposal under Chapter 3745-270 of the Administrative Code; or 40 ~~CFR~~CFR.F.R. Part 148; are not prohibited from land disposal if the wastes meet the following criteria:
 - (a) Are disposed into a nonhazardous or hazardous injection well as described in 40 ~~CFR~~CFR.F.R. 144.6(a).
 - (b) Do not exhibit any prohibited characteristic of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code at the point of injection.
 - (4) Wastes that are hazardous only because the wastes exhibit a hazardous characteristic, and which are otherwise prohibited by Chapter 3745-270 of the Administrative Code, are not prohibited if the wastes meet any of the following criteria, unless the wastes are subject to a specified method of treatment other than DEACT in rule 3745-270-40 of the Administrative Code, or are D003 reactive cyanide:

- (a) The wastes are managed in a treatment system which subsequently discharges to waters of the United States pursuant to a permit issued under Section 402 of the Clean Water Act (CWA); or
 - (b) The wastes are treated for the purposes of the pretreatment requirements of Section 307 of the CWA; or
 - (c) The wastes are managed in a zero discharge system engaged in "CWA-equivalent treatment" as defined in paragraph (A) of rule 3745-270-37 of the Administrative Code; and
 - (d) The wastes no longer exhibit a prohibited characteristic at the point of land disposal (i.e., placement in a surface impoundment).
- (D) Chapter 3745-270 of the Administrative Code does not affect the availability of a waiver under Section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, ~~42 U.S.C. 9604~~ (CERCLA).
- (E) The following hazardous wastes are not subject to any provision of Chapter 3745-270 of the Administrative Code:
- (1) Waste generated by "very small quantity generators," ~~of less than one hundred kilograms of non-acute hazardous waste per month or less than one kilogram of acute hazardous waste per month, as described~~ defined in rule ~~3745-51-05~~ 3745-50-10 of the Administrative Code.
 - (2) Waste pesticides that a farmer disposes of pursuant to rule 3745-52-70 of the Administrative Code.
 - (3) Wastes identified or listed as hazardous after November 8, 1984 for which Ohio EPA has not promulgated land disposal prohibitions or treatment standards.
 - (4) De minimis losses of characteristic wastes to wastewaters are not considered to be prohibited wastes and are defined as losses from normal material handling operations (e.g. spills from the unloading or transfer of materials from bins or other containers; leaks from pipes, valves, or other devices used to transfer materials); minor leaks of process equipment, storage tanks, or containers; leaks from well-maintained pump packings and seals; sample purgings; and relief device discharges; discharges from safety showers and rinsing and cleaning of personal safety equipment; rinsate from empty containers or from containers that are rendered empty by that rinsing; and laboratory wastes not exceeding one per cent of the total flow of wastewater into the facility's headworks on an annual basis, or with a combined annualized average concentration not

exceeding one part per million in the headworks of the facility's wastewater treatment or pretreatment facility.

(F) "Universal waste handlers" and "universal waste transporters," (as defined in rule 3745-50-10 of the Administrative Code), are exempt from rules 3745-270-07 and 3745-270-50 of the Administrative Code for the wastes listed in paragraphs (F)(1) to (F)(5) of this rule. These handlers and transporters are subject to regulation under Chapter 3745-273 of the Administrative Code when handling the following universal wastes:

- (1) Batteries as described in rule 3745-273-02 of the Administrative Code.
- (2) Pesticides as described in rule 3745-273-03 of the Administrative Code.
- (3) Mercury-containing equipment as described in rule 3745-273-04 of the Administrative Code.
- (4) Lamps as described in rule 3745-273-05 of the Administrative Code.
- (5) Ohio-specific universal wastes, which include the following:
 - (a) Aerosol containers as described in paragraph (A) of rule 3745-273-89 of the Administrative Code.
 - (b) Antifreeze as described in paragraph (B) of rule 3745-273-89 of the Administrative Code.
 - (c) Paint and paint-related waste as described in paragraph (C) of rule 3745-273-89 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."]

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3745-270-07

Testing, tracking, and recordkeeping requirements for generators, reverse distributors, treaters, and disposal facilities.**(A) Requirements for generators and reverse distributors.**

- (1) A generator of a hazardous waste shall determine if the waste has to be treated before the 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 shall send the waste to a permitted hazardous waste treatment facility, where the waste treatment facility shall comply with rule 3745-54-13 of the Administrative Code and paragraph (B) of this rule.]
 - (b) In addition, some hazardous wastes shall be treated by particular treatment methods before 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 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 the 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, 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 the generator's waste shall be treated, with the initial shipment of waste to each treatment

or storage facility, the generator shall 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 shall 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 shall be treated, the notification shall include the EPA hazardous waste numbers and manifest number of the first shipment and shall state "This hazardous waste may or may not be subject to the LDR treatment standards. The treatment facility shall 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 shall be sent to the new treatment or storage facility and a copy shall be placed in the generator's files.

(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 shall 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 shall 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 shall send a one-time written notice to each facility receiving the waste, and place a copy in the generator's files. The notice shall include the information in column B of table 1 of this rule.

(c) If the waste changes, the generator shall send a new notice and certification to the receiving facility, and place a copy in the generator's 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 such 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 shall send a one-time written notice to each land disposal facility receiving the waste. The notice shall include the information in column C of table 1 of this rule. If the waste changes, the generator shall send a new notice to the receiving facility, and place a copy in the generator's files.

Table 1: Generator Paperwork Requirements

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 Administrative Code. The constituents of concern for F001 to F005, and F039, and underlying hazardous constituents in characteristic wastes,	X	X		

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 <u>all the constituents</u> on the LDR notice.				
4. The notice shall include the applicable 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 contaminants subject to treatment, as described in paragraph (B) of rule 3745-270-45 of the Administrative Code,	X		X	

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 or 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~~ rules 3745-52-15, 3745-52-16, and 3745-52-17 of the Administrative Code to meet applicable LDR treatment standards in rule 3745-270-40 of the Administrative Code, the generator shall develop and

follow a written waste analysis plan which describes the procedures the generator 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 waste analysis plan shall be kept on site in the generator's records, and the following requirements shall be met:

- (a) The waste analysis plan shall be based on a detailed chemical and physical analysis of a representative sample of the prohibited wastes being treated, and contain all information necessary to treat the wastes in accordance with Chapter 3745-270 of the Administrative Code, including the selected testing frequency.
 - (b) The waste analysis plan shall 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 shall comply with the notification requirements of paragraph (A)(3) of this rule.
- (6) If a generator determines any of the following:
- (a) That the waste or contaminated soil is restricted based solely on the generator's knowledge of the waste, all supporting data used to make this determination shall be retained on-site in the generator's files.
 - (b) 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 shall be retained on-site in the generator's files.
- (7) If a generator determines that the 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], 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 shall 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~~after 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~~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. This paragraph applies 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~~that contains 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 shall submit a notice that provides the information in column D of table 1 of this rule, and the following certification. The certification, which shall be signed by an authorized representative and shall be placed in the generator's files, shall 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 A 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 shall 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 shall comply with paragraphs (A)(6) and (A)(7) of this rule.
- (10) Small quantity generators with tolling agreements pursuant to paragraph ~~(F)~~(E) of rule 3745-52-20 of the Administrative Code shall comply with the applicable notification and certification requirements of paragraph (A) of this rule for the initial shipment of the waste subject to the tolling agreement. Such generators shall 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 tolling 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 shall test the wastes according to the frequency specified in the treatment facility's waste analysis plans as required by rule 3745-54-13 or 3745-65-13 of the Administrative Code. Such testing shall 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 shall 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 shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards in Chapter 3745-270 of the Administrative Code.
- (3) A one-time notice shall be sent with the initial shipment of waste or contaminated soil to the land disposal facility. A copy of the notice shall 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 shall be sent to the new receiving facility and a copy placed in the treatment facility's files.
- (b) The one-time notice shall include the requirements in table 2 of this rule:

