

# Ohio Administrative Code (OAC) Chapter 560

## COMPOSTING REGULATIONS

### Definitions & Administrative Requirements

3745-560-01	Applicability
3745-560-02	Definitions
3745-560-03	Plan view drawing update for class IV composting facilities.
3745-560-04	Log of operations and annual report forms
3745-560-05	Composting – closure cost estimate

### Class I Composting Facilities

3745-560-100	Facility establishment
3745-560-101	Criteria and procedures for permit to install
3745-560-102	Facility preparation requirements
3745-560-105	Alternative materials request
3745-560-110	Operational
3745-560-115	Record keeping requirements
3745-560-120	Compost distribution requirements
3745-560-125	Compost sampling and testing requirements
3745-560-130	Compost quality standards
3745-560-135	Closure requirements

### Class II Composting Facilities

3745-560-200	Facility establishment
3745-560-201	Criteria and procedures for registration
3745-560-202	Facility preparation requirements
3745-560-205	Alternative materials request

3745-560-210	Operational requirements
3745-560-215	Record keeping requirements
3745-560-220	Distribution requirements
3745-560-225	Sampling and testing requirements
3745-560-230	Compost quality standards
3745-560-235	Closure requirements

### Class III Composting Facilities

3745-560-300	Facility establishment
3745-560-301	Criteria and procedures for registration
3745-560-302	Facility preparation requirements
3745-560-310	Operational requirements
3745-560-315	Record keeping requirements
3745-560-320	Compost distribution requirements
3745-560-325	Compost sampling and testing requirements
3745-560-330	Compost quality standards
3745-560-335	Closure requirements

### Class IV Composting Facilities

3745-560-400	Facility establishment
3745-560-401	Criteria and procedures for registration
3745-560-402	Facility preparation requirements
3745-560-410	Operational requirements
3745-560-415	Record keeping requirements
3745-560-435	Closure requirements

### Referenced multi-program regulations:

<b>OAC 3745-500</b>	<b>Administrative regulations</b>
<b>OAC 3745-501</b>	<b>Licensing regulations</b>
<b>OAC 3745-503</b>	<b>Financial assurance regulations</b>

### 3745-560-01 Composting facilities - applicability.

- (A) This chapter is the program chapter for composting facilities.
- (B) Except as otherwise provided in paragraph (E) of this rule, this chapter shall apply to any person who establishes or operates a solid waste composting facility in the state of Ohio.
- (C) In addition to the multi-program rules made applicable by reference in this chapter, the following multi-program rules apply to this chapter:
- (1) Rule 3745-500-35 of the Administrative Code which pertains to relationships among authorizing documents, rules, and the authority of the director and board of health.
  - (2) Rule 3745-500-210 of the Administrative Code which pertains to a variance from this chapter.
  - (3) Rule 3745-500-220 of the Administrative Code which pertains to an exemption from this chapter.
- (D) The compost distribution requirements of rules 3745-560-220 and 3745-560-320 of the Administrative Code shall not apply to the owner or operator of a class II or class III composting facility provided that the following conditions are met:
- (1) The owner or operator composts only those feedstocks, bulking agents, and additives

authorized by rule for their class of facility.

- (2) All compost produced is utilized exclusively on property owned by the owner of the facility.

(E) This chapter shall not apply to the following:

- (1) Any person composting yard waste, agricultural waste, animal waste, food scraps, bulking agents, and additives within an aggregate area not greater than three hundred square feet on any premises in a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.
- (2) Animal and crop production operations. Composting facilities that compost yard waste, agricultural waste, animal waste, food scraps, and bulking agents generated from animal or crop production operations provided that the following conditions are met:
  - (a) The owner of the composting facility is the same as the owner of the animal or crop production operation where the yard waste, agricultural waste, animal waste, food scraps, and bulking agents are generated.
  - (b) The composting facility is located on property owned by the animal or crop production operation.

(c) The composting facility is operated in such a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.

(d) All compost produced is utilized exclusively at the animal or crop production operation.

(3) On-farm mortality composting. Except as otherwise provided in section 3734.029 of the Revised Code, composting facilities that compost animal carcasses pursuant to section 1511.022 of the Revised Code and distribute for use or give away compost are subject to the compost quality standards requirements established in rules 3745-560-220, 3745-560-225, and 3745-560-230 of the Administrative Code.

(4) Restricted yard waste composting facilities. Composting facilities that compost yard waste and bulking agents provided that the following conditions are met:

(a) The owner or operator composts only yard waste and bulking agents generated by the owner of an operation engaged in providing lawn mowing or landscaping services or operations that generate yard waste while lawn mowing or landscaping the owner's premises.

