

3745-27-19 Operational criteria for a sanitary landfill facility.

(A) Applicability.

The owner or operator of a sanitary landfill facility shall comply with the requirements and operational criteria specified in this rule until all closure certifications required by paragraph (J) of rule 3745-27-11 of the Administrative Code are submitted and the post-closure care period begins.

(B) Compliance.

- (1) The owner or operator shall conduct all operations at a sanitary landfill facility in strict compliance with the terms and conditions of the solid waste disposal license issued for the facility in accordance with Chapter 3745-37 of the Administrative Code.
- (2) The owner or operator shall conduct all construction and operation at a sanitary landfill facility in strict compliance with the applicable authorizing document, including a permit to install, a plan approval, an operational report, an approved closure plan, an alteration concurred with in writing by Ohio EPA, or any authorizing document listed in paragraph (I) of rule 3745-27-09 of the Administrative Code, except as follows:
 - (a) For a sanitary landfill facility with a permit to install approved after January 1, 1980, but before March 1, 1990, the owner or operator shall conduct all operations in strict compliance with the detail plans, specifications, terms and conditions of an approved permit to install, with the exception, that if the engineered bottom liner and leachate collection system approved in the permit to install is less protective of human health and the environment than the interim composite liner/leachate collection system specified in rule 3745-27-08 of the Administrative Code, the owner or operator shall conduct operations in accordance with the interim composite liner/leachate collection system design required to be installed in response to paragraph (A) of rule 3745-27-20 of the Administrative Code in lieu of the liner and leachate collection system plans, specifications, terms and conditions in an approved permit to install, until such time as an approved permit to install requires compliance with rule 3745-27-08 of the Administrative Code.
 - (b) For a sanitary landfill facility with a plan approval issued by the Ohio department of health, an operational report submitted in accordance with paragraph (J) or (K) of rule 3745-27-09 of the Administrative Code, as effective July 29, 1976, or a permit to install approved prior to January 1, 1980, the owner or operator shall conduct operations in strict compliance with the plan approval, operational report, or a permit to install, whichever document is applicable, unless either of the following apply:
 - (i) The owner or operator of a sanitary landfill facility has obtained a permit to install pursuant to the conditions and schedule outlined in division (A)(3) or (A)(4) of section 3734.05 of the Revised Code.
 - (ii) The composite liner system and the leachate collection and management system approved in the plan approval, operating report, or permit to install is less protective of human health and the environment than the interim composite liner/leachate collection system specified in rule 3745-27-08 of the Administrative Code, in which case, the owner or operator shall conduct operations in accordance with the interim composite liner/leachate collection system design required to be in accordance with paragraph (A) of rule 3745-27-20 of the Administrative Code

in lieu of the liner/leachate collection system plans, specifications, terms and conditions in the plan approval, operational report, or permit to install, until such time as an approved permit to install requires compliance with rule 3745-27-08 of the Administrative Code.

- (c) The owner or operator has obtained written concurrence from Ohio EPA for the alteration of the sanitary landfill facility or the owner or operator has obtained a permit to install prior to the modification of the sanitary landfill facility.

[Comment: "Alteration" is defined in rule 3745-27-01 of the Administrative Code; "modification" is defined in rule 3745-27-02 of the Administrative Code.]

- (3) The owner or operator shall operate the facility in such a manner that noise, dust, and odors are strictly controlled so as not to cause a nuisance or a health hazard.
- (4) The owner or operator shall operate the facility in such a manner that the attraction, breeding, and emergence of insects, rodents, and other vectors are strictly controlled so as to not cause a nuisance or a health hazard. The owner or operator shall initiate effective supplemental vector control measures as deemed necessary by the health commissioner or the director.
- (5) The owner or operator shall operate the facility in such a manner that operation does not create a nuisance or a health hazard, does not cause water pollution pursuant to Chapter 6111. of the Revised Code, and does not violate any regulation adopted by the director pursuant to Chapter 3704. of the Revised Code.
- (6) The owner or operator shall comply with all of the following:
- (a) The applicable design, construction and testing specifications in rule 3745-27-08 of the Administrative Code.
 - (b) The operating record, designation, and location restriction demonstration requirements of rule 3745-27-09 of the Administrative Code.
 - (c) The ground water monitoring, assessment, and corrective measures requirements of rule 3745-27-10 of the Administrative Code.
 - (d) The closure requirements of rule 3745-27-11 of the Administrative Code.
 - (e) The explosive gas monitoring and corrective measures requirements of rule 3745-27-12 of the Administrative Code.
 - (f) The closure, post-closure care, and corrective measures financial assurance requirements of rules 3745-27-15, 3745-27-16, and 3745-27-18 of the Administrative Code.
 - (g) Rule 3745-27-20 of the Administrative Code.

(C) Construction certification, concurrence, and compliance.

(1) Construction certification and concurrence.

After the installation of any of the engineered components specified in rule 3745-27-08 of the Administrative Code, other than the cap system, in any phase of any unit of a sanitary landfill facility, the owner or operator shall not accept waste in the phase until all of the following occur:

- (a) A construction certification report for that phase, prepared in accordance with rule 3745-27-08 of the

Administrative Code, has been submitted to Ohio EPA and the approved health department.

- (b) The owner or operator has received written concurrence from the appropriate Ohio EPA district office for the components specified in rule 3745-27-08 of the Administrative Code, except that written concurrence is not required for the interim composite liner/leachate collection system constructed in accordance with rules 3745-27-08 and 3745-27-20 of the Administrative Code.

(2) Construction compliance.