Table 2: Treatment Facility Paperwork Requirements

Table 2: Treatment Facility Paperwork Requirements	
Required information	3745-270-07(B)
1. 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 <u>all of the constituents</u> on the LDR notice.	X
3. The notice shall include the applicable wastewater or nonwastewater 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 or complies with] the soil treatment standards as provided by paragraph (C) of rule 3745-270-49 of the Administrative Code."	X
6. A certification is needed (see applicable rule for exact wording)	X

- (4) The treatment facility shall 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 shall 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 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 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 shall 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 shall 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 paragraph (B)(4) to (B)(4)(c)~~ of this rule.
- (c) For wastes with organic constituents ~~having that have~~ 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, shall 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 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 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 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 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, shall 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 shall be placed in the facility's on-site files. ~~if~~If the waste or the receiving facility changes, a new certification and notification shall be prepared and placed in the on-site files. In addition, the recycling facility also shall 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 shall do the following:
- (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 shall 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 shall 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 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 shall 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 shall document and certify compliance with the treatment standards from the table in rule 3745-270-45 of the Administrative Code as follows:
- (a) Records shall be kept of all inspections, evaluations, and analyses of treated debris that are made to determine compliance with the treatment standards.
 - (b) Records shall be kept of any data or information the treater obtains during treatment of the debris that identifies key operating parameters of the treatment unit.
 - (c) For each shipment of treated debris, a certification of compliance with the treatment standards shall be signed by an authorized representative and placed in the treatment facility's files. The certification shall 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, shall do both of the following:

- (1) Prepare a one-time only documentation of these determinations including all supporting information.
- (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."]

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3745-270-50

Prohibitions on storage of restricted wastes.

(A) Except as provided in this rule, the storage of hazardous wastes restricted from land disposal under rules 3745-270-20 to 3745-270-39 of the Administrative Code or Section 3004(d) of RCRA is prohibited, unless the following conditions are met:

- (1) A generator stores such wastes in tanks, containers, or containment buildings on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and the generator complies with ~~the requirements in rule 3745-52-34~~ rules 3745-52-16 and 3745-52-17 of the Administrative Code and Chapters 3745-54 to 3745-57, 3745-65 to 3745-69, 3745-205, and 3745-256 of the Administrative Code.

[Comment: A generator who is in existence on the effective date of a rule in Chapter 3745-270 of the Administrative Code and who ~~must~~shall store hazardous wastes for longer than ninety days due to the rules of Chapter 3745-270 of the Administrative Code becomes an owner or operator of a storage facility and ~~must~~shall obtain an Ohio hazardous waste installation and operation permit. Such a facility may qualify for a permit by rule upon compliance with rule 3745-50-46 and paragraph (C) of rule 3745-50-40 of the Administrative Code.]

- (2) An owner or operator of a hazardous waste treatment, storage, or disposal facility stores such wastes in tanks, containers, or containment buildings solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment, or disposal and:

(a) Each container is clearly marked to identify ~~its~~the container's contents and ~~the date each period of accumulation begins;~~with all of the following:

(i) The words "Hazardous Waste."

(ii) The applicable EPA hazardous waste numbers in rules 3745-51-20 to 3745-51-24 and 3745-51-30 to 3745-51-35 of the Administrative Code, or use a nationally recognized electronic system, such as bar coding, to identify the EPA hazardous waste numbers.

(iii) An indication of the hazards of the contents. Examples include, but are not limited to, the following:

(a) The applicable hazardous waste characteristic (i.e., ignitable, corrosive, reactive, toxic).

(b) Hazard communication consistent with the department of transportation requirements at 49 C.F.R. Part 172 subpart E (labeling) or subpart F (placarding).

(c) A hazard statement or pictogram consistent with the occupational safety and health administration hazard communication standard at 29 C.F.R. 1910.1200.

(d) A chemical hazard label consistent with the national fire protection association code 704.

(iv) The date each period of accumulation begins.

(b) Each tank is clearly marked with a description of ~~its~~the tank's contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility. Regardless of whether the tank ~~itself~~ is marked, an owner or operator ~~must~~shall comply with the operating record requirements specified in rule 3745-54-73 or 3745-65-73 of the Administrative Code.

(3) A transporter stores manifested shipments of such wastes at a transfer facility for ten days or less.

(4) A healthcare facility accumulates such wastes in containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste pharmaceuticals as necessary to facilitate proper recovery, treatment, or disposal, and the healthcare facility complies with the applicable requirements in rules 3745-266-502 and 3745-266-503 of the Administrative Code.

(5) A reverse distributor accumulates such wastes in containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste pharmaceuticals as necessary to facilitate proper recovery, treatment, or disposal, and the reverse distributor complies with rule 3745-266-510 of the Administrative Code.

(B) An owner or operator of a treatment, storage, or disposal facility may store such wastes for up to one year unless Ohio EPA can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

(C) An owner or operator of a treatment, storage, or disposal facility may store such wastes beyond one year; however, the owner or operator bears the burden of proving

that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

- (D) If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension under rule 3745-270-05 of the Administrative Code, an approved petition under rule 3745-270-06 of the Administrative Code, or a national capacity variance under rules 3745-270-30 to 3745-270-39 of the Administrative Code), the prohibition in paragraph (A) of this rule does not apply during the period of such exemption.
- (E) The prohibition in paragraph (A) of this rule does not apply to hazardous wastes that meet the treatment standards specified in rule 3745-270-42 of the Administrative Code or the treatment standards specified in a variance granted under rule 3745-270-44 of the Administrative Code, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in rule 3745-270-32 of the Administrative Code or in Section 3004 of RCRA.
- (F) Liquid hazardous wastes containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to fifty parts per million ~~must~~shall be stored at a facility that ~~meets the requirements of~~complies with 40 ~~CFR~~C.F.R. 761.65(b) and ~~must~~shall be removed from storage and treated or disposed as required by Chapter 3745-270 of the Administrative Code within one year ~~of~~after the date when such wastes are first placed into storage. Paragraph (C) of this rule does not apply to such PCB waste prohibited under rule 3745-270-32 of the Administrative Code.
- (G) The prohibition and requirements in this rule do not apply to hazardous remediation wastes stored in a staging pile approved pursuant to rule 3745-57-74 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."]

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3745-273-08

Applicability- household and ~~conditionally exempt~~ very small quantity generator waste.

(A) Persons ~~managing~~ who manage the wastes listed in paragraphs (A)(1) to (A)(2) of this rule, at such person's option, may manage such wastes under Chapter 3745-273 of the Administrative Code as follows:

- (1) Household wastes that are exempt under paragraph (B)(1) of rule 3745-51-04 of the Administrative Code and are also of the same type as the "universal wastes" defined in rule 3745-273-09 of the Administrative Code.
- (2) ~~Conditionally exempt~~ Very small quantity generator wastes that are exempt under rule ~~3745-51-05~~ 3745-52-14 of the Administrative Code and are also of the same type as the "universal wastes" defined in rule 3745-273-09 of the Administrative Code.

[Comment: Persons who store, treat, or dispose of ~~conditionally exempt~~ very small quantity generator wastes in Ohio, who are not the generator of that waste, and who do not manage those wastes under Chapter 3745-273 of the Administrative Code, are required to obtain an Ohio hazardous waste permit and to comply with the applicable requirements in Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.]

(B) Persons who commingle the wastes described in paragraphs (A)(1) and (A)(2) of this rule together with universal waste regulated under Chapter 3745-273 of the Administrative Code shall manage the commingled waste under Chapter 3745-273 of the Administrative Code.

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3745-273-13

Waste management - standards for small quantity handlers of universal waste.

- (A) Universal waste batteries. A small quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A small quantity handler of universal waste shall contain in a container any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions ~~in a container~~. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
 - (2) A small quantity handler of universal waste may conduct any or all of the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but shall be immediately closed after removal):
 - (a) Sorting batteries by type.
 - (b) Mixing battery types in one container.
 - (c) Discharging batteries so as to remove the electric charge.
 - (d) Regenerating used batteries.
 - (e) Disassembling batteries or battery packs into individual batteries or cells.
 - (f) Removing batteries from consumer products.
 - (g) Removing electrolyte from batteries.
 - (3) A small quantity handler of universal waste who removes electrolyte from batteries, or who generates other waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed in paragraph (A)(2) of this rule, shall determine whether the electrolyte or other waste exhibit a characteristic of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.
 - (a) If the electrolyte or other waste exhibit a characteristic of hazardous waste, the electrolyte or other waste is subject to all applicable requirements of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code. The handler is considered the

generator of the hazardous electrolyte or other waste and is subject to Chapter 3745-52 of the Administrative Code.