(b) The owner of the composting facility is the same as the owner of the operation.

(c) The composting facility is located on the owner's property.

(d) The limits of materials placement on the facility site are less than twelve hundred square feet of total area.

(e) The composting facility is operated in such a manner that noise, dust, and odors do not constitute a nuisance or health hazard and does not cause or contribute to surface or ground water pollution.

(f) All compost produced is utilized exclusively on the owner's property. The use of the compost in plant potting media by nurseries and greenhouses that grow plant stock is considered use on the owner's property for the purposes of this rule.

(5) Sewage sludge composting. Sewage sludge composting with solid wastes when that sewage sludge composting is sewage sludge treatment or disposal pursuant to Chapter 3745-40 of the Administrative Code and is authorized by a current permit issued under Chapter 6111. of the Revised Code.

### 3745-560-02 Composting facilities - definitions.

If a term used in this chapter is defined in rule 3745-500-02 of the Administrative Code the definition in rule 3745-500-02 of the Administrative Code is applicable to this chapter unless the term is defined in this rule. As used in this chapter:

(A)

(1) "Accept" or "acceptance," in the context of material acceptance, handling, and disposal activities, means to record material in the log of operations or to place material on the materials placement area at a composting facility.

(2) "Active composting facility" means a composting facility where authorized feedstocks, bulking agents, and additives are received, processed, or stored.

(3) "Additive" means a supplemental material mixed with or otherwise added to feedstocks and bulking agents to create a favorable condition for the composting process and includes urea, crushed egg shells, earthworms, and bacterial or fungal inoculum.

(4) "Aerated static pile" means a method of composting where solid waste is constructed into a pile and air is forced through the pile to enable aerobic composting.

(5) "Agricultural waste" means plant material including but not limited to stems, leaves, vines, or roots from an agricultural operation.

(6) "Alteration" means a change, other than a modification, to a class I composting facility or to a permit to install issued pursuant to Chapter 3734. of the Revised Code for a class I composting facility which is at least equivalent to the rule requirements. An alteration includes but is not limited to changes in the type of waste received, replacement of equipment, and repair of the facility.

(7) "Alternative material" means a waste that might be suitable for use as a feedstock, bulking agent, or additive in the composting process including but not limited to animal carcasses, raw rendering material, and exceptional quality biosolids.

(8) "Animal carcass" means a carcass or parts thereof of a domestic or non-domestic animal.

(9) "Animal waste" means animal excreta, bedding, wash waters, incidental waste feed, and silage drainage.

(B)

(1) "Biofilter material" means material consisting of bulking agents, shredded yard waste, or compost that is applied over the composting mixture to control odors, dust, or vectors.

(2) "Bulking agent" means a material added to a composting process to provide structural support, improve aeration, or absorb moisture and includes wood chips, straw, clean untreated wood, shredded newspaper, shredded cardboard, sawdust, shredded brush, compostable containers, and stover.

(C)

- (1) "Class I solid waste composting facility" means a facility where the owner or operator may accept yard waste, agricultural waste, animal waste, food scraps, mixed solid waste, bulking agents, additives, and authorized alternative materials.
- (2) "Class II solid waste composting facility" means a facility where the owner or operator may accept yard waste, agricultural waste, animal waste, food scraps, bulking agents, additives, and authorized alternative materials.
- (3) "Class III solid waste composting facility" means a facility where the owner or operator may accept yard waste, agricultural waste, animal waste, bulking agents, and additives.
- (4) "Class IV solid waste composting facility" means a facility where the owner or operator may accept only yard waste, bulking agents, and additives limited to urea and bacterial or fungal inoculum.
- (5) "Clean untreated wood" means source-separated wood including but not limited to sawdust, pallets, and dimensional lumber that has not been treated chemically or with adhesives and coatings including but not limited to paint, glue, or any other visible contaminant.
- (6) "Commingled yard waste" means yard waste that has been mixed with other solid wastes. Commingled yard waste does not include yard waste in bags mixed with other solid wastes.
- (7) "Compost" means a humus-like organic material resulting from the biological decomposition of solid waste.
- (8) "Compostable container" means a container composed of materials such as vegetable matter, paper, cardboard, and plastic that meets ASTM D6400 or D6868 as described in rule 3745-500-03 of the Administrative Code, that may display the international biodegradable products institute's "Compostable Logo," and that will decompose or degrade at a rate equal to or faster than the material with which it is composted under equivalent conditions.
- (9) "Compostable serviceware" means an item such as bowls, plates, cups, cutlery, and films, that meets ASTM D6400 or D6868 as described in rule 3745-500-03 of the Administrative Code, that may display the international biodegradable products institute's "Compostable Logo," and that will decompose or degrade at a rate equal to or faster than the material with which it is

composted under equivalent conditions.