Upon discovery by the owner or operator, or upon notification by Ohio EPA that a failed test or an alteration has occurred in construction of any engineered component or portion of a sanitary landfill facility, the owner or operator shall comply with the procedures outlined in this paragraph.

(a) Failed test.

For the purposes of this rule, a "failed test" occurs when a test performed on a component of the sanitary landfill facility yields a result that does not meet the specifications outlined in the applicable authorizing document specified in paragraph (B) of this rule or other requirements of these rules. If, prior to submission of the construction certification report for the component or portion of the sanitary landfill facility, the owner or operator determines that there is a "failed test," the owner or operator shall do the following:

- (i) Assess the component or portion of the facility to determine if construction is in compliance with the applicable authorizing document or other requirements of these rules.
- (ii) Implement measures to attain compliance with the applicable authorizing document or other requirements of these rules. An area with a verified failure must be reconstructed. Reconstructed areas must be retested at a frequency sufficient to demonstrate to the director that compliance has been achieved.

(b) Alteration.

If, prior to submission of the construction certification report for the component or portion of the sanitary landfill facility, the owner or operator determines that there is an alteration, the owner or operator shall do all of the following:

- (i) Include the applicable testing results and an explanation of the alteration in the certification report "alterations" section required by rule 3745-27-08 of the Administrative Code.
- (ii) Provide a demonstration in the certification report that the alteration is at least equivalent to the requirement in the applicable authorizing document or other requirements of these rules.
- (iii) Submit the certification report to Ohio EPA and the approved health department.
- (iv) Continue to comply with paragraph (C)(1) of this rule.

[Comment: Paragraph (C)(2)(b) of this rule applies only to a change that qualifies as an alteration as that term is defined in rule 3745-27-01 of the Administrative Code. Rule 3745-27-02 and paragraph (A) of rule 3745-27-06 of the Administrative Code require an owner or operator to obtain a permit to install prior to the establishment of a new, or modification of an existing, solid waste landfill facility. Obtaining concurrence for an alteration in accordance with the procedures outlined in paragraph (C)(2) of this rule does not relieve the owner or operator from liability for failure to obtain a permit to install to modify the facility if the change being

addressed constitutes a modification.]

(c) Detection after submission of certification report.

If the owner or operator determines that the certification report is in error because a "failed test" or an alteration was detected after submission of the construction certification report to Ohio EPA, the owner or operator shall do the following:

- (i) Notify, not later than twenty-four hours after discovery by phone and not later than seven days after discovery in writing, the appropriate Ohio EPA district office and the approved health department of the noncompliance.
- (ii) Not later than fourteen days after submitting the written notification required by paragraph (C)(2)(c)(i) of this rule do either of the following:
 - (a) Implement compliance with the applicable steps outlined in paragraph (C)(2)(a) of this rule and amend and resubmit the construction certification report to explain the circumstances and how compliance was achieved.
 - (b) Submit the information required by paragraph (C)(2)(b) of this rule.

[Comment: Compliance with paragraph (C)(2)(c) of this rule does not relieve the owner or operator from liability for failure to construct or operate the sanitary landfill facility in strict compliance with the applicable authorizing document, other requirements of these rules, or failure to submit a certification report that is true, accurate, and complete as required by the construction certification requirements of rule 3745-27-08 of the Administrative Code.]

(D) Select waste layer.

- (1) The owner or operator shall place select waste as the first layer of waste in all areas within the limits of waste placement adjacent to or in contact with the leachate collection system to protect the composite liner from the intrusion of objects during operation of the facility. The select waste layer shall conform to the following:
 - (a) Be spread but not compacted.
 - (b) Not contain items over two feet in length that are capable of puncturing the liner.
 - (c) Not restrict the flow of liquid to the leachate collection and management system.
 - (d) Not contain fines or small particles which can clog the leachate collection system.
 - (e) Be placed as a single lift above the leachate collection layer required pursuant to rule 3745-27-08 of the Administrative Code so that a minimum distance of five feet is created between the liner and general waste placement.

[Comment: Granular drainage medium used in the leachate collection system provides some of the required protective material needed to create five feet of distance between the liner and general waste placement. Thus, if the leachate collection system consists of one foot of sand, then at least four feet of select waste would be needed to satisfy the requirement in paragraph (D)(1) of this rule.]

- (2) The owner or operator shall maintain documentation at the facility verifying the placement of the select

waste layer. The owner or operator shall insert the documentation into the operating record required pursuant to rule 3745-27-09 of the Administrative Code. The documentation shall include the following information:

- (a) The date on which the select waste layer was placed.
- (b) The location of the cell or phase where the select waste layer was placed.
- (c) The thickness of the select waste layer.
- (d) The source and composition of the material used for the select waste layer.

(E) General operational criteria.

(1) Construction.

- (a) The owner or operator shall clear naturally occurring vegetation to the extent necessary for proper operation of the facility.
- (b) Any oil wells and gas wells within the proposed limits of solid waste placement shall be properly plugged and abandoned in accordance with Chapter 1509. of the Revised Code.
- (c) The owner or operator shall maintain the integrity of the engineered components of the sanitary landfill facility and repair any damage to or failure of the components. "Engineered components" include the components described in rule 3745-27-08 of the Administrative Code and components of the monitoring system installed in accordance with rule 3745-27-10 of the Administrative Code. Failed or damaged engineered components shall be investigated and reconstructed in strict compliance with the existing applicable authorizing documents. If a redesign is necessary, prior approval of an alteration or a modification shall be obtained.
- (d) The owner or operator shall perform chemical compatibility testing if the director determines that such testing is necessary to demonstrate that the solid waste to be received at the sanitary landfill facility will not compromise the integrity of any material used to construct the sanitary landfill facility.