(b) If the electrolyte or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable law.

(B) Universal waste pesticides. A small quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following ~~manners~~:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A container that does not comply with paragraph (B)(1) of this rule, provided that the unacceptable container is overpacked in a container that does comply with paragraph (B)(1) of this rule.

(3) A tank that complies with rules 3745-66-90 to ~~3745-66-101~~3745-66-99 of the Administrative Code, except for paragraph (C) of rule 3745-66-97, ~~rule 3745-66-100, and rule 3745-66-101~~ of the Administrative Code.

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(C) Universal waste mercury-containing equipment. A small quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A small quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

- (2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler does all of the following:
- (a) Removes and manages the ampules in a manner designed to prevent breakage of the ampules.
 - (b) Removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage).
 - (c) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules, from the containment device to a container that complies with rule ~~3745-52-34~~3745-52-16 or 3745-52-17 of the Administrative Code.
 - (d) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that complies with rule ~~3745-52-34~~3745-52-16 or 3745-52-17 of the Administrative Code;
 - (e) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable occupational safety and health (OSHA) exposure levels for mercury.
 - (f) Ensures that employees ~~removing~~who remove ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers.
 - (g) Stores removed ampules in closed, non-leaking containers that are in good condition.
 - (h) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.
- (3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler does both of the following:
- (a) Immediately seals the original housing ~~holding~~that holds the mercury with an air-tight seal to prevent the release of any mercury to the environment.

- (b) Follows all requirements for removing ampules and managing removed ampules under paragraph (C)(2) of this rule.

(4) Mercury and clean-up residues.

- (a) A small quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in the original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code:

- (i) Mercury or clean-up residues resulting from spills or leaks.

- (ii) Other waste generated as a result of the removal of mercury-containing ampules or housings (e.g., the remaining mercury-containing device).

- (b) If the mercury, residues, or other waste exhibit a characteristic of hazardous waste, the mercury, residues, or other waste shall be managed in compliance with all applicable requirements of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code. The handler is considered the generator of the mercury, residues, or other waste and shall manage the mercury, residues, or other waste in compliance with Chapter 3745-52 of the Administrative Code.

- (c) If the mercury, residues, or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable law.

(D) Universal waste lamps. A small quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (1) A small quantity handler of universal waste shall contain any lamp in containers, cabinets, or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers, cabinets, and packages shall remain closed and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

- (2) A small quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken, and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment.

Containers shall be closed, structurally sound, compatible with the contents of the lamps, and shall lack evidence of leakage, spillage, or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(E) Universal waste aerosol containers. A small quantity handler of universal waste shall manage universal waste aerosol containers in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:

- (1) A small quantity handler of universal waste shall store aerosol containers in a cabinet, hopper, container, or other unit such as a ~~table-top~~ table-top or shelving unit that is structurally sound and compatible with the contents of the containers and that lacks evidence of leakage.
- (2) A small quantity handler of universal waste who initially collects aerosol containers at a universal waste satellite accumulation area prior to moving the aerosol containers to a specified accumulation area for storage, puncturing, or shipment off-site shall move the satellite accumulation container to the specified accumulation area prior to the capacity of the satellite accumulation area being exceeded.
- (3) A small quantity handler of universal waste shall immediately empty a leaking aerosol container of the container's contents in accordance with paragraph (E) (4) of this rule or shall individually overpack the leaking aerosol container in a container having enough absorbent material to absorb the leaking contents of the aerosol container.
- (4) A small quantity handler of universal waste may puncture or crush an aerosol container to remove and collect the contents of the aerosol container rendering the container empty, provided the handler does the following:
 - (a) The small quantity handler of universal waste shall use commercially available equipment, or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents, to puncture or crush and empty aerosol containers within an enclosed compartment.
 - (b) The small quantity handler of universal waste shall use puncturing or crushing equipment that has sufficient processing capacity to puncture or crush the quantity of aerosol containers received or generated within one year.

- (c) The small quantity handler of universal waste shall ensure that puncturing or crushing equipment meets the following conditions:
- (i) The equipment shall be located in a ~~well-ventilated~~well-ventilated area.
 - (ii) The equipment shall be protected from an ignition source.
 - (iii) The equipment shall be connected to a container or tank to collect liquids released from the aerosol container.
- (d) The small quantity handler of universal waste shall maintain the puncturing or crushing equipment and replace air filters according to the manufacturer's specifications.
- (e) The small quantity handler of universal waste shall determine if the collected liquids, except for liquids consisting solely of paint, and air filters meet the definition of "hazardous waste" according to Chapter 3745-51 of the Administrative Code. If the collected liquids or air filters meet the definition of hazardous waste, the handler is the generator of the hazardous waste and is subject to Chapter 3745-52 of the Administrative Code. The collected liquids, except for liquids consisting solely of paint, and air filters are not eligible to be classified as universal waste for the purposes of this rule, the empty containers may be recycled.

[Comment: Liquids ~~consisting~~that consist solely of paint collected from aerosol containers are eligible to be classified and managed as a universal waste paint in accordance with Chapter 3745-273 of the Administrative Code.]

- (f) The small quantity handler of universal waste shall train each operator of the aerosol container puncturing or crushing equipment regarding the safe and proper operation of the puncturing or crushing equipment, the maintenance of the unit, the segregation of incompatible wastes, and the identification of aerosol containers for which puncturing or crushing may not be appropriate.

[Comment: Small quantity handlers of universal waste who use aerosol container puncturing or crushing units may be subject to requirements of the Clean Air Act or the Occupational ~~Health~~Safety and ~~Safety~~Health Act.]

- (5) A small quantity handler of universal waste shall manage aerosol containers that are ignitable or reactive in accordance with the following:

- (a) Rule 3745-66-76 of the Administrative Code or obtain written approval from the authority having jurisdiction over the local fire code allowing alternative aerosol container storage less than fifty feet from the facility's property line. The written approval shall be maintained on-site for as long as ignitable or reactive aerosol containers are managed on-site.
 - (b) Rule 3745-65-17 of the Administrative Code.
- (6) A small quantity handler of universal waste shall manage aerosol containers that are incompatible in accordance with rule 3745-66-77 of the Administrative Code.
- (7) The small quantity handler of universal waste shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or unplanned sudden or non-sudden release of universal waste or hazardous constituents to air, soil, or surface water which could threaten human health or the environment.
- (F) Universal waste antifreeze. A small quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:
 - (1) A small quantity handler of universal waste shall store antifreeze in containers or tanks that are structurally sound and compatible with the antifreeze. Such containers and tanks shall lack leakage or damage, including severe corrosion, which could cause leakage under reasonably foreseeable conditions.
 - (2) A container or tank that does not comply with paragraph (F)(1) of this rule shall be overpacked or taken out of service by the small quantity handler of universal waste by transferring the contents of the container or tank to another container or tank.
 - (3) A small quantity handler of universal waste who stores antifreeze in a container shall keep the container closed except when adding or removing antifreeze.
 - (4) A small quantity handler of universal waste shall store antifreeze in a tank that complies with ~~paragraphs (B) to (H)~~paragraph (B)(3) of rule ~~3745-66-101~~3745-52-16 of the Administrative Code.
 - (5) A small quantity handler of universal waste shall not commingle or contaminate antifreeze subsequent to the removal of the antifreeze from a heat exchanger or other equipment when used to winterize that equipment with listed hazardous waste or a characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code.