- (10) "Compost product" means compost that meets applicable compost product quality standards.
- (11) "Composting" means the process of biological decomposition of solid wastes under controlled conditions resulting in compost. Controlled conditions include but are not limited to grinding, shredding, piling, physical turning, aerating, adding moisture, or other processing of solid wastes.
- (12) "Cross-contamination" means the intentional or unintentional contact of feedstocks subject to a more stringent quality standard with a feedstock subject to a less stringent quality standard and includes but is not limited to contact with the surface of a machine, the mixture of tested compost with untested compost, or contact with leachate that was previously in contact with a feedstock subject to a more stringent quality standard.

(D) [Reserved.]

(E) [Reserved.]

(F)

- (1) "Feedstock" means a solid waste that will readily decompose during the composting process including but not limited to yard waste, agricultural waste, animal waste, food scraps, animal carcasses, raw rendering material, and mixed solid waste.
- (2) "Food scraps" means food residuals including but not limited to vegetables, fruits, grains, dairy products, meats, and the compostable packaging that may be commingled.
- (3) "Foreign/inert matter" means inorganic and organic constituents that were not readily decomposed during the composting process including but not limited to plastics, glass, textiles, rubber, leather, metal, ceramics, styrofoam, sharp objects, and painted, laminated, or treated wood.

(G) [Reserved.]

(H) [Reserved.]

(I)

- (1) "Inactive composting facility" means a composting facility where no solid wastes are received, processed, or stored.
- (2) "In-vessel" means a method of composting where solid wastes are placed in an enclosed or partly enclosed unit and managed to enable composting.

(J) [Reserved.]

(K) [Reserved.]

(L) [Reserved.]

(M)

- (1) "Materials placement area" means any area of the composting facility where compost products, solid wastes, feedstocks, bulking agents, or additives are received, placed, processed, or stored.
- (2) "Mixed solid waste" means a feedstock consisting of solid wastes that will readily decompose and waste materials that will not readily decompose and may contain household solid wastes that are excluded from regulation as hazardous wastes in accordance with Chapter 3745-51 of the Administrative Code.
- (3) "Modification" means any substantial change to the location or size of the material placement area, or to the design, construction, process, or operation of a class I composting facility.

(N) [Reserved.]

(O) [Reserved.]

(P) [Reserved.]

(Q) [Reserved.]

(R)

- (1) "Raw rendering material" means a feedstock consisting of any part of a carcass or product of a carcass of any dead animal that is unwholesome, condemned, inedible, or otherwise unfit for human consumption.
- (2) "Runoff" means precipitation that has fallen onto the composting facility and has not come in contact with any compost products, solid wastes, feedstocks, bulking agents, or additives.

(S)

- (1) "Salvaging" means the extracting or removing of materials from the solid waste stream at the working face of a solid waste disposal facility for the intended purpose of recycling or for removal to a salvage facility regulated by Chapter 3737. of the Revised Code and rules adopted thereunder.
- (2) "Sewage sludge" has the same meaning as in Chapter 6111. of the Revised Code and rules adopted thereunder.
- (3) "Static pile" means a method of composting where solid wastes are constructed into a pile and are managed and turned to enable aerobic composting.

(T) "Thermophilic stage" means a biological stage in the composting process characterized by a high rate of decomposition and temperatures above one hundred thirty-one degrees Fahrenheit.

(U) [Reserved.]

(V) [Reserved.]

(W)

- (1) "Windrow" means an elongated pile.
- (2) "Windrow composting" means a method of composting where solid wastes are constructed into an elongated pile and are managed and turned to enable aerobic composting.

(X) [Reserved.]

(Y) "Yard waste" means solid waste that includes only leaves, grass clippings, brush, garden waste, tree trunks, tree stumps, holiday trees, prunings from trees or shrubs, and vegetative waste resulting from the use of commercial products, including but not limited to discarded flowers, potted flowers, or grave blankets that do not include plastic, metal, styrofoam, or other non-biodegradable material. Yard waste does not include wastes from industrial processing, agricultural processing, or food processing.

**3745-560-03 Plan view drawing update for class IV composting facilities.**

No later than February 1, 2013, the owner or operator of a class IV composting facility that obtained an acknowledgment of registration prior to the effective date of this rule shall submit a plan view drawing that meets the requirements set forth in rule 3745-560-400 of the Administrative Code.