(2) Access.

- (a) The owner or operator shall construct and maintain all-weather access roads within the facility boundary in such a manner as to withstand the anticipated degree of use and allow passage of the loaded refuse vehicles at all times, with a minimum of erosion and dust generation.
- (b) The owner or operator shall limit access to the facility by unauthorized personnel except during operating hours when operating personnel are present. The owner or operator shall, at all times, limit access to the facility as necessary to prevent scavenging and salvaging operations not conducted in accordance with paragraph (E)(4) of this rule. This paragraph shall not apply to the health commissioner or the director who, upon proper identification, may enter the facility at any time to determine compliance with this chapter.
- (c) The owner or operator shall post legible signs stating the yard waste restrictions applicable to the facility. A sign shall be posted in proximity to each public entrance of the facility.
- (d) The owner or operator shall exclude live domestic and farm animals from the operating areas of the

facility, except for animals used for security purposes.

(3) Equipment.

- (a) The owner or operator shall have adequate equipment, material, and services available at or near the facility to control fire. The owner or operator shall act immediately to control or extinguish any fire.
- (b) The owner or operator shall ensure that operable equipment of adequate size and quantity for the operations of the facility are available at all times, or that an appropriate contingency plan is prepared to properly handle and dispose of waste materials in the event of equipment failure.

(4) Scavenging and salvaging.

The owner or operator may only conduct salvaging in a manner approved by the director. Scavenging is prohibited.

(5) Personnel.

The owner or operator shall ensure that any individual meeting the definition of operator specified in rule 3745-27-01 of the Administrative Code shall be thoroughly familiar with the proper operational procedures, license, permits, and other authorizations pertaining to the facility.

(6) Inclement weather.

The owner or operator shall ensure preparations have been made such that, during inclement weather, the sanitary landfill facility is able to receive, compact, and cover incoming waste. The preparations shall include but need not be limited to designation and preparation of areas where waste will be deposited, compacted, and covered during inclement weather, construction and maintenance of all-weather access roads leading from all points where loaded vehicles enter the site to the inclement weather areas, and stockpiling of cover material.

(7) Waste acceptance and placement.

- (a) Prior to accepting waste at a unit of a new sanitary landfill facility, or in any unit of a lateral expansion area, or in a vertical expansion approved on or after March 1, 1990, the owner or operator shall comply with all applicable requirements for leachate treatment or disposal, discharges to surface waters, management of surface water runoff, and air emissions.
- (b) The owner or operator shall not begin filling in a new phase, without completing the previous phase, except to the extent necessary for the proper operation of the sanitary landfill facility.
- (c) The owner or operator shall confine unloading of waste materials to the smallest practical area. The owner or operator shall ensure that each unloading area is supervised by a person or persons knowledgeable regarding operations at the working face.
- (d) The owner or operator shall not deposit waste that is burning or is at a temperature likely to cause fire at the working face. Prior to placing the waste at the working face, the owner or operator shall deposit such material in a separate location which is at a sufficient distance from the working face to prevent fires from spreading to the working face and shall immediately extinguish the fire or lower the temperature of the waste.
- (e) Except as provided in paragraphs (D)(1) and (E)(7)(d) of this rule, the owner or operator shall ensure

that all waste admitted to the sanitary landfill facility is deposited at the working face, spread in layers not more than two feet thick, and compacted to the smallest practical volume. An alternate method may be used if approved in writing by the director. During periods when inclement weather prevents compliance with this rule, the waste shall be deposited at the area prepared in accordance with paragraph (B)(2)(a) of this rule.

(f) The owner or operator shall employ all necessary means to ensure the following:

- (i) Bulky materials can be compacted or otherwise managed in such a way as to ensure the proper placement of daily cover.
- (ii) Dusty materials are handled, compacted, and covered in such a manner as to minimize the amount of dust that is generated by those materials.

(8) Disposal restrictions.

The owner or operator shall not accept for disposal or dispose of any of the following materials at a sanitary landfill facility:

(a) Asbestos or asbestos-containing waste material that is subject to the provisions of NESHAP, 40 CFR Part 61, subpart M (July 1, 2007) without the necessary permits.

[Comment: A copy of 40 CFR Part 61, subpart M can be found at <http://www.gpo.gov/fdays>.]

(b) Containerized bulk liquids or non-containerized liquids without authorization from the director. Bulk liquid containers do not include small containers of a size that normally would be found in solid waste from community operations. For the purposes of this rule, solid waste from "community operations" is wastes derived from households (including single and multiple residences, hotels, and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

(c) Materials that are defined as hazardous wastes pursuant to rule 3745-51-03 of the Administrative Code.

(d) Polychlorinated biphenyls (PCB) wastes as defined in 40 CFR Part 761 (July 1, 2007) (<http://www.gpoaccess.gov/cfr/index.html>) unless otherwise authorized by 40 CFR Part 761.

(e) Materials that are designated as infectious wastes pursuant to rule 3745-27-01 of the Administrative Code, other than infectious waste subject to division (D) of section 3734.02 of the Revised Code and divisions (B)(2)(c) and (B)(2)(d) of section 3734.021 of the Revised Code and rules adopted thereunder, including rules 3745-27-30 and 3745-27-32 of the Administrative Code, unless the infectious waste has been treated to render it non-infectious in accordance with rule 3745-27-32 of the Administrative Code.

(f) Yard waste, source-separated yard waste, or commingled yard waste as defined in rule 3745-27-01 of the Administrative Code.

[Comment: Application of this rule should be read in conjunction with the yard waste management rules contained in paragraph (O) of this rule.]