- (6) A small quantity handler of universal waste shall develop and maintain at the facility a procedure that describes how antifreeze will be prevented from being commingled or contaminated subsequent to removal from the heat exchanger or other equipment when used to winterize that ~~equipment~~equipment with a listed hazardous waste or a characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code.
- (7) A small quantity handler of universal waste who manages antifreeze shall use dedicated antifreeze collection and storage containers and tanks for the management of antifreeze.
- (8) A small quantity handler of universal waste may reclaim antifreeze provided the handler does the following:
- (a) The small quantity handler of universal waste shall use commercially available equipment, or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents to reclaim the antifreeze as "reclaimed" is defined in rule 3745-51-01 of the Administrative Code.
 - (b) The small quantity handler of universal waste shall use reclamation equipment that has sufficient processing capacity to reclaim the quantity of antifreeze received or generated by the handler within one year.
 - (c) The small quantity handler of universal waste shall train each operator of the reclamation equipment regarding the proper operation and maintenance of the antifreeze reclamation equipment.
 - (d) A small quantity handler of universal waste shall determine if the wastes generated from the reclamation of antifreeze are "hazardous wastes" as described in Chapter 3745-51 of the Administrative Code. If a waste meets the definition of "hazardous waste," the handler is a hazardous waste generator and subject to regulation under Chapter 3745-52 of the Administrative Code.
- (9) A small quantity handler of universal waste, upon detection of a release of antifreeze, shall do the following as applicable:
- (a) Stop the release of antifreeze.
 - (b) Contain the released antifreeze.

- (c) Clean up and properly manage and dispose the released antifreeze and other materials generated from the clean-up according to applicable waste ~~management~~management requirements.
 - (d) Remove a leaking container or tank from service by transferring the contents to another container or tank.
 - (e) Overpack or replace any leaking storage container.
 - (f) Repair any leaking container or tank prior to returning the container or tank to service.
- (10) Spilled universal waste antifreeze that is recovered in liquid form or materials used to absorb a spill of universal waste antifreeze may be managed as universal waste antifreeze.
- (11) A small quantity handler of universal waste who manages antifreeze shall train employees who manage antifreeze regarding the universal waste requirements applicable to antifreeze, the proper management of antifreeze, the procedure to prevent contamination of antifreeze with characteristic hazardous waste or listed hazardous waste, and the proper response to a release of antifreeze.
- (G) Universal waste paint and paint-related waste. A small quantity handler of universal waste shall manage universal waste paint and paint-related wastes in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:
- (1) The small quantity handler of universal waste shall store universal waste paint or paint-related wastes in units that feed crushing or shredding equipment (i.e., hopper), containers, or tanks that are structurally sound and compatible with the paint or paint-related wastes. Such hoppers, containers, and tanks shall lack leakage or damage, including severe corrosion, which could cause leakage under reasonably foreseeable conditions.
 - (2) The small quantity handler of universal waste shall ensure that a hopper, container, or tank that does not comply with paragraph (G)(1) of this rule is overpacked or taken out of service by transferring the contents to another hopper, container, or tank.
 - (3) The small quantity handler of universal waste shall keep hoppers and containers that hold paint and paint-related wastes closed except when adding or removing paint or paint-related wastes.

- (4) The small quantity handler of universal waste shall store paint or paint-related waste in a tank that complies with ~~paragraphs (B) to (H)~~paragraph (B)(3) of rule ~~3745-66-101~~3745-52-16 of the Administrative Code.
- (5) The small quantity handler of universal waste who generates universal waste paint and paint-related wastes on-site may recycle such paint and paint-related wastes on-site by reclamation, use, or reuse as described in rule 3745-51-02 of the Administrative Code if the wastes are not burned for energy recovery or used in a manner constituting disposal according to rule 3745-51-02 of the Administrative Code.
- (6) The small quantity handler of universal waste who receives universal waste paint from another universal waste handler may recycle such paint by reclamation, use, or reuse as described in rule 3745-51-02 of the Administrative Code if the universal waste paint is not burned for energy recovery or used in a manner constituting disposal according to rule 3745-51-02 of the Administrative Code.
- (7) Wastes generated from the reclamation of universal waste paint and paint-related wastes are not universal wastes for the purposes of this rule. The handler shall evaluate the wastes to determine if such wastes are listed hazardous wastes or characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code. If a waste meets the definition of "hazardous waste," the handler is a hazardous waste generator and is subject to Chapter 3745-52 of the Administrative Code.
- (8) The small quantity handler of universal waste who recycles universal waste paint and paint-related wastes as described in paragraphs (G)(5) and (G)(6) of this rule shall ensure that employees responsible for recycling universal waste paint and paint-related wastes are trained regarding the proper operation and maintenance of the recycling process.
- (9) The small quantity handler of universal waste, upon detection of a release of paint or paint-related wastes, shall do the following as applicable:
 - (a) Stop the release.
 - (b) Contain the released paint or paint-related wastes.
 - (c) Clean up and properly manage the released paint or paint-related wastes and other materials generated from the ~~clean-up~~cleanup.
 - (d) Remove a leaking container or tank from service by transferring the contents to another container or tank.

- (e) Overpack or replace any leaking storage container.
 - (f) Repair any leaking container or tank prior to returning the container or tank to service.
- (10) A small quantity handler of universal waste shall manage paint and paint-related wastes that are ignitable or reactive in accordance with the following:
- (a) Rule 3745-66-76 of the Administrative Code or obtain written approval from the authority having jurisdiction over the local fire code allowing alternative storage less than fifty feet from the facility's property line. The written approval shall be maintained on-site for as long as the ignitable or reactive paint and paint-related wastes are managed on-site.
 - (b) Rule 3745-65-17 of the Administrative Code.
- (11) A small quantity handler of universal waste shall manage paint and paint-related wastes that are incompatible in accordance with rule 3745-66-77 of the Administrative Code.
- (12) The small quantity handler of universal waste shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or unplanned sudden or non-sudden release of universal waste or hazardous constituents to air, soil, or surface water which could threaten human health or the environment.
- (13) The small quantity handler of universal waste may open containers of universal waste paint and scrape, pour, pump, or drain the universal waste paint from the container to collect the paint and render the container empty.
- (14) The small quantity handler of universal waste may puncture, shred, or crush containers of paint that do not exceed five gallons in volume to remove and collect the paint rendering the container empty, provided the handler does all of the following:
- (a) The small quantity handler of universal waste shall use commercially available equipment, or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents, to puncture, shred or crush and empty paint containers within an enclosed compartment or hopper.

- (b) The small quantity handler of universal waste shall use equipment that has sufficient processing capacity to empty the quantity of paint containers received or generated within one year.
- (c) The small quantity handler of universal waste shall collect the liquids from the paint container. Collected liquids are still classified as universal paint waste.
- (d) The small quantity handler of universal waste shall maintain the puncturing, crushing, and shredding equipment and replace air filters according to the manufacturer's specifications.
- (e) The small quantity handler of universal waste shall train each operator of the equipment used to shred, puncture, or crush containers of universal waste paint regarding the maintenance and proper operation of the equipment.

~~[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."]~~

[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."]

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3745-273-33

Waste management - standards for large quantity handlers of universal waste.

- (A) Universal waste batteries. A large quantity handler of universal waste shall manage universal waste batteries in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- (1) A large quantity handler of universal waste shall contain in a container any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions ~~in a container~~. The container shall be closed, structurally sound, compatible with the contents of the battery, and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
 - (2) A large quantity handler of universal waste may conduct any or all of the following activities as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but shall be immediately closed after removal):
 - (a) Sorting batteries by type.
 - (b) Mixing battery types in one container.
 - (c) Discharging batteries so as to remove the electric charge.
 - (d) Regenerating used batteries.
 - (e) Disassembling batteries or battery packs into individual batteries or cells.
 - (f) Removing batteries from consumer products.
 - (g) Removing electrolyte from batteries.
 - (3) A large quantity handler of universal waste who removes electrolyte from batteries, or who generates other waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed in paragraph (A)(2) of this rule, shall determine whether the electrolyte or other waste exhibit a characteristic of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.
 - (a) If the electrolyte or other waste exhibit a characteristic of hazardous waste, the electrolyte or other waste shall be managed in compliance with all applicable requirements of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code. The

handler is considered the generator of the hazardous electrolyte or other waste and is subject to Chapter 3745-52 of the Administrative Code.

(b) If the electrolyte or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable law.