**3745-560-04 Composting - log of operations and annual report forms.**

- (A) An owner or operator of a composting facility shall maintain a log of operations on forms prescribed by the director or by alternate forms either in paper or electronic format which shall contain the following:
- (1) General information: facility name and location, contact name and telephone number, license number for class I and II facilities, registration number for class II, III, and IV facilities, and calendar year for which the log is maintained.
  - (2) Operational information: method of composting used and description of equipment available.
  - (3) Materials acceptance and distribution information: date when waste recorded in log of operations, quantity of waste received entered as tons or cubic yards, type of feedstocks, bulking agents, and additives received, county of generation, and quantity of compost product distributed entered as tons or cubic yards.
  - (4) Materials management information: dates when tree stumps, pallets, and clean whole wood are processed and dates when compost piles, windrows, and vessels are formed, turned,

loaded, and sampled.

- (5) Self-inspection checklist: information acknowledging compliance or noncompliance with operational requirements as specified in rule 3745-560-110, 3745-560-210, 3745-560-310, or 3745-560-410 of the Administrative Code and a description of actions taken to abate violations, if applicable.
- (6) Unauthorized materials incident information: the date and time the unauthorized material was discovered, description of the material, hauler name, and action taken by the owner or operator.
- (7) Yard waste load refusal information: the date and time that a load was rejected, the license plate number of the vehicle transporting the rejected load, hauler name, and the reason for rejecting the load.

(B) An owner or operator of a composting facility shall submit an annual report on forms prescribed by the director which shall contain the following:

- (1) General information: facility name and location, contact name and telephone number, license number for class I and II facilities, registration number for class II, III, and IV facilities, and calendar year for which the report is submitted.
- (2) Materials acceptance and distribution information: monthly quantity of waste received by feedstock type, bulking agent, and additive entered as tons or cubic yards, county of generation, and monthly quantity of compost product distributed entered as tons or cubic yards.
- (3) Product testing information: copy of all testing performed on compost product and method utilized and results of the test analysis, if applicable.
- (4) For class I or class II composting facilities, the current closure cost estimate pursuant to rule 3745-560-05 of the Administrative Code.

#### **3745-560-05 Composting - closure cost estimate.**

(A) Closure cost estimate. The owner or operator of a class I or class II composting facility shall determine the closure cost estimate as follows:

- (1) Class I composting facility. The closure cost estimate shall be based on the closure costs at the point in the operating life of the facility when the extent and manner of its operation would make the closure the most expensive, and shall be based on a third party conducting the closure activities. The closure cost estimate shall be documented as an itemized written estimate, in current dollars, of the cost of closure. Ohio EPA may require revisions to the closure cost estimate or to the closure financial assurance instrument.

(2) Class II composting facility. The closure cost estimate shall be calculated as follows:

- (a) For facilities accepting solid wastes authorized in accordance with paragraph (B) of rule 3745-560-210 of the Administrative Code, two dollars and fifty cents per cubic yard, based on the maximum capacity of the materials placement area, excluding the storage capacity of compost product, as specified in the authorizing document.
- (b) For facilities accepting alternative materials not authorized in accordance with paragraph (B) of rule 3745-560-210 of the Administrative Code, eight dollars per cubic yard or the local disposal rate, whichever is higher, based on the maximum capacity of the materials placement area, excluding the storage capacity of compost product, as specified in the authorizing document or that portion of the materials placement area designated for receiving and composting alternative materials specified in the log of operations.

Ohio EPA may require revisions to the closure cost estimate or to the closure financial assurance instrument.

(B) Annual review of closure cost estimate. The owner or operator of a class I or class II composting facility shall annually review and make appropriate revisions to the closure cost estimate in accordance with paragraph (A) of this rule. The review of the closure cost estimate for a class I composting facility shall include an adjustment of the closure cost estimate for inflation. The adjustment shall be made as specified in this paragraph, using an inflation factor derived from the annual implicit price deflator for gross domestic product as published by the U.S. department of commerce in the February issue of "Survey of Current Business" as described in rule 3745-500-03 of the Administrative Code. The inflation factor is the result of dividing the latest published annual deflator by the annual deflator for the previous year.

(1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.

(2) Subsequent adjustments are made by multiplying the most recently adjusted closure cost estimate by the most recent inflation factor.

(C) Review of closure cost estimates associated with modifications or amendments to registrations.

(1) Upon issuance of a permit to install for a modification of an existing class I composting facility, the owner or operator shall review and make appropriate revisions to the closure cost estimate in accordance with paragraph (A) of this rule.

(2) Upon submittal of amendments to the registration of an existing class II composting facility, the owner

or operator shall review and make appropriate revisions to the closure cost estimate in accordance with paragraph (A) of this rule.

