

3745-27-75

Operational criteria for a scrap tire monofill facility.

- (A) **Applicability.** The owner or operator of a scrap tire monofill facility, or a monocell facility as specified in rule 3745-27-69 of the Administrative Code, shall comply with the requirements and operational criteria specified in this rule until the final closure certification required by paragraph (J) of rule 3745-27-73 of the Administrative Code is submitted and the post-closure care period begins.
- (B) The owner or operator shall conduct all operations at a scrap tire monofill facility in strict compliance with the terms and conditions of the scrap tire monofill disposal license issued for the facility in accordance with Chapter 3745-37 of the Administrative Code.
- (C) The owner or operator shall conduct all construction and operation at a scrap tire monofill facility in strict compliance with the applicable authorizing document(s), including permit(s) to install, and alteration(s) concurred with in writing by Ohio EPA, unless, the owner or operator has obtained written concurrence from Ohio EPA for the alteration of the scrap tire monofill facility or the owner or operator has obtained a permit to install prior to modifying of the scrap tire monofill 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.]

- (D) **Construction certification, concurrence, and compliance.**
 - (1) **Construction certification and concurrence.** After the installation of any of the engineered components specified in rule 3745-27-72 of the Administrative Code, other than the cap system, in any cell of any phase of a scrap tire monofill facility, the owner or operator shall not accept scrap tires in the phase until all of the following occur:
 - (a) A construction certification report for that phase, prepared in accordance with the paragraph (H) of rule 3745-27-72 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 paragraph (F)(1) of rule 3745-27-72 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 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 scrap tire monofill facility yields a result that does not meet the specifications outlined in the applicable authorizing document(s) specified in paragraph (C) 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 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(s) 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 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(s) in the certification report "alterations" section required by rule 3745-27-72 of the Administrative Code.

(ii) Provide a demonstration in the certification report that the alteration(s) is at least equivalent to the requirement in the applicable authorizing document(s) 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 (D)(1) of this rule.

[Comment: Paragraph (D)(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. Paragraph (A) of rule 3745-27-70 and rule 3745-27-02 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 scrap tire monofill facility. Obtaining concurrence for an alteration in accordance with the procedures outlined in paragraph (D)(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 alteration was detected after submission of the construction certification report to Ohio EPA, the owner or operator shall do the following:

(i) Notify, within twenty-four hours after discovery by phone and within seven days after discovery in writing, the appropriate Ohio EPA district office and the approved health department of the noncompliance.

(ii) Within fourteen days of the submitting the written notification required by paragraph (D)(2)(c)(i) of this rule, do either of the following:

(a) Implement compliance with the applicable steps outlined in paragraph (D)(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 (D)(2)(b) of this rule.

[Comment: Compliance with paragraph (D)(2)(c) of this rule does not relieve the owner or operator from liability for failure to construct or operate the scrap tire monofill facility in strict compliance with the applicable authorizing document(s), 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 3745-27-72 of the Administrative Code.]

(E) General operational criteria.

(1) The owner or operator shall ensure preparations have been made such that,

during inclement weather, the facility is able to receive and cover incoming scrap tires. The preparations shall include, but need not be limited to, construction and maintenance of all-weather access roads leading from the point(s) where loaded vehicles enter the site to the inclement weather areas, construction and maintenance of storage area, and stockpiling of cover material.

- (2) The owner or operator shall construct and maintain all-weather access roads 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.
- (3) The owner or operator shall limit access to the facility by non-employees 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 or salvaging operations not conducted in accordance with paragraph (E)(7) of this rule to prevent interference with proper operating procedures. This paragraph shall not apply to the health commissioner or to the director who upon proper identification may enter the facility at any time to determine compliance with Chapter 3745-27 of the Administrative Code.
- (4) The owner or operator shall confine unloading of scrap tires to the scrap tire handling area and shall ensure that unloading is supervised by competent operating personnel and that the amount is kept within permitted limits.
- (5) The owner or operator shall ensure that all scrap tires arriving at the monofill/monocell facility not immediately placed in the working face or scrap tires in an unprocessed form are placed at the facility's temporary scrap tire storage area in compliance with rule 3745-27-65 of the Administrative Code. The temporary scrap tire storage area shall not exceed an amount of ten thousand square feet of effective scrap tire storage area.
- (6) 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, and does not violate any regulation adopted by the director pursuant to Chapter 3704. of the Revised Code. The owner or operator shall manage the facility in such a manner that noise and dust are strictly controlled so as not to cause a nuisance or a health hazard.
- (7) The owner or operator may only conduct salvaging in a manner specified in plans approved by the director.