(g) Whole scrap tires or shredded scrap tires with the exception of the following:

- (i) Burned and partially burned scrap tires, pyrolytic oil, and contaminated soils provided that those materials meet the definition of solid waste in rule 3745-27-01 of the Administrative Code.
- (ii) Scrap tire pieces from a scrap tire recovery facility that are the byproduct of the processing of scrap tires.
- (iii) Authorized beneficial uses of scrap tires pursuant to rule 3745-27-78 of the Administrative Code.
- (iv) Whole scrap tires which could not be processed by a scrap tire recovery facility. The owner or operator of the scrap tire recovery facility shall complete a scrap tire shipping paper and record on the shipping paper why the scrap tires are not processable at the scrap tire recovery facility. This includes but is not limited to aircraft tires and forklift tires that are not processable due to their construction or scrap tires contaminated with mud or other materials that render the tires unsuitable for processing.

(h) Low-level radioactive wastes as specified in section 3734.027 of the Revised Code.

- (i) Semi-solid material containing free liquids, as determined by results obtained from conducting method 9095 (paint filter liquids test) in SW-846, third edition: "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," (February 2007) (<http://www.epa.gov/epaoswer/hazwaste/test/main.htm>) on the semi-solid material, unless the owner or operator has obtained prior written authorization from Ohio EPA to dispose of that semi-solid material in the facility.

(9) Litter.

The owner or operator shall employ all reasonable measures to collect, properly contain, and dispose of scattered litter, including the use of portable wind screens where necessary and frequent policing of the area.

(10) Daily log of operations.

- (a) The owner or operator shall keep a daily log of operations of the facility that contains all the information specified on forms prescribed by the director. All entries required by the log form shall be completed. The owner or operator of the facility may use alternate forms, either in paper or electronic formats, for the daily log of operations, provided that all of the information requested on the prescribed forms is present.
- (b) A copy of the log shall be available for inspection by the health commissioner or the director during normal operating hours.
- (c) When required by Ohio EPA, the owner or operator shall submit log forms or summaries of daily logs to the health commissioner or the director on either paper or electronic versions of forms prescribed by the director. The owner or operator may use alternate forms, either in paper or electronic formats, for the log forms or summary of daily logs, provided that all of the information requested on the prescribed forms is present.
- (d) The owner or operator shall make the completed daily logs available for inspection at the facility for a minimum of three years. The records retention period may be extended during the course of any unresolved litigation or when so requested by Ohio EPA. The three-year period for retention of records shall begin on the date the daily log form is completed.

(11) Inspection.

- (a) The owner or operator shall inspect the sanitary landfill facility at least daily for ponding, erosion, and leachate outbreaks. Written results of the inspections, including a discussion of any corrective actions taken, the date, and weather conditions, shall be recorded on the daily log forms required pursuant to paragraph (E)(10) of this rule and shall be made available to the health commissioner or the director upon request.
- (b) The owner or operator shall inspect sedimentation ponds and sedimentation pond discharge structures, including pipes, ditches, and culverts at least weekly for erosion, clogging, or failure and take prompt corrective action, if necessary. Written results of the inspections, including a discussion of any corrective actions taken, any water quality samples taken, the date, and weather conditions, shall be recorded on the daily log forms required pursuant to paragraph (E)(10) of this rule and shall be made available to the health commissioner or the director upon request.

(12) Approved permit to install, detail plans, and specifications.

The owner or operator shall ensure that a copy of the approved permit to install, detail plans, specifications and information is maintained at the sanitary landfill facility and is available and may be inspected by the health commissioner or the director upon request during normal operating hours.

(F) Daily cover.

Daily cover shall be applied to all exposed solid waste by the end of the working day to control fire hazards, blowing litter, odors, insects, vectors, and rodents. In no event shall solid waste be exposed for more than twenty-four hours after unloading. Daily cover material shall be nonputrescible, shall not contain large objects in such quantities as may interfere with its application and intended purpose, and shall not be solid waste, unless the owner or operator has received prior, written authorization in accordance with paragraph (F)(3)(a) of this rule.

- (1) For units of a sanitary landfill facility having a leachate management system, a soil layer, a minimum of six inches thick, shall be applied and maintained. Daily cover applied in an area served by a leachate collection system shall be removed or otherwise prepared as necessary prior to the placement of the next layer of waste in that area so as not to impede the flow of leachate to the leachate management system within the limits of waste placement.
- (2) For units of a sanitary landfill facility without a leachate management system, a soil layer a minimum of six inches thick, consisting of well-compacted loam, clay loam, silty clay loam, silty clay, or some combination thereof, shall be used.

(3) Alternative daily cover.

- (a) The director may approve solid waste to be used as alternative material for daily cover if the owner or operator can demonstrate to the satisfaction of the director that the solid waste material proposed for use can provide protection comparable to six inches of soil and is protective of human health and environment. The owner or operator must obtain written approval to use solid waste for alternative daily cover prior to utilizing the solid waste.
- (b) The director may approve alternative materials, other than solid waste, or other thicknesses for daily cover if the owner or operator can demonstrate to the satisfaction of the director that the proposed alternative material or thickness provides protection that is comparable to six inches of soil and is protective of human health and the environment. The owner or operator must obtain written

approval to use an alternative material or thickness for daily cover prior to utilizing the alternative material or thickness.

- (4) The director may authorize the application of cover material less often than daily if the owner or operator can demonstrate to the satisfaction of the director that the alternate frequency provides comparable and adequate protection.

(G) Intermediate cover.