- (D) The owner or operator of a class I or class II composting facility shall ensure financial assurance instruments account for increases in the closure cost estimate.

**3745-560-100 Class I composting facility establishment.**

- (A) No person shall establish or operate a class I composting facility without first having met the following:

- (1) Obtaining a permit to install in accordance with this rule prior to the construction of a new class I composting facility.
- (2) Obtaining a solid waste license pursuant to Chapter 3745-501 of the Administrative Code.
- (3) Executing the financial assurance instrument pursuant to rule 3745-503-05 of the Administrative Code for an amount not less than the current closure cost estimate established in accordance with rule 3745-560-05 of the Administrative Code.

- (B) Permit to install for a class I composting facility. A permit to install application shall be submitted to Ohio EPA and shall consist of the following:

- (1) Plan sheets required in paragraph (C) of this rule. Engineering plans, specifications, and information as required by this rule shall be sufficiently detailed to allow for technical review of the permit application and to provide assurance that the facility meets the siting criteria and is designed and will be constructed, operated, and closed in accordance with this chapter and Chapter 3745-501 of the Administrative Code.
- (2) Narrative report with operational information required in paragraph (D) of this rule. The information required in this rule shall be provided in sufficient detail to allow for technical review of the permit application and to provide assurance that the facility is designed and will be constructed, operated, and closed in accordance with this chapter and Chapter 3745-501 of the Administrative Code.
- (3) Land owner information including name, address, and contact information, if the land owner is not the applicant. This information shall include a notarized written statement from each titleholder of each tract of land on which the facility is located that each titleholder acknowledges that the applicant is submitting a permit to install application and may use the land for the purpose of establishing a class I composting facility.

- (4) Copies of the letters of intent required in paragraph (G) of this rule.

- (5) A notarized statement described in and signed by the applicant in accordance with rule 3745-500-50 of the Administrative Code.

- (6) For regulatory review purposes, the initial application and any subsequent revisions to the application shall be submitted in duplicate to the director with a third copy sent to the board of health of the health district where the facility is or will be located. Any revisions to the application must be accompanied by an index listing the change and the page where the change occurred. Upon written request from Ohio EPA, the applicant shall submit two additional complete copies of the revised application to the director and a notarized statement described in and signed by the applicant in accordance with rule 3745-500-150 of the Administrative Code.

- (C) Plan sheets. The following detailed engineering plans, specifications, and information for the composting facility shall be shown by means of drawings and narrative descriptions where appropriate and shall be signed and sealed by a professional engineer. Minimum dimensions of the plan drawings shall be twenty-four inches by thirty-six inches. An individual plan drawing may contain information specified in more than one individual subheading. Each individual plan drawing shall clearly show the vertical and horizontal scales used. A scale of one inch equals no greater than one hundred feet shall be used unless specified otherwise by Ohio EPA.

- (1) Engineering plan cover sheet to be numbered sheet 1 shall contain the following detailed information:

- (a) The name of the composting facility.
- (b) The geographical location of the composting facility shown on a USGS 7.5 minute (topographic) map.
- (c) The name and address of the applicant and the composting facility operator.
- (d) The name and address of each titleholder of each tract of land to be used for the composting facility.
- (e) The name, address, and telephone number of the person who prepared the plans.
- (f) Index of plan sheets.

- (2) A plan drawing to be numbered consecutively as sheets 2A, 2B, 2C, etc. shall contain the following detailed facility construction and operational information:

- (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
- (b) Direction of prevailing winds during each season.