(B) Universal waste pesticides. A large quantity handler of universal waste shall manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides shall be contained in one or more of the following ~~manners~~:

(1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(2) A container that does not comply with paragraph (B)(1) of this rule, provided that the unacceptable container is overpacked in a container that does comply with paragraph (B)(1) of this rule.

(3) A tank that complies with rules 3745-66-90 to ~~3745-66-101~~3745-66-99 of the Administrative Code, except for paragraph (C) of rule 3745-66-97, ~~rule 3745-66-100, and rule 3745-66-101~~ of the Administrative Code.

(4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

(C) Universal waste mercury-containing equipment. A large quantity handler of universal waste shall manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

(1) A large quantity handler of universal waste shall place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container shall be closed, structurally sound, compatible with the contents of the device, shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions, and shall be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.

- (2) A large quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler does all of the following:
- (a) Removes and manages the ampules in a manner designed to prevent breakage of the ampules.
 - (b) Removes the ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage).
 - (c) Ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks from broken ampules from that containment device to a container that complies with rule ~~3745-52-34~~3745-52-16 or 3745-52-17 of the Administrative Code.
 - (d) Immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that complies with rule ~~3745-52-34~~3745-52-16 or 3745-52-17 of the Administrative Code.
 - (e) Ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable occupational safety and health administration (OSHA) exposure levels for mercury.
 - (f) Ensures that employees ~~removing~~who remove ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers.
 - (g) Stores removed ampules in closed, non-leaking containers that are in good condition.
 - (h) Packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.
- (3) A large quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler does both of the following:
- (a) Immediately seals the original housing ~~holding~~that holde the mercury with an air-tight seal to prevent the release of any mercury to the environment.

- (b) Follows all requirements for removing ampules and managing removed ampules under paragraph (C)(2) of this rule.

(4) Mercury and clean-up residues.

- (a) A large quantity handler of universal waste who removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in the original housing shall determine whether the following exhibit a characteristic of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code:

- (i) Mercury or clean-up residues resulting from spills or leaks.

- (ii) Other waste generated as a result of the removal of mercury-containing ampules or housings (e.g., the remaining mercury-containing device).

- (b) If the mercury, residues, or other waste exhibit a characteristic of hazardous waste, the mercury, residues, or other waste shall be managed in compliance with all applicable requirements of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code. The handler is considered the generator of the mercury, residues, or other waste and shall manage the mercury, residues, or other waste in compliance with Chapter 3745-52 of the Administrative Code.

- (c) If the mercury, residues, or other waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable law.

(D) Universal waste lamps. A large quantity handler of universal waste shall manage lamps in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

- (1) A large quantity handler of universal waste shall contain any lamp in containers, cabinets, or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers, cabinets, and packages shall remain closed and shall lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

- (2) A large quantity handler of universal waste shall immediately clean up and place in a container any lamp that is broken, and shall place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Containers shall

be closed, structurally sound, compatible with the contents of the lamps, and shall lack evidence of leakage, spillage, or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions.

(E) Universal waste aerosol containers. A large quantity handler of universal waste shall manage universal waste aerosol containers in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:

- (1) A large quantity handler of universal waste shall store aerosol containers in a cabinet, hopper, container, or other unit such as a ~~table-top~~ table-top or shelving unit that is structurally sound and compatible with the contents of the containers and that lacks evidence of leakage.
- (2) A large quantity handler of universal waste who initially collects aerosol containers at a universal waste satellite accumulation area prior to moving the aerosol containers to a specified accumulation area for storage, puncturing, or shipment off-site shall move the satellite accumulation container to the specified accumulation area prior to the capacity of the satellite accumulation area being exceeded.
- (3) A large quantity handler of universal waste shall immediately empty a leaking aerosol container of the container's contents in accordance with paragraph (E) (4) of this rule or shall individually overpack the leaking aerosol container in a container having enough absorbent material to absorb the leaking contents of the aerosol container.
- (4) A large quantity handler of universal waste may puncture or crush an aerosol container to remove and collect the contents of the aerosol container rendering the container empty, provided the handler does the following:
 - (a) The large quantity handler of universal waste shall use commercially available equipment, or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents, to puncture or crush and empty aerosol containers within an enclosed compartment.
 - (b) The large quantity handler of universal waste shall use puncturing or crushing equipment that has sufficient processing capacity to puncture or crush the quantity of aerosol containers received or generated within one year.

- (c) The large quantity handler of universal waste shall ensure that puncturing or crushing equipment meets the following conditions:
- (i) The equipment shall be located in a ~~well-ventilated~~well-ventilated area.
 - (ii) The equipment shall be protected from an ignition source.
 - (iii) The equipment shall be connected to a container or tank to collect liquids released from the aerosol container.
- (d) The large quantity handler of universal waste shall maintain the puncturing or crushing equipment and replace air filters according to the manufacturer's specifications.
- (e) The large quantity handler of universal waste shall determine if the collected liquids, except for liquids consisting solely of paint, and air filters meet the definition of "hazardous waste" according to Chapter 3745-51 of the Administrative Code. If the collected liquids or air filters meet the definition of hazardous waste, the handler is the generator of the hazardous waste and is subject to Chapter 3745-52 of the Administrative Code. The collected liquids, except for liquids consisting solely of paint, and air filters are not classified as universal waste for the purposes of this rule, the empty containers may be recycled.

[Comment: Liquids ~~consisting~~that consists solely of paint from aerosol containers are eligible to be classified and managed as a universal waste paint in accordance with Chapter 3745-273 of the Administrative Code.]

- (f) The large quantity handler of universal waste shall train each operator of the aerosol container puncturing or crushing equipment regarding the safe and proper operation of the puncturing or crushing equipment, the maintenance of the unit, the segregation of incompatible wastes, and the identification of aerosol containers for which puncturing or crushing may not be appropriate.

[Comment: Large quantity handlers of universal waste who use aerosol container puncturing or crushing units may be subject to requirements of the Clean Air Act or the Occupational ~~Health~~Safety and ~~Safety~~Health Act.]

- (5) A large quantity handler of universal waste shall manage aerosol containers that are ignitable or reactive in accordance with the following:

- (a) Rule 3745-66-76 of the Administrative Code or obtain written approval from the authority having ~~jurisdiction~~jurisdiction over the local fire code allowing alternative aerosol container storage less than fifty feet from the facility's property line. The written approval shall be maintained on-site for as long as ignitable or reactive aerosol containers are managed on-site.
 - (b) Rule 3745-65-17 of the Administrative Code.
- (6) A large quantity handler of universal waste shall manage aerosol containers that are incompatible in accordance with rule 3745-66-77 of the Administrative Code.
- (7) The large quantity handler of universal waste shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or unplanned sudden or non-sudden release of universal waste or hazardous constituents to air, soil, or surface water which could threaten human health or the environment.
- (F) Universal waste antifreeze. A large quantity handler of universal waste shall manage universal waste antifreeze in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:
- (1) A large quantity handler of universal waste shall store antifreeze in containers or tanks that are structurally sound and compatible with the antifreeze. Such containers and tanks shall lack leakage or damage, including severe corrosion, which could cause leakage under reasonably foreseeable conditions.
 - (2) A container or tank that does not comply with paragraph (F)(1) of this rule shall be overpacked or taken out of service by the large quantity handler of universal waste by transferring the contents of the container or tank to another container or tank.
 - (3) A large quantity handler of universal waste who stores antifreeze in a container shall keep the container closed except when adding or removing antifreeze.
 - (4) A large quantity handler of universal waste shall store antifreeze in a tank that complies with ~~paragraphs (B) to (H)~~paragraph (B)(3) of rule ~~3745-66-101~~3745-52-16 of the Administrative Code.
 - (5) A large quantity handler of universal waste shall not commingle or contaminate antifreeze subsequent to the removal of the antifreeze from a heat exchanger or other equipment when used to winterize that equipment with listed hazardous waste or a characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code.