- (1) To minimize infiltration, the owner or operator shall apply intermediate cover to all filled areas of a sanitary landfill facility where additional waste is not to be deposited for at least thirty days. The director may approve the use of some alternate time period, if the owner or operator can demonstrate to the satisfaction of the director that, by use of the alternate time period, infiltration will not be increased.
- (2) Intermediate cover material shall be nonputrescible and have low permeability to water, good compactability, cohesiveness, and relatively uniform texture, and shall not contain large objects in such quantities as may interfere with its application and intended purpose. A soil layer, a minimum of twelve inches thick, consisting of well-compacted loam, silt loam, clay loam, silty clay loam, silty clay or some combination thereof, shall be used. The owner or operator may use other materials or thicknesses for intermediate cover if the owner or operator can demonstrate the satisfaction of the director that the proposed intermediate cover material or thickness provides comparable and adequate protection.
- (3) Prior to the placement of the next layer of waste in that area, intermediate cover in an area shall be removed or otherwise prepared as necessary so as not to impede the flow of leachate to the leachate management system within the limits of waste placement.
- (4) The owner or operator shall perform measures to protect the intermediate cover from erosion.

(H) Final cover.

Not later than seven days after reaching the approved final elevations of waste placement in a phase, or an alternate schedule approved by the director, the owner or operator shall begin constructing the final cap system by doing either of the following:

- (1) By constructing a cap system over the entire phase in accordance with rule 3745-27-08 of the Administrative Code as specified in rule 3745-27-11 of the Administrative Code.
- (2) By doing all of the following:
 - (a) Place transitional cover over the entire phase in accordance with rule 3745-27-08 of the Administrative Code.
 - (b) When the unit in which the phase is located has reached approved final elevations of solid waste placement, construct a cap system over the entire unit in accordance with rule 3745-27-08 of the Administrative Code as specified in rule 3745-27-11 of the Administrative Code.
 - (c) The owner or operator shall provide written notice to Ohio EPA and the approved health department clearly describing all phases and units, or portions thereof, where transitional cover will be installed in accordance with rule 3745-27-08 of the Administrative Code. The owner or operator shall submit the notification prior to the beginning construction of transitional cover for a particular phase, or portion thereof. A copy of notice shall be placed in the operating record.

- (d) After completing construction or transitional cover in a particular phase, the owner or operator shall submit a certification report to Ohio EPA and the approved health department in accordance with rule 3745-27-08 of the Administrative Code. The certification report shall be submitted not later than the date for the submittal of the next annual operational report required pursuant to paragraph (M) of this rule. A copy of the certification shall be placed in the operating record.
- (e) Notwithstanding any prior notification that transitional cover will be installed, the owner or operator may choose to comply with paragraph (H)(1) of this rule. The owner or operator shall provide prior notice to Ohio EPA and the approved health department of any change from a previously submitted notification.

[Comment: Use of the transitional cover, formerly known as interim final cover, as specified in paragraph (H)(2) of this rule may increase the closure cost estimate since that final cap system may not be installed over large areas of a facility until near the end of the facility's life. Rule 3745-27-15 of the Administrative Code requires the owner or operator to prepare cost estimates which reflect the cost of closure activities at a point when closure of the sanitary landfill facility would be most expensive and which assumes closure is performed by a third party. Paragraph (M)(6) of this rule requires the owner or operator to at least annually update the closure cost estimate and submit the revised estimate with the annual operational report. Finally, rule 3745-27-15 of the Administrative Code mandates that when the current closure cost estimate increases the owner or operator must increase the dollar amount of the financial assurance mechanism.]

(I) Scales.

The owner or operator of a sanitary landfill facility, with an authorized maximum daily waste receipt greater than two hundred tons per day, shall use scales as the sole means of determining gate receipts. All scales shall be inspected, tested, and approved by the county auditor or city sealer having jurisdiction where the scale is located and shall meet the specifications, tolerances, and regulatory requirements of section 1327.49 of the Revised Code. This paragraph shall not apply to a sanitary landfill facility owned by the generator that exclusively disposes of waste generated at premises owned by the generator.

(J) Surface water management.

- (1) The owner or operator shall ensure that surface water at a sanitary landfill facility is diverted from areas where solid waste is being, or has been, deposited. The owner or operator shall ensure that a sanitary landfill facility is designed, constructed, maintained, and provided with surface water control structures that control run-on and runoff of surface water. These surface water control structures shall ensure minimal erosion and infiltration of water through the cover material and cap system. These surface water control structures shall be designed in accordance with rule 3745-27-08 of the Administrative Code.
- (2) The design of any surface water control structures shall be placed in the operating record in accordance with rule 3745-27-09 of the Administrative Code.
- (3) If ponding or erosion occurs on areas of the sanitary landfill facility where waste is being, or has been, deposited, the owner or operator shall undertake actions as necessary to correct the conditions causing the ponding or erosion.
- (4) If a substantial threat of surface water pollution exists, the director or health commissioner may require the owner or operator to monitor the surface water.

(K) Leachate management.