- (c) Traffic patterns, including on-site access roads.
  - (d) Cross sections and construction materials of all surfaces and facilities on or in which solid wastes will be placed prior to, during, or after composting.
  - (e) Runoff control structures, sedimentation ponds, and leachate management system structures and the layout of the leachate management system including at a minimum leachate flow patterns, drains, piping, storage, and clean-outs.
  - (f) Composting facility boundary.
  - (g) Location of the materials placement areas for each of the following:
    - (i) Composting operations.
    - (ii) Storage of feedstocks, bulking agents, or additives.
    - (iii) Storage of compost product.
  - (h) The location of existing or proposed maintenance buildings, weighing facilities, storage buildings, and other structures.
  - (i) Roads, railroads, and occupied structures.
  - (j) The location of fencing, gates, and natural or other screening on the site (may be shown on an aerial photograph).
  - (k) The north arrow.
- (3) A plan drawing to be numbered consecutively as sheets 3A, 3B, 3C, etc., showing the following detailed facility siting criteria items located inside the facility boundaries and within one thousand feet beyond the facility boundaries:
- (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
  - (b) Composting facility boundary.
  - (c) Public roads, railroads, and structures.
  - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
  - (e) Existing domiciles.
  - (f) Leachate management structures.
  - (g) The limits of the one hundred year floodplain.
  - (h) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
- (i) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
- (j) Existing public water supply wells, developed springs, or private potable water supply wells.
- (k) The north arrow.
- (4) A plan drawing to be numbered consecutively as sheets 4A, 4B, 4C, etc. shall contain the following detailed facility surface and ground water management information inside the facility boundaries and within five hundred feet beyond the facility boundaries. At a minimum, the plan drawings shall include the following:
- (a) The property lines of land owned or leased for the composting facility as determined by a property survey conducted by a professional skilled in the appropriate discipline.
  - (b) A detailed description of the existing direction of flow and points of concentration of surface water.
  - (c) The existing topography showing vegetation, streams, wetlands, lakes, springs, and other surface waters of the state as defined in Chapter 3745-1 of the Administrative Code with a contour interval no greater than five feet.
  - (d) The proposed topography of the site with contour lines that shall have an interval of no greater than five feet.
  - (e) Existing public and private water system drinking water supply wells.
  - (f) Drainage plans which show the following:
    - (i) Grades.
    - (ii) Swales and streams and existing or proposed diversion trenches.
    - (iii) Existing or proposed special drainage devices to be used for control of surface erosion.
  - (g) The north arrow.
- (D) Narrative report. The following information shall be presented in narrative form with necessary

accompanying diagrams provided on a form prescribed by the director and shall be signed and sealed by a professional engineer:

- (1) A detailed discussion of the following general operational information shall include the following:
    - (a) The authorized maximum daily waste receipt planned for the facility.
    - (b) The equipment to be used in the operation and maintenance of the facility.
    - (c) The waste processing rate, performance capabilities, and principal specifications of each piece of powered equipment to be used at the facility for loading, unloading, handling, or processing solid wastes.
    - (d) The maximum capacity and type of each container to be used, if applicable, to store solid wastes at the composting facility including feedstocks, bulking agents, additives, and materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process.
    - (e) The maximum available capacity of the facility including area measurements for all stages of composting.
    - (f) For informational purposes only, proposed hours of operation and if applicable proposed hours that the facility will be open to the public for receiving waste materials.
    - (g) Methods of loading and unloading solid waste materials including compost and materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process into transportation vehicles at the facility.
    - (h) Traffic patterns within the facility boundaries.
    - (i) Maximum and average force in pounds per square inch that will be exerted upon the floor of the facility.
  - (2) A detailed discussion of composting operational information shall include the following:
    - (a) Identification of the sources, composition, and estimated quantity of solid waste by type of feedstock, bulking agent, or additive to be used for composting.
    - (b) A materials flow diagram for the facility showing both the type of feedstocks, bulking agents, or additives and the quantities of materials received and removed.
  - (c) Procedures, frequency, and the sequence of processes and steps involved in converting solid waste to compost including but not limited to handling, sorting, shredding, mixing, adding water, screening, turning, composting, curing, and recirculating leachate and other liquids authorized for use by the director.
  - (d) The percentage of mixture of the feedstock, bulking agent, and additive and the resulting carbon to nitrogen ratio.
  - (3) A detailed discussion of control measures taken shall include the following:
    - (a) The collection, containment, recirculation, treatment, removal, disposal and prevention of generation of leachate and how leachate will be prevented from entering surface and ground waters including either the following:
      - (i) Direct discharge to an approved treatment facility.
      - (ii) Leachate conveyance, recirculation, and storage structures and systems.
    - (b) The collection, containment, recirculation, treatment, removal, disposal and prevention of generation of surface water runoff and how water runoff will be prevented from entering surface and ground waters including either of the following:
      - (i) Direct discharge to an approved treatment facility.
      - (ii) Surface water runoff conveyance, recirculation, and storage structures and systems.
    - (c) How birds, rodents, and other vectors will be prevented from reaching solid wastes at the composting facility.
    - (d) Measures utilized to control fire, dust, scavenging, erosion, and blowing debris.
    - (e) Inspection procedures for incoming wastes to prevent and manage prohibited materials at the composting facility.
    - (f) Inclement weather operation procedures.
    - (g) Salvaging procedures to be conducted on site, if any.
    - (h) Odor management plan including discussion of the circumstances that are likely to result in nuisance odor production, methods that will be taken to reduce or minimize odors that are produced, and methods that will be used to mitigate the effects of odors.
- (E) On the date the permit to install application is received by Ohio EPA, the limits of materials placement and

leachate management structures are in compliance with the following siting criteria:

- (1) The materials placement area and leachate management structures shall not be located within the following:
  - (a) Two hundred feet from any surface waters of the state.
  - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
  - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
  - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
  - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
  - (f) Three hundred feet from a transient non-community public water system drinking water supply well.
  - (g) Five hundred feet from a domicile unless the domicile is owned or leased by the owner or operator.
  - (h) One thousand feet from the following:
    - (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
    - (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
    - (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
    - (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.
    - (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.
  - (i) A one hundred year floodplain.
- (2) The materials placement area and leachate management structures shall not be located

within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.