- (6) A large quantity handler of universal waste shall develop and maintain at the facility a procedure that describes how antifreeze ~~will~~shall be prevented from being commingled or contaminated subsequent to removal of the antifreeze from a heat exchanger or other equipment when used to winterize that equipment with a listed hazardous waste or a characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code.
- (7) A large quantity handler of universal waste who manages antifreeze shall use dedicated antifreeze collection and storage containers and tanks for the management of antifreeze.
- (8) A large quantity handler of universal waste may reclaim antifreeze provided the handler does the following:
- (a) The large quantity handler of universal waste shall use commercially available equipment, or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents to reclaim the antifreeze as "reclaimed" is defined in rule 3745-51-01 of the Administrative Code.
 - (b) The large quantity handler of universal waste shall use reclamation equipment that has sufficient processing capacity to reclaim the quantity of antifreeze received or generated by the handler within one year.
 - (c) The large quantity handler of universal waste shall train each operator of the reclamation equipment regarding the proper operation and maintenance of the antifreeze reclamation equipment.
 - (d) A large quantity handler of universal waste shall determine if the wastes generated from the reclamation of antifreeze are "hazardous wastes" as described in Chapter 3745-51 of the Administrative Code. If a waste meets the definition of "hazardous waste," the handler is a hazardous waste generator and is subject to Chapter 3745-52 of the Administrative Code.
- (9) A large quantity handler of universal waste, upon detection of a release of antifreeze, shall do the following, as applicable:
- (a) Stop the release of antifreeze.
 - (b) Contain the released antifreeze.

- (c) Clean up and properly manage and dispose the released antifreeze and other materials generated from the ~~cleanup~~clean-up according to applicable waste management requirements.
 - (d) Remove a leaking container or tank from service by transferring the contents to another container or tank.
 - (e) Overpack or replace any leaking storage container.
 - (f) Repair any leaking container or tank prior to returning the container or tank to service.
- (10) Spilled universal waste antifreeze that is recovered in liquid form or materials used to absorb a spill of universal waste antifreeze may be managed as universal waste antifreeze.
- (11) A large quantity handler of universal waste who manages antifreeze shall train employees who manage antifreeze regarding the universal waste requirements applicable to antifreeze, the proper management of antifreeze, the procedure to prevent contamination of antifreeze with characteristic hazardous waste or listed hazardous waste, and the proper response to a release of antifreeze.
- (G) Universal waste paint and paint-related waste. A large quantity handler of universal waste shall manage universal waste paint and paint-related wastes in a way that prevents releases of any universal waste or any component of a universal waste to the environment, as follows:
- (1) The large quantity handler of universal waste shall store universal waste paint or paint-related wastes in units that feed crushing or shredding equipment (i.e., hopper), containers, or tanks that are structurally sound and compatible with the paint or paint-related wastes. Such hoppers, containers, and tanks shall lack leakage or damage, including severe corrosion, which could cause leakage under reasonably foreseeable conditions.
 - (2) The large quantity handler of universal waste shall ensure that a hopper, container, or tank that does not comply with paragraph (G)(1) of this rule is overpacked or taken out of service by transferring the contents to another hopper, container, or tank.
 - (3) The large quantity handler of universal waste shall keep hoppers and containers that hold paint and paint-related wastes closed except when adding or removing paint or paint-related wastes.

- (4) The large quantity handler of universal waste shall store paint or paint-related waste in a tank that complies with rules 3745-66-90 to 3745-66-99 except paragraph (C) of rule 3745-66-97 of the Administrative Code.
- (5) The large quantity handler of universal waste who generates universal waste paint and paint-related wastes on-site may recycle such paint and paint-related wastes on-site by reclamation, use, or reuse as described in rule 3745-51-02 of the Administrative Code if the wastes are not burned for energy recovery or used in a manner constituting disposal according to rule 3745-51-02 of the Administrative Code.
- (6) The large quantity handler of universal waste who receives universal waste paint from another universal waste handler may recycle such paint by reclamation, use, or reuse as described in rule 3745-51-02 of the Administrative Code if the universal waste paint is not burned for energy recovery or used in a manner constituting disposal according to rule 3745-51-02 of the Administrative Code.
- (7) Wastes generated from the reclamation of universal waste paint and paint-related wastes are not universal wastes for the purposes of this rule. The handler shall evaluate the wastes to determine if such wastes are listed hazardous wastes or characteristic hazardous waste as described in Chapter 3745-51 of the Administrative Code. If a waste meets the definition of "hazardous waste," the handler is a hazardous waste generator and is subject to Chapter 3745-52 of the Administrative Code.
- (8) The large quantity handler of universal waste who recycles universal waste paint and paint-related wastes as described in paragraphs (G)(5) and (G)(6) of this rule shall ensure that employees responsible for recycling universal waste paint and paint-related wastes are trained regarding the proper operation and maintenance of the recycling process.
- (9) The large quantity handler of universal waste, upon detection of a release of paint or paint-related wastes, shall do the following, as applicable:
 - (a) Stop the release.
 - (b) Contain the released paint or paint-related wastes.
 - (c) Clean up and properly manage the released paint or paint-related wastes and other materials generated from the ~~clean-up~~cleanup.
 - (d) Remove a leaking container or tank from service by transferring the contents to another container or tank.

- (e) Overpack or replace any leaking storage container.
 - (f) Repair any leaking container or tank prior to returning the container or tank to service.
- (10) A large quantity handler of universal waste shall manage paint and paint-related wastes that are ignitable or reactive in accordance with the following:
- (a) Rule 3745-66-76 of the Administrative Code or obtain written approval from the authority having jurisdiction over the local fire code allowing alternative storage less than fifty feet from the facility's property line. The written approval shall be maintained on-site for as long as the ignitable or reactive paint and paint-related wastes are managed on-site.
 - (b) Rule 3745-65-17 of the Administrative Code.
- (11) A large quantity handler of universal waste shall manage paint and paint-related wastes that are incompatible in accordance with rule 3745-66-77 of the Administrative Code.
- (12) The large quantity handler of universal waste shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or unplanned sudden or non-sudden release of universal waste or hazardous constituents to air, soil, or surface water which could threaten human health or the environment.
- (13) The large quantity handler of universal waste may open containers of universal waste paint and scrape, pour, pump, or drain the universal waste paint from the container to collect the paint and render the container empty.
- (14) The large quantity handler of universal waste may puncture, shred, or crush containers of paint that do not exceed five gallons in volume to remove and collect the contents of the container rendering the container empty, provided the handler does all of the following:
- (a) The large quantity handler of universal waste shall use commercially available equipment or equipment specifically custom designed or retrofitted according to accepted engineering practices based on established codes, standards, published technical reports, or similar peer reviewed documents to puncture, shred, or crush and empty the paint containers within an enclosed compartment or hopper.

- (b) The large quantity handler of universal waste shall use equipment that has sufficient processing capacity to empty the quantity of paint containers received or generated within one year.
- (c) The large quantity handler of universal waste shall collect the liquids from the paint container. Collected liquids are still classified as universal waste paint.
- (d) The large quantity handler of universal waste shall maintain the puncturing, crushing, and shredding equipment and replace air filters according to the manufacturer's specifications.
- (e) The large quantity handler of universal waste shall train each operator of the equipment used to shred, puncture, or crush containers of universal waste paint regarding the maintenance and proper operation of the equipment.

[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."]

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3745-273-39

Tracking universal waste shipments- standards for large quantity handlers of universal waste.

- (A) Receipt of shipments. A large quantity handler of universal waste shall keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste received shall include all of the following information:
- (1) The name and address of the originating universal waste handler or foreign shipper from whom the universal waste was sent.
 - (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, mercury-containing equipment, lamps, aerosol containers, antifreeze, and paint and paint-related waste).
 - (3) The date of receipt of the shipment of universal waste.
- (B) Shipments off-site. A large quantity handler of universal waste shall keep a record of each shipment of universal waste sent from the handler to other facilities. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste sent shall include all of the following information:
- (1) The name and address of the universal waste handler, destination facility, or foreign destination to whom the universal waste was sent.
 - (2) The quantity of each type of universal waste sent (e.g., batteries, pesticides, mercury-containing equipment, lamps, aerosol containers, antifreeze, and paint and paint-related waste).
 - (3) The date the shipment of universal waste left the facility.
- (C) Record retention.
- (1) A large quantity handler of universal waste shall retain the records described in paragraph (A) of this rule for at least three years after the date of receipt of a shipment of universal waste.
 - (2) A large quantity handler of universal waste shall retain the records described in paragraph (B) of this rule for at least three years after the date a shipment of universal waste left the facility.