- (8) The owner or operator shall exclude live domestic and farm animals from the operating areas of the facility, except for animals employed for security purposes.
- (9) 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 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.
- (10) The owner or operator shall ensure that all operations at the facility shall be performed by individuals who are thoroughly familiar with proper operational procedures and with the approved detail plans, specifications, and information.
- (11) The owner or operator shall ensure a copy of the approved detail plans, specifications, and information is maintained at the facility and is available and may be inspected by the health commissioner or director during normal operating hours.
- (12) The owner or operator shall ensure that operable equipment of adequate size

and quantity for the operations of the facility is available at all times, or that an appropriate contingency plan is prepared to properly handle and dispose of scrap tires in the event of equipment failure.

- (13) The owner or operator shall clear naturally occurring vegetation to the extent necessary for proper operation of the facility.
- (14) Prior to accepting scrap tires at a new facility, in a lateral expansion area, or in a vertical expansion, the owner or operator shall comply with all applicable requirements for leachate treatment and/or disposal and air emissions.
- (15) 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 scrap tire monofill facility.
- (16) The owner or operator shall perform chemical compatibility testing if the director determines that such testing is necessary to demonstrate that the scrap tires to be received at the facility will not compromise the integrity of any material used to construct the facility.
- (17) The owner or operator shall not deposit scrap tires that are burning or at a temperature likely to cause fire at the working face. The owner or operator shall deposit such material in a separate location at a sufficient distance from the working face to prevent fires from spreading to the working face shall immediately extinguish the scrap tires by covering them with a sufficient amount of earth or other material, or by spraying them with water or other appropriate fire suppressant. The owner or operator shall notify, within twenty-four hours, the local health department and the Ohio EPA district office prior to placing the material in the working face.
- (18) Except as provided in paragraph (E)(17) of this rule, the owner or operator shall ensure that all scrap tires admitted to the facility are deposited at the working face or in the temporary storage area. An alternate method may be used if approved by the director. During periods when inclement weather prevents compliance with this rule, the scrap tires shall be deposited at the area prepared in accordance with paragraph (D)(1) of this rule.
- (19) The owner or operator shall maintain the integrity of the engineered components of the facility and repair any damage to or failure of the components. "Engineered components" include the components described in rule 3745-27-72 of the Administrative Code.

- (20) The owner or operator shall comply with all of the following:
- (a) The applicable construction specifications in rule 3745-27-72 of the Administrative Code.
 - (b) The final closure requirements of rule 3745-27-73 of the Administrative Code.
 - (c) The final closure and post-closure care financial assurance requirements of rules 3745-27-15 and 3745-27-16 of the Administrative Code.
- (21) Only off road construction and mining equipment tires, that have a bead width of at least fourteen inches or larger and a rim or wheel diameter of a least twenty-four inches or larger, are authorized to be placed in the working face of a monofill or monocell without being processed. The owner or operator of the monofill or monocell shall place the scrap tires in the working face and fill with either soil, processed tires, or other material, approved for disposal at the facility, to prevent possible future settling above these scrap tires.
- (22) Any oil wells and gas wells within the proposed limits of scrap tire placement shall be properly plugged and abandoned in accordance with Chapter 1509. of the Revised Code.
- (F) Cell cover. Cover shall be applied to all exposed scrap tires in the cell at the end of the work week to control fire hazards, insects, vectors, and rodents. Cover material shall be nonputrescible, shall not be solid waste, and shall not contain large objects in such quantities as may interfere with its application and intended purpose of preventing the ignition and spread of a fire at the facility, the movement of leachate from ponding and the breeding of mosquitoes.
- (1) Cell cover shall be a minimum of twelve inches thick. Cell cover in an area shall be removed or prepared as necessary so as not to impede the flow of leachate to the leachate collection system within the limits of waste placement prior to the placement of the next layer of scrap tires in that area. The soil for the cell cover shall either:
- (a) Possess properties of a fine-grained soil as defined in the unified soil classification system described in ASTM D2487-00.
 - (b) Be an alternative soil type acceptable to the director of Ohio EPA, if the owner or operator can demonstrate that the alternative material and/or

thickness provides comparable protection and is protective of human health and the environment.