- (1) If a leachate outbreak occurs at the sanitary landfill facility, the owner or operator shall repair all outbreaks and do the following:
 - (a) Contain and properly manage the leachate at the sanitary landfill facility.
 - (b) If necessary, collect and dispose of the leachate in accordance with paragraphs (K)(5) and (K)(6) of this rule.
 - (c) Take action to minimize, control, or eliminate the conditions which contribute to the production of leachate.
- (2) The owner or operator shall maintain at least one lift station back-up pump at the sanitary landfill facility at all times.
- (3) The owner or operator shall visually or physically inspect the collection pipe network of the leachate management system after placement of the initial lift of waste to ensure that crushing has not occurred and shall inspect the collection pipe network annually thereafter to ensure that clogging has not occurred.
- (4) If authorized in writing by the director, the owner or operator may temporarily store leachate within the limits of waste placement until the leachate can be treated and disposed as outlined in the leachate contingency plan as required in paragraph (K)(6) of this rule.
- (5) The owner or operator shall treat and dispose of collected leachate in accordance with Chapter 6111. of the Revised Code and with one of the following:
 - (a) Treat and dispose of collected leachate on site at the sanitary landfill facility.
 - (b) Pretreat collected leachate on-site and dispose of collected leachate off-site of the sanitary landfill facility.
 - (c) Treat and dispose of collected leachate off-site of the sanitary landfill facility.
- (6) The owner or operator shall prepare a contingency plan for the storage and disposal of leachate and place a copy in the operating record. The plan shall describe the immediate and long term steps, including the setting aside of land for the construction and operation of an on-site treatment facility, to be taken for leachate management in the event that collected leachate cannot be managed in accordance with the management option selected in paragraph (K)(5) of this rule.
- (7) If a substantial threat of water pollution exists from the leachate entering surface waters, the director or health commissioner may require the owner or operator to monitor the surface water.

(L) PCB and hazardous waste prevention and detection program.

By June 1, 1994, the owner or operator shall implement a written program at the sanitary landfill facility with procedures that are sufficient to detect and prevent the disposal of regulated hazardous wastes as defined in rule 3745-51-03 of the Administrative Code and polychlorinated biphenyls (PCB) wastes as defined in 40 CFR Part 761 (July 1, 2007) (<http://www.gpo.gov/fdsys>). The owner or operator shall place the "PCB and hazardous waste prevention and detection program," inspection records, generator certifications, waste screening information, and notifications required by this rule into the operating record in accordance

with rule 3745-27-09 of the Administrative Code. The "PCB and hazardous waste prevention and detection program" shall at a minimum include the following elements:

- (1) Detection program. The owner or operator shall implement a written detection program for the detection PCB or hazardous wastes prior to disposal. The detection program shall consist of at least one of the following:
 - (a) A "random inspection program." The owner or operator shall randomly inspect incoming loads at the sanitary landfill facility as follows:
 - (i) Incoming loads shall be randomly selected by means of a random numbers table or other equivalent method prior to the start of the business day.
 - (ii) The frequency of inspections shall be sufficient to ensure that incoming loads do not contain regulated PCB or hazardous wastes, but shall not be less than one inspection per fifty incoming loads.
 - (iii) The owner or operator may exclude from random inspection loads sources exclusively dedicated to waste collection from community operations (i.e. waste derived from households including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).
 - (b) Pre-acceptance waste screening program. A "pre-acceptance waste screening program" shall at a minimum include the following:
 - (i) A description of the type of wastes and type of waste characteristics that require evaluation by the owner or operator prior to acceptance at the sanitary landfill facility.
 - (ii) A requirement, based on type of waste, that the owner or operator obtain from the generator a written description of the waste, its source, physical and chemical characteristics including analytic data, if available, and certification from the generator that the material does not contain PCB or hazardous wastes.
 - (iii) A requirement, based on the type of waste, that the owner or operator obtain a representative sample of the waste from the generator and a certification from the generator that the sample is representative of the waste stream, and a description of the circumstances in which sample analysis is required prior to waste acceptance.
 - (iv) A description of the procedures and personnel (including professional qualifications) responsible for determining waste acceptance and for documenting a decision on waste acceptance.
 - (c) Other detection measures, acceptable to the director, sufficient to ensure that incoming loads do not contain regulated PCB or hazardous wastes.
- (2) Procedure upon detection or suspected detection of PCB or hazardous wastes.
- (3) Procedure for creating and maintaining records, including inspection records, generator certifications, waste screening documentation, and notifications in accordance with the requirements of rule 3745-27-09 of the Administrative Code.

- (4) Procedures for training of sanitary landfill facility personnel for personal safety and to recognize regulated hazardous wastes and PCB wastes.
 - (5) Procedures for notifying the appropriate Ohio EPA district office and approved health department upon the actual discovery of a regulated hazardous waste or PCB waste at the sanitary landfill facility. The notification procedures shall at a minimum provide the following:
 - (a) A notification to Ohio EPA and the approved health department not later than twenty-four hours by phone, and not later than seven days in writing, of the discovery of regulated hazardous wastes or PCB wastes at the facility.
 - (b) The notification shall identify all generators, transporters, and brokers of the wastes.
 - (c) The notification shall indicate whether the waste was disposed of at the facility, and if so, where.
 - (6) Upon the suspected detection of PCB or hazardous wastes, prior to placement of the PCB or hazardous wastes at the working face, the owner or operator shall not place the wastes at the working face and shall manage waste in a manner protective of human health and the environment until confirming that wastes are not PCB or hazardous wastes.
 - (7) Upon the detection of PCB or hazardous wastes prior to placement of the wastes at the working face, the owner or operator shall not place the wastes at the working face, shall implement the notification procedures in the PCB and hazardous waste prevention and detection program, and shall manage the PCB or hazardous waste in accordance with applicable state and federal laws.
 - (8) Upon the detection of PCB or hazardous wastes after placement of the wastes at the working face, the owner or operator shall take such actions as are necessary to attain compliance with applicable state and federal laws.
- (M) Annual operation report.