- (3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted the materials placement area and leachate management system of the composting facility shall not be located in any of the following:
  - (a) A national park or national recreation area.
  - (b) A state park or an established state park purchase area.
  - (c) A candidate area for potential inclusion in the national park system.
  - (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.
- (F) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.
- (G) Concurrent with submitting the permit to install application, the applicant shall do the following:
  - (1) Comply with any applicable disclosure statement requirements in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.
  - (2) Mail letters of intent to establish a composting facility which include a description of property and facility boundaries by certified mail or any other form of mail accompanied by a receipt to the following:
    - (a) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
    - (b) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
    - (c) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
  - (d) The local zoning authority having jurisdiction.

- (e) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
- (f) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
- (g) The fire department having responsibility for providing fire control services where the facility is proposed to be located.
- (h) The division of air pollution control, the division of surface water, and the division of drinking and ground water of Ohio EPA including a written request for information pertaining to any regulatory requirements under Chapter 3704. or Chapter 6111. of the Revised Code.

(H) Modifications to a permit to install.

- (1) No person shall modify a class I composting facility without first obtaining a permit to install issued by the director.
- (2) The owner or operator proposing to modify a class I composting facility shall submit an application to the director in accordance with paragraphs (B), (C), and (D) of this rule.

(I) Alterations to the permit to install. No person shall alter a class I composting facility without first submitting a request and obtaining written concurrence from Ohio EPA in accordance with rule 3745-500-150 of the Administrative Code.

**3745-560-101 Criteria and procedures for approval, termination, revocation, and administrative change of a class I composting facility permit to install.**

(A) Criteria for approval.

- (1) The director shall not approve a class I composting facility permit to install unless the following are determined:
  - (a) Establishment or modification and operation of the class I composting facility will not violate Chapters 3704., 3734., or 6111. of the Revised Code.
  - (b) The applicant or person listed as the operator who has previously or is currently responsible for the management or operation of one or more solid waste facilities has managed or operated such facility in substantial compliance with applicable provision of Chapters 3704., 3714., 3734., and 6111. of the Revised Code and any rules adopted and permits issued thereunder and has maintained substantial compliance with all applicable orders issued by the director, environmental

review appeals commission, or courts having jurisdiction in accordance with Chapter 3746-13 of the Administrative Code in the course of such previous or current management or operations. The director may take into consideration whether compliance has been maintained with any applicable order of a board of health maintaining a program on the approved list.

- (c) The applicant meets the requirements of sections 3734.40 and 3734.43 of the Revised Code and rules adopted thereunder.
- (d) The person listed as operator of the facility shall meet the requirements of division (L) of section 3734.02 of the Revised Code and rules adopted thereunder.
- (e) The permit to install application contains the information required pursuant to rule 3745-560-100 of the Administrative Code.
- (f) The siting criteria as established in rule 3745-560-100 of the Administrative Code have been met.
- (g) The facility preparation requirements are met as established in rule 3745-560-102 of the Administrative Code.
- (h) The letters of intent were sent in accordance with rule 3745-560-100 of the Administrative Code.

- (2) An application notwithstanding any deficiency may be considered and acted upon if sufficient information is provided for the director to determine whether the permit to install requirements set forth in rule 3745-560-100 of the Administrative Code are satisfied.
- (3) If the director determines that information in addition to that required by rule 3745-560-100 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, the director may require that the applicant supply such information as a precondition to further consideration of the permit to install application.
- (4) The director may deny a permit to install application for a class I composting facility if not later than thirty days after receipt of notification that the application is incomplete the owner or operator has not corrected noted deficiencies and resubmitted the application or has not submitted a written request for and obtained approval of a thirty day extension.
- (5) The director may deny a permit to install application for a class I composting facility that proposes to be established on land where a hazardous or solid waste facility was operated and has not obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.

(B) Criteria for termination of a class I composting facility permit to install.

- (1) A class I composting facility permit to install shall terminate in accordance with rule 3745-500-330 of the Administrative Code.
- (2) A class I composting facility permit to install shall expire upon receipt by Ohio EPA of written notification from the owner or operator that the permit to install be terminated.

(C) Criteria for revocation of a class I composting facility permit to install.