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3745-273-62

Tracking universal waste shipments- standards for destination facilities.

- (A) The owner or operator of a destination facility shall keep a record of each shipment of universal waste received at the facility. The record may take the form of a log, invoice, manifest, bill of lading, movement document, or other shipping document. The record for each shipment of universal waste received shall include all of the following information:
- (1) The name and address of the universal waste handler, destination facility, or foreign shipper from whom the universal waste was sent.
 - (2) The quantity of each type of universal waste received (e.g., batteries, pesticides, mercury-containing equipment, lamps, aerosol containers, antifreeze, and paint and paint-related wastes).
 - (3) The date of receipt of the shipment of universal waste.
- (B) The owner or operator of a destination facility shall retain the records described in paragraph (A) of this rule for at least three years after the date of receipt of a shipment of universal waste.

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3745-273-80

General requirements for petitions to include other wastes under Chapter 3745-273 of the Administrative Code.

- (A) ~~Any~~Except as provided in paragraph (D) of this rule, any person seeking to add a hazardous waste or a category of hazardous waste to Chapter 3745-273 of the Administrative Code may petition for a regulatory amendment under rules 3745-273-80 to 3745-273-81 and 3745-50-20 of the Administrative Code.
- (B) The petitioner shall demonstrate to the satisfaction of the director that regulation under Chapter 3745-273 of the Administrative Code meets the following:
- (1) Is appropriate for the waste or category of waste; ~~and,~~
 - (2) Will improve management practices for the waste or category of waste; ~~and,~~
 - (3) Will improve implementation of the hazardous waste program.
 - (4) The petition shall be submitted to the director by certified mail and shall include the following:
 - (a) The petitioner's name and address; ~~and,~~
 - (b) A statement of the petitioner's interest in the subject of the petition; ~~and,~~
 - (c) A description of the subject of the petition, including suggested regulatory language; ~~and,~~
 - (d) A statement of the need and justification for the subject of the petition, including any supporting tests, studies, or other information.
 - (5) The petition should also address as many of the factors listed in rule 3745-273-81 of the Administrative Code as are appropriate for the waste or waste category addressed in the petition.
- (C) The director ~~will~~shall evaluate petitions using the factors listed in rule 3745-273-81 of the Administrative Code, and ~~will~~shall grant or deny a petition using the factors listed in that rule. The decision ~~will~~shall be based on the weight of evidence showing that regulation under Chapter 3745-273 of the Administrative Code is appropriate for the waste or category of waste, will improve management practices for the waste or category of waste, and will improve implementation of the hazardous waste program. If a petition for a regulatory amendment is granted, the director ~~will~~shall propose rules pursuant to Chapter 119. of the Revised Code to address the petition.
- (D) Hazardous waste pharmaceuticals are regulated by rules 3745-266-500 to 3745-266-510 of the Administrative Code and may not be added as a category

of hazardous waste for management in accordance with Chapter 3745-273 of the Administrative Code.

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3745-273-81

Factors ~~that the director will evaluate regarding~~ petitions to include other wastes under Chapter 3745-273 of the Administrative Code.

- (A) The waste or category of waste, as generated by a wide variety of generators, is listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code, or, if not listed, a proportion of the waste stream exhibits one or more characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code. [When a characteristic waste is added to Chapter 3745-273 of the Administrative Code by using a generic name to identify the waste category (e.g., batteries), the definition of "universal waste" in rules 3745-50-10 and 3745-273-09 of the Administrative Code ~~will~~shall be amended to include only the hazardous waste portion of the waste category (e.g., hazardous waste batteries)]. Thus, only the portion of the waste stream that does exhibit one or more characteristics (i.e., is hazardous waste) is subject to Chapter 3745-273 of the Administrative Code.
- (B) The waste or category of waste is not exclusive to a specific industry or group of industries, is commonly generated by a wide variety of types of establishments (including, for example, households, retail and commercial businesses, office complexes, ~~conditionally exempt~~very small quantity generators, small businesses, government organizations, as well as large industrial facilities);.
- (C) The waste or category of waste is generated by a large number of generators (e.g., more than one thousand nationally) and is frequently generated in relatively small quantities by each generator;.
- (D) Systems to be used ~~for collecting~~to collect the waste or category of waste (including packaging, marking, and labeling practices) would ensure close stewardship of the waste;.
- (E) The risk posed by the waste or category of waste during accumulation and transport is relatively low compared to other hazardous wastes, and specific management standards proposed or referenced by the petitioner (e.g., waste management requirements appropriate to be added to rules 3745-273-13, 3745-273-33, and 3745-273-52 of the Administrative Code; ~~and/or~~and applicable department of transportation requirements in 49 CFR Parts 100 to 185) would be protective of human health and the environment during accumulation and transport;.
- (F) Regulation of the waste or category of waste under Chapter 3745-273 of the Administrative Code ~~will increase~~increases the likelihood that the waste ~~will be~~is diverted from non-hazardous waste management systems (e.g., the municipal waste stream, non-hazardous industrial or commercial waste stream, municipal sewer or stormwater systems) to recycling, treatment, or disposal which are in compliance with Chapter 3734. of the Revised Code.

(G) Regulation of the waste or category of waste under Chapter 3745-273 of the Administrative Code will improve implementation of and compliance with the hazardous waste regulatory program; ~~and/or,~~

(H) Such other factors as may be appropriate.

~~[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."]~~

[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".]

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3745-279-10

Applicability - recycled used oil management standards.

This rule identifies those materials which are subject to regulation as used oil under Chapter 3745-279 of the Administrative Code. This rule also identifies some materials that are not subject to regulation as used oil under Chapter 3745-279 of the Administrative Code, and indicates whether these materials may be subject to regulation as hazardous waste under Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.

~~[Note: Ohio EPA presumes that used oil is to be recycled unless a used oil handler disposes of used oil, or sends used oil for disposal.]~~

(A) Used oil. Ohio EPA presumes that used oil is to be recycled unless a used oil handler disposes of used oil, or sends used oil for disposal. Except as provided in rule 3745-279-11 of the Administrative Code, ~~the rules in~~ Chapter 3745-279 of the Administrative Code ~~apply~~ applies to used oil, and to materials identified in this rule as being subject to regulation as used oil, whether or not the used oil or material exhibits any characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code.

(B) Mixtures of used oil and hazardous waste.

(1) Listed hazardous waste.

(a) Except as provided in paragraphs (B)(2) and (B)(3) of this rule, mixtures of used oil and hazardous waste ~~that is~~ listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code are subject to regulation as hazardous waste under Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code, rather than as used oil under Chapter 3745-279 of the Administrative Code.

(b) Rebuttable presumption for used oil. Used oil ~~containing~~ that contains more than one thousand parts per million (ppm) total halogens is presumed to be a hazardous waste because ~~it~~ the used oil has been mixed with halogenated hazardous waste listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by showing that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in the appendix to rule 3745-51-11 of the Administrative Code).

(i) The rebuttable presumption does not apply to metalworking ~~oils/ fluids containing~~ oils or fluids that contain chlorinated paraffins, if ~~they~~ such oils or fluids are processed, through a tolling arrangement

as described in paragraph (C) of rule 3745-279-24 of the Administrative Code, to reclaim metalworking ~~oils/fluids~~ oils or fluids. The presumption does apply to metalworking ~~oils/fluids~~ oils or fluids if such ~~oils/fluids~~ oils or fluids are recycled in any other manner, or disposed.

- (ii) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFCs) removed from refrigeration units where the CFCs are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFCs that have been mixed with used oil from sources other than refrigeration units.