The owner or operator of a sanitary landfill facility shall submit an "annual operational report" to the appropriate Ohio EPA district office and approved health department not later than the first day of April of each year. The "Annual Operational Report" shall include at a minimum the following information summarizing the previous calendar year's operations:

- (1) A topographic map of all units of the sanitary landfill facility, certified by a professional skilled in the appropriate disciplines, with updated contour lines on the plan drawing containing information specified in rule 3745-27-06 of the Administrative Code. The scale and contour interval shall be consistent with the approved plans. At a minimum, the owner or operator shall identify the following:
 - (a) The calendar year which the submittal represents.
 - (b) The areal extent of each phase of construction.
 - (c) The areal extent of closed areas of all units that have a final cap system or have transitional cover.
 - (d) Areas that have intermediate cover.
 - (e) The current working phase and unit.
 - (f) The projected phase and unit for filling in the coming year.

- (g) Access roads and buildings.
- (h) On-site borrow areas and cover material stockpiles.
- (i) A comparison of the actual vertical and horizontal limits of emplaced waste to the vertical and horizontal limits of waste placement authorized in the applicable authorizing documents, including an approved permit to install, plan approval, or operational report. If emplaced waste exceeds the limits of vertical and horizontal waste placement authorized in the applicable authorizing documents, this comparison shall include a topographic map which delineates the areal extent of emplaced waste that exceeds approved limits specified in such authorizing documents. In addition, the topographic map shall contain notes that indicate the following information for waste exceeding authorized limits of waste placement: the maximum estimated volume, the maximum depth, and the average depth.

[Comment: The submittal of this information does not relieve an owner or operator from complying with applicable authorizing documents or correcting violations.]

- (2) A summary of the daily logs for the previous year on forms prescribed by the director or alternate forms used pursuant to paragraph (E)(10) of this rule.
- (3) An estimate of the remaining sanitary landfill facility life, in years, and in terms of the remaining volume of the sanitary landfill facility to be filled, in cubic yards.
- (4) A summary of the quantity of leachate collected for treatment and disposal on a monthly basis during the year, location of leachate treatment and disposal, and verification that the leachate management system is operating in accordance with this rule.
- (5) Results of analytical testing of an annual grab sample of leachate for the parameters specified in appendix I to rule 3745-27-10 of the Administrative Code and for polychlorinated biphenyls (PCBs). The grab sample shall be obtained from the leachate management system.

[Comment: If PCBs are detected in leachate that will be discharged directly to or transported and discharged to a wastewater treatment plant, then the owner or operator of the sanitary landfill facility generating the leachate should contact Ohio EPA, division of surface water, prior to discharging the leachate. If the wastewater treatment plant is not affiliated with the landfill facility, then the owner or operator should also contact the receiving wastewater treatment plant prior to discharge. The owner or operator of the sanitary landfill facility should inform Ohio EPA, division of surface water (and the wastewater treatment plant, if applicable) of the presence and concentration of PCBs detected in the leachate. Depending upon the wastewater treatment plant's permitted discharge limit for PCBs, the owner or operator of the sanitary landfill facility may be required to conduct pretreatment of the leachate to remove PCBs prior to discharging to the wastewater treatment plant.]

- (6) The most recent updated closure cost estimate, post-closure care cost estimate, and, if applicable, corrective measures cost estimate, adjusted for inflation and for any change in closure cost estimate, post-closure care cost estimate, or corrective measures cost estimate required by rules 3745-27-15, 3745-27-16, and 3745-27-18 of the Administrative Code.
- (7) A summary of any maintenance performed on the leachate management system, ground water monitoring system, explosive gas monitoring system, and any other monitoring and control system installed at the sanitary landfill facility or performed in response to this rule.
- (8) A notarized statement that, to the best of the knowledge of the owner or operator, the information

contained in the annual report is true and accurate.

- (9) If applicable, a summary of instances recorded in accordance with procedures required in paragraph (O)(2)(a)(v) of this rule in which the owner or operator of a sanitary landfill facility refused acceptance of a vehicle due to the presence of source-separated yard waste or commingled yard waste in the vehicle load.

(N) Ten year design demonstration.

Upon every tenth anniversary of the effective date of the initial permit to install issued to the owner or operator of the sanitary landfill facility pursuant to Chapter 3734. of the Revised Code and each tenth anniversary thereafter, the owner or operator shall submit to Ohio EPA an analysis demonstrating that the design of the unconstructed portions of the sanitary landfill facility continues to be consistent with the design standards established in the current version of rule 3745-27-08 of the Administrative Code. If the director determines that the design is no longer consistent with the standard established in the current version of rule 3745-27-08 of the Administrative Code, then the director may require the owner or operator to make the necessary changes to the sanitary landfill facility to bring the facility into compliance with the design standards in the current version of rule 3745-27-08 of the Administrative Code. Since these changes will represent deviations from what is contained in the current authorizing documents, the owner or operator shall obtain the appropriate authorization from Ohio EPA prior to making the changes. If a permit to install application is required, the director shall not apply the criteria outlined in paragraph (H) of rule 3745-27-07 of the Administrative Code, when considering the permit to install application.

[Comment: A deviation may be an alteration, a modification, or an other change depending upon the significance of the deviation. If the deviation represents an alteration, then the owner or operator is required to obtain written concurrence from Ohio EPA prior to making any change to the facility. If the deviation represents a modification, then the owner or operator is required to obtain a permit to install for the modification from Ohio EPA prior to making any change to the facility.]

[Comment: To determine when Ohio EPA does and does not apply siting criteria to the review of an application for a permit to install to modify the facility, see rule 3745-27-07 of the Administrative Code.]

(O) Yard waste management.