- (2) Frequencies, other than weekly, may be used if it can be demonstrated to the satisfaction of the director that the alternate frequency provides comparable and adequate protection.

(G) Intermediate cover.

- (1) To minimize infiltration and prevent fire and mosquito breeding, the owner or operator shall apply intermediate cover to all filled areas of a facility where additional scrap tires are not to be deposited for at least one hundred eighty days. The director may approve the use of some alternate time period if it can be demonstrated to the satisfaction of the director that by use of the alternate time period, infiltration or ponding of water that may breed mosquitoes, and the possibility of fire, 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 of preventing the ignition and spread of fire, the movement of leachate from ponding, and the breeding of mosquitoes.
- (3) A soil layer, a minimum of twenty-four inches thick, and a geo-textile fabric shall be used. The soil for the intermediate cover shall either:
 - (a) Possess properties of a fine-grained soil as defined in the unified soil classification system described in ASTM D2487-00.
 - (b) Be an alternative soil type acceptable to the director of Ohio EPA.
- (4) Intermediate cover in an area shall be removed or prepared as necessary so as not to impede the flow of leachate to the leachate collection system within the limits of waste placement prior to the placement of the next layer of scrap tire in that area.
- (5) The owner or operator shall perform measures to protect the intermediate cover from erosion if the intermediate cover is exposed or will be exposed for more than one hundred eighty days.

(H) Final cover. The owner or operator shall construct the final cap system when a phase

has reached approved final elevations of scrap tire placement, in accordance with paragraph (C)(9) of rule 3745-27-72 of the Administrative Code.

(I) Scales. The owner or operator of a scrap tire monofill facility 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.

(J) Surface water management.

(1) The owner or operator shall ensure that surface water at a scrap tire monofill facility is diverted from areas where scrap tires are being, or have been, deposited. The owner or operator shall ensure that a scrap tire monofill 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. Surface water control structures shall be designed in accordance with paragraph (C)(6) of rule 3745-27-72 of the Administrative Code.

(2) The owner or operator shall manage surface water in compliance with the requirements of Chapter 6111. of the Revised Code.

(3) If ponding or erosion occurs on areas of the scrap tire monofill facility where scrap tires are being, or have 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 leachate is detected on the surface of the facility, the owner or operator shall repair the outbreaks and do the following:

(a) Contain and properly manage the leachate at the 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 scrap tire monofill 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 scrap tires to ensure that crushing of the collection pipe network has not occurred, and the owner or operator shall inspect the collection pipe network annually thereafter to ensure that clogging of the collection pipe network has not occurred.
- (4) If authorized 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 rule 3745-27-70 of the Administrative Code.
- (5) The owner or operator shall treat and dispose of collected leachate in accordance with the one of the following:
 - (a) Treat and dispose of collected leachate on site at the scrap tire monofill facility.
 - (b) Pretreat collected leachate on-site and dispose of collected leachate off-site of the scrap tire monofill facility.
 - (c) Treat and dispose of collected leachate off-site of the scrap tire monofill facility.
- (6) The owner or operator shall prepare a contingency plan as detailed in rule 3745-27-70 of the Administrative Code, 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) [Reserved.]

(M) Annual operational report. The owner or operator of a facility shall submit an "annual operational report" to the appropriate Ohio EPA district office, approved local health department, and the local solid waste management district not later than April first of each year for paragraphs (M)(1) to (M)(6) and (M)(8) of this rule and January thirty-first of each year for paragraphs (M)(7) and (M)(8) of this rule. The "annual operational report" shall include, at a minimum, the following information summarizing the previous calendar year's operations:

- (1) A topographic map of the facility, certified by a professional skilled in the appropriate discipline(s), with updated contour lines on the plan drawing containing information specified in paragraph (B)(3) of rule 3745-27-70 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 that have a final cap system.
 - (d) Areas that have intermediate cover.
 - (e) The current working phase and cell(s).
 - (f) The projected phase(s) and cell(s) 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 scrap tires to the vertical and horizontal limits of scrap tire placement authorized in the applicable authorizing document(s), including an approved permit(s) to install, plan approval, or operational report. If

emplaced scrap tires exceed the limits of vertical and horizontal scrap tire placement authorized in the applicable authorizing document(s), this comparison shall include a topographic map which delineates the areal extent of emplaced scrap tires that exceed approved limits specified in such authorizing documents. In addition, the topographic map shall contain notes that indicate the following information for scrap tires exceeding authorized limits of waste placement: the maximum established 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) An estimate of the remaining scrap tire monofill facility life, in years, and an estimate in terms of the remaining volume of the scrap tire monofill facility to be filled, in cubic yards.
- (3) A summary of the quantity of leachate collected for treatment and disposal on a monthly basis during the year, location of leachate treatment and/or disposal, and verification that the leachate management system is operating in accordance with this rule.
- (4) Results of analytical testing of an annual grab sample of leachate for the parameters specified in appendix I of rule 3745-27-79 of the Administrative Code. The grab sample shall be obtained from the leachate management system.
- (5) The most recent updated final closure cost estimate and post-closure care cost estimate adjusted for inflation and for any change in final closure cost estimate or post-closure care cost estimate required by rules 3745-27-15, 3745-27-16, and 3745-27-18 of the Administrative Code.
- (6) A summary of any maintenance performed on the leachate management system, and any other monitoring and control system installed at the scrap tire monofill facility or performed in response to this rule.
- (7) The owner or operator shall submit an annual report on forms prescribed by the director (to Ohio EPA, central office, division of solid and infectious waste) not later than January thirty-first of each year. Copies of the report shall also be submitted to the appropriate Ohio EPA district office and approved health department at the same time. The owner or operator shall retain copies of

annual reports for a minimum period of three years. The report shall include at least the following information:

- (a) The total number or quantity in weight or volume of scrap tires received from each transporter, the place of origin, and an estimate of the total number of each type of tire including passenger car tires, truck tires and other tires.
 - (b) The total number or quantity in weight or volume of scrap tires received from the public, and an estimate of the total number of each type of tire including passenger car tires, truck tires, and other tires.
 - (c) The total number or quantity in weight or volume of scrap tires received at, shipped from, or transported to each storage, monocell, monofill, or recovery facility, or other premise, and an estimate of the total number of each type of tire shipped, routed, or transported to each facility including passenger car tires, truck tires, and other tires. In addition for scrap tire recovery facilities only, the total number or quantity in weight or volume of scrap tires processed at the facility. In all cases the report shall include out-of-state as well as Ohio facilities.
 - (d) The number of scrap tires or quantity in weight or volume of scrap tires received at and shipped from the facility, and the number of scrap tires or quantity in weight or volume of scrap tires present at the facility's temporary scrap tire storage area.
- (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.
- (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 scrap tire monofill 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 facility continues to be consistent with the design standards established in the current version of rule 3745-27-72 of the Administrative Code. If the director determines that the design is no longer consistent with the standards established in the current version of rule 3745-27-72 of the Administrative Code, then the director may require the owner or operator to make the necessary changes to the scrap tire monofill facility to bring the facility into compliance with the design standards in the current version of rule 3745-27-72 of the Administrative Code. Since these changes will represent deviations from what is contained in the current authorizing document(s), 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 3745-27-71 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 3745-27-71 of the Administrative Code.]

(O) Submergence facilities. The owner or operator of a scrap tire submergence facility shall comply with the operational requirements specified in this rule except that the following are not applicable to a scrap tire submergence facility:

(1) Paragraph (E)(14) of this rule. In lieu of paragraph (E)(14) of this rule, prior to accepting scrap tires at a new scrap tire submergence facility or an expansion of an existing scrap tire submergence facility, the owner or operator shall comply with all applicable requirements for in Chapter 3704. or 6111. of the Revised Code.

(2) Paragraph (E)(15) of this rule (phasing).

(3) Paragraph (F) of this rule (cell cover).

(4) Paragraph (G) of this rule (intermediate cover).

(5) Paragraph (H) of this rule (final cover).

(6) Paragraph (K) of this rule (leachate management).