(2) Characteristic hazardous waste. Mixtures of used oil and hazardous waste that solely exhibit one or more of the hazardous waste characteristics identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code ~~and used oil~~, and mixtures of used oil and hazardous waste that is listed in rules 3745-51-30 to 3745-51-35 of the Administrative Code solely because ~~it~~ the listed hazardous waste exhibits one or more of the characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code ~~and used oil~~, are subject to one of the following:

- (a) Except as provided in paragraph (B)(2)(c) of this rule, regulation as hazardous waste under Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code rather than as used oil under Chapter 3745-279 of the Administrative Code, if the resultant mixture exhibits any characteristics of hazardous waste identified in rules 3745-51-20 to 3745-51-24 of the Administrative Code; ~~or.~~
- (b) Except as specified in paragraph (B)(2)(c) of this rule, regulation as used oil under Chapter 3745-279 of the Administrative Code, if the resultant mixture does not exhibit any characteristics of hazardous waste identified under rules 3745-51-20 to 3745-51-24 of the Administrative Code.
- (c) Regulation as used oil under Chapter 3745-279 of the Administrative Code, if the mixture is of used oil and a waste which is hazardous solely because ~~it~~ the waste exhibits the characteristic of ignitability (e.g., ignitable-only mineral spirits), provided that the resultant mixture does not exhibit the characteristic of ignitability under rule 3745-51-21 of the Administrative Code.

- (3) ~~Conditionally exempt~~ Very small quantity generator hazardous waste. Mixtures of used oil and ~~conditionally exempt~~ very small quantity generator hazardous waste regulated under rule ~~3745-51-05~~ 3745-52-14 of the Administrative Code are subject to regulation as used oil under Chapter 3745-279 of the Administrative Code.

(C) Materials ~~containing~~ that contains or is otherwise contaminated with used oil.

- (1) Except as provided in paragraph (C)(2) of this rule, materials ~~containing~~ that contain or are otherwise contaminated with used oil from which the used oil has been properly drained or removed to the extent possible such that no visible signs of free-flowing oil remain in or on the material are both of the following:

- (a) ~~Are not~~ Not used oil and thus not subject to Chapter 3745-279 of the Administrative Code, ~~and~~.
- (b) If applicable, ~~are~~ subject to ~~the hazardous waste rules of~~ Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270 of the Administrative Code.

- (2) Materials ~~containing~~ that contain or are otherwise contaminated with used oil that are burned for energy recovery are subject to regulation as used oil under Chapter 3745-279 of the Administrative Code.

- (3) Used oil drained or removed from materials ~~containing~~ that contain or otherwise are contaminated with used oil is subject to regulation as used oil under Chapter 3745-279 of the Administrative Code.

(D) Mixtures of used oil with products.

- (1) Except as provided in paragraph (D)(2) of this rule, mixtures of used oil and fuels or other fuel products are subject to regulation as used oil under Chapter 3745-279 of the Administrative Code.

- (2) Mixtures of used oil and diesel fuel mixed on-site by the generator of the used oil for use in the generator's own vehicles are not subject to Chapter 3745-279 of the Administrative Code once the used oil and diesel fuel have been mixed. Prior to mixing, the used oil is subject to ~~the requirements of~~ rules 3745-279-20 to 3745-279-24 of the Administrative Code.

(E) Materials derived from used oil.

- (1) Materials that are reclaimed from used oil that are used beneficially and are not burned for energy recovery or used in a manner constituting disposal (e.g., re-refined lubricants) are:
 - (a) Not used oil and thus are not subject to Chapter 3745-279 of the Administrative Code, ~~and,~~
 - (b) Not wastes and are thus not subject to ~~the hazardous waste regulations of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270~~ of the Administrative Code as provided in paragraph (C)(2)(a) of rule 3745-51-03 of the Administrative Code.
 - (2) Materials produced from used oil that are burned for energy recovery (e.g., used oil fuels) are subject to regulation as used oil under Chapter 3745-279 of the Administrative Code.
 - (3) Except as provided in paragraph (E)(4) of this rule, materials derived from used oil that are disposed of or used in a manner constituting disposal are both of the following:
 - (a) Not used oil and thus are not subject to Chapter 3745-279 of the Administrative Code, ~~and,~~
 - (b) ~~Are wastes~~ Wastes and thus are subject to ~~the hazardous waste regulations of Chapters 3745-50 to 3745-69, 3745-205, 3745-256, 3745-266, and 3745-270~~ of the Administrative Code if the materials are listed or identified as hazardous wastes.
 - (4) Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products are not subject to Chapter 3745-279 of the Administrative Code.
- (F) Wastewater. Wastewater, the discharge of which is subject to regulation under either section 402 or section 307(b) of the Clean Water Act (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with de minimis quantities of used oil are not subject to the requirements of Chapter 3745-279 of the Administrative Code. For purposes of this paragraph, "de minimis" quantities of used oils are defined as small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations or small amounts of oil lost to the wastewater treatment system during washing or draining operations. This exception ~~will~~ shall not apply if the used oil is discarded as a result of abnormal manufacturing operations resulting in substantial leaks, spills, or other releases, or to used oil recovered from wastewaters.

(G) Used oil introduced into crude oil pipelines or a petroleum refining facility.

- (1) Used oil mixed with crude oil or natural gas liquids (e.g., in a production separator or crude oil stock tank) for insertion into a crude oil pipeline is exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~. The used oil is subject to ~~the requirements of Chapter 3745-279 of the Administrative Code~~ prior to the mixing of used oil with crude oil or natural gas liquids.
- (2) Mixtures of used oil and crude oil or natural gas liquids containing less than one per cent used oil that are being stored or transported to a crude oil pipeline or petroleum refining facility for insertion into the refining process at a point prior to crude distillation or catalytic cracking are exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~.
- (3) Used oil that is inserted into the petroleum refining facility process before crude distillation or catalytic cracking without prior mixing with crude oil is exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~ provided that the used oil constitutes less than one per cent of the crude oil feed to any petroleum refining facility process unit at any given time. Prior to insertion into the petroleum refining facility process, the used oil is subject to ~~the requirements of Chapter 3745-279 of the Administrative Code~~.
- (4) Except as provided in paragraph (G)(5) of this rule, used oil that is introduced into a petroleum refining facility process after crude distillation or catalytic cracking is exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~ only if the used oil meets the specifications of rule 3745-279-11 of the Administrative Code. Prior to insertion into the petroleum refining facility process, the used oil is subject to ~~the requirements of Chapter 3745-279 of the Administrative Code~~.
- (5) Used oil that is incidentally captured by a hydrocarbon recovery system or wastewater treatment system as part of routine process operations at a petroleum refining facility and inserted into the petroleum refining facility process is exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~. This exemption does not extend to used oil which is intentionally introduced into a hydrocarbon recovery system (e.g., by pouring collected used oil into the wastewater treatment system).
- (6) Tank bottoms from stock tanks containing exempt mixtures of used oil and crude oil or natural gas liquids are exempt from ~~the requirements of Chapter 3745-279 of the Administrative Code~~.

- (H) Used oil on vessels. Used oil produced on vessels from normal shipboard operations is not subject to Chapter 3745-279 of the Administrative Code until ~~it~~ such used oil is transported ashore.
- (I) Used oil containing polychlorinated biphenyls (PCBs). Used oil ~~containing that contains~~ "PCBs," (as defined at 40 ~~CFR~~ C.F.R. 761.3), at any concentration less than fifty parts per million (ppm) is subject to ~~the requirements of~~ Chapter 3745-279 of the Administrative Code unless, because of dilution, ~~it~~ such used oil is regulated under 40 ~~CFR~~ C.F.R. Part 761 as a used oil ~~containing that contains~~ PCBs at fifty ppm or greater. PCB-containing used oil subject to ~~the requirements of~~ Chapter 3745-279 of the Administrative Code may also be subject to the prohibitions and requirements of 40 ~~CFR~~ C.F.R. Part 761, including 40 ~~CFR~~ C.F.R. 761.20(d) and 40 ~~CFR~~ C.F.R. 761.20(e). Used oil ~~containing that contains~~ PCBs at concentrations of fifty ppm or greater is not subject to ~~the requirements of~~ Chapter 3745-279 of the Administrative Code, but is subject to regulation under 40 ~~CFR~~ C.F.R. Part 761. No person may avoid these provisions by diluting used oil ~~containing that contains~~ PCBs, unless otherwise specifically provided for in Chapter 3745-279 of the Administrative Code or in 40 ~~CFR~~ C.F.R. Part 761.

~~[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."]~~

[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".]

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