[Comment: Application of this rule should be read in conjunction with paragraphs (E)(2)(c) and (E)(8)(f) of this rule. The definitions for "yard waste," "source-separated yard waste," and "commingled yard waste" are located in rule 3745-27-01 of the Administrative Code.]

- (1) The owner or operator may accept for disposal and dispose of source-separated yard waste at the sanitary landfill facility if any of the following are applicable:

- (a) The owner or operator may for a temporary period of time accept for disposal and dispose of yard waste resulting from storm damage or other natural catastrophe upon the written acknowledgment of the solid waste management district of the need for the temporary disposal of yard waste.

[Comment: The solid waste management district is the local entity responsible for tracking the availability of waste disposal and processing capacity. The solid waste management district is therefore the appropriate entity to make the determination that locally available yard waste management capacity is not sufficient to handle yard waste resulting from storm damage or other natural catastrophe.]

- (b) The owner or operator may dispose of yard waste resulting from the incidental acceptance of yard waste where the yard waste has been placed at the working face of the landfill, provided the owner or operator complies with paragraph (O)(2) of this rule.

For the purposes of this rule "incidental acceptance" of yard waste means a source-separated or commingled yard waste is placed at the working face of the landfill.

- (c) The owner or operator may accept a vehicle load of source-separated yard waste if that vehicle load has been refused acceptance by a composting facility registered or licensed in accordance with Chapter 3745-560 of the Administrative Code. The owner or operator shall obtain documentation of this refused acceptance by a composting facility upon acceptance of the vehicle at the sanitary landfill. Such documentation shall identify the vehicle, the vehicles' load, the compost facility which refused acceptance of the vehicle load, and the date of refusal on a form prepared by the director. The owner or operator shall attach any forms received to the appropriate daily log of operations required in paragraph (E)(10) of this rule.
- (d) The owner or operator may accept for disposal and dispose of tree trunks and stumps.

(2) Yard waste restriction program.

[Comment: The yard waste restriction program outlined in paragraph (O)(2)(a) of this rule consists of procedures to inform persons transporting waste of the yard waste restrictions, alternative yard waste management options, and identification of readily observable dedicated yard waste collection vehicles or loads of source-separated yard waste in order to encourage alternative management of yard waste, direct persons to available yard waste composting facilities, and deter the landfilling of readily observable source-separated yard waste loads. This approach is due to Ohio EPA's position that a sanitary landfill facility's required design, operation, and environmental monitoring provides more than adequate environmental protection.]

In order for the owner or operator to dispose of yard waste resulting from the incidental acceptance of yard waste in accordance with paragraph (O)(1)(b) of this rule, the owner or operator shall do the following:

- (a) Implement a written program to ensure that yard waste is not accepted for disposal or disposed of at the sanitary landfill facility. The program shall at a minimum consist of the following:
- (i) Procedures for notifying person transporting waste to the landfill of the yard waste restrictions at the sanitary landfill facility.
 - (ii) Procedures for distributing information regarding alternative yard waste management methods, such as composting, to persons transporting waste to the landfill facility. At a minimum, information shall include the name, address, and phone number of the solid waste management district in which the sanitary landfill facility is located and a listing of informational pamphlets, brochures, etc., regarding yard waste composting published by Ohio EPA and the solid waste management district in which the sanitary landfill is located.
 - (iii) Except for a sanitary landfill facility with an on-site licensed or registered compost facility, procedures for distributing information regarding the facility names and locations of Ohio EPA licensed or Ohio EPA registered composting facilities in the county in which the sanitary landfill facility is located to persons transporting waste to the sanitary landfill facility.

- (iv) Procedures for identifying vehicles dedicated to yard waste collection or vehicles transporting portable containers and compartments of portable containers dedicated to yard waste collection, or vehicles with loads observed to consist of source-separated yard waste, and for refusal of the load due to the presence of source-separated yard waste.
 - (v) Procedures for the recording of instances in which the sanitary landfill facility refused acceptance of a vehicle load due to the presence of a source-separated yard waste or commingled yard waste in the vehicle load.
- (b) Place the yard waste restriction program document in the sanitary landfill facility's operating record in accordance with rule 3745-27-09 of the Administrative Code.
- (c) Yard waste restriction program compliance. The owner or operator of a sanitary landfill facility shall review the yard waste restriction program and implement such revisions as the owner or operator deems necessary to ensure control of the acceptance of yard waste at the sanitary landfill facility when either of the following occur:
- (i) Upon discovery by the owner or operator that source-separated yard waste has been accepted for disposal at the sanitary landfill facility.
 - (ii) Upon notification by Ohio EPA or the approved health department that source-separated yard waste has been accepted for disposal at the sanitary landfill facility.

Paragraph (O)(1)(b) of this rule shall not apply unless the owner or operator complies with paragraph (O)(2) of this rule.

[Comment: Chapter 3734. of the Revised Code does not expressly provide Ohio EPA with the statutory authority to regulate transporters of solid waste, which includes the transportation of yard waste. Chapter 3734. of the Revised Code does not expressly provide Ohio EPA with the statutory authority to require generators of solid wastes, which includes yard waste, to source-separate solid waste for delivery to a particular type of solid waste facility or recycling facility. Chapter 3734. of the Revised Code does provide Ohio EPA with authority to establish rules regarding the operation of regulated solid waste facilities. Given these circumstances, it is Ohio EPA's position that the requirement that an owner or operator review and revise the facility's yard waste restriction program upon discovery of the acceptance of yard waste is appropriate to assure improvement in the program's effectiveness.]

Effective: 01/01/2017

Five Year Review (FYR) Dates: 08/01/2016 and 01/01/2022

CERTIFIED ELECTRONICALLY

Certification

10/13/2016

Date

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