The director may revoke a class I composting facility permit to install when any of the following apply:

- (1) The composting facility ceases to be an active composting facility.
- (2) The siting criteria as established in rule 3745-560-100 of the Administrative Code have not been met.
- (3) The composting facility was modified or altered and the owner or operator did not submit to Ohio EPA a modification or alteration request for the changes and failed to obtain any applicable authorizing documents.
- (4) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.
- (5) A solid waste facility license held by the owner or operator of the composting facility expires and a license renewal has been applied for and denied as a final action of the licensing authority.
- (6) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.
- (7) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
- (8) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code.
- (9) Any causes for revocation pursuant to rule 3745-500-350 of the Administrative Code.

(D) Administrative change. A permit to install may be administratively changed in accordance with rule 3745-500-360 of the Administrative Code

(E) Procedures.

- (1) When issuing, denying, modifying, suspending,

approving or denying transfer of, or revoking a permit to install, the director shall follow the appropriate procedures set forth in rule 3745-500-120 of the Administrative Code and any applicable procedures set forth in the Revised Code.

- (2) Upon approving or denying the transfer of a permit to install, the director shall retain and distribute copies of the signed approval or denial letter pursuant to rule 3745-500-130 of the Administrative Code.

**3745-560-102 Procedures for commencement of operations at class I composting facilities.**

(A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the facility, the following shall be completed:

- (1) Materials placement areas shall be located within enclosed buildings or structures. The area where solid waste is received at the composting facility shall be located within structures that may have one open side.
- (2) The floor of the composting facility used for materials placement and storage of materials that will be removed from the facility including but not limited to salvaged materials and materials that are not utilized in the composting process shall be designed and installed to meet the following:
  - (a) Constructed of an impermeable material such as concrete, asphalt, or metal to prevent the infiltration of leachate into the ground water.
  - (b) Constructed to withstand at least one hundred and ten per cent of the maximum force in pounds per square inch to be expected during normal operation.
  - (c) Constructed to prevent any unauthorized discharge of leachate from the facility.
  - (d) Constructed in such a manner to readily allow wet or dry cleanup operations.
  - (e) Sloped to direct leachate to collection points and not allow ponding of liquids.
  - (f) Constructed to direct leachate to the leachate management system.
  - (g) Designed to withstand the maximum temperatures encountered during composting.
  - (h) Accessible for annual visual inspection for cracks and breaks.
  - (i) Constructed with materials that enable repairs to be made.

(j) Constructed to allow heavy equipment operation during inclement weather.

(3) Adequate leachate collection, management, and treatment or disposal shall be provided and proper treatment or disposal facilities shall be used. If conveyance storage structures are utilized, the conveyance storage structures shall provide the following:

(a) For storage tanks, be provided with spill containment.

(b) For storage structures and other leachate handling areas, have a capacity sufficient for proper operation of the facility.

(c) For storage structures, be capable of being monitored or inspected for leaks.

(4) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.

(5) The materials placement area shall be constructed to allow facility operation during inclement weather.

(6) Construction of planned leachate and surface water management structures.

(7) Signs are posted in accordance with rule 3745-560-110 of the Administrative Code.

(B) Verification of preparations. Prior to initial acceptance of feedstocks, bulking agents, or additives, the composting facility shall be inspected and written concurrence shall be received from Ohio EPA acknowledging compliance with this rule.

**3745-560-105 Alternative materials request for class I composting facilities.**

(A) The owner or operator of a class I composting facility may submit a written request to the director for approval to accept alternative materials not otherwise authorized in accordance with paragraph (B) of rule 3745-560-110 of the Administrative Code. At a minimum, a request to accept an alternative material shall include the following:

(1) The name of the composting facility where the material will be accepted and the name of the facility owner and operator.

(2) A detailed description of the material to be accepted including any available or requested analytical data.

(3) The source and suppliers of the material.

(4) The maximum amount of the material that the facility will accept on a daily basis.

(5) A detailed description that outlines the technical feasibility of the proposal.

(6) A detailed description of any impact that may result from the acceptance of the material in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-560-110 of the Administrative Code including the methods that will be used to control the impacts.

(7) Whether pathogens are expected to be present in the material and what mechanisms will be in place to prevent exposure for those in contact with the waste or the compost product produced from such wastes.

(8) Whether the owner or operator is requesting to compost the material separate from mixed solid waste.

(9) Whether the owner or operator is requesting to compost the material as a pilot project or on a permanent basis.

(10) A description of any known or potential contaminants that may cause or threaten to cause an adverse effect to the public health or safety or the environment.

(11) How the owner or operator intends to distribute or otherwise utilize the compost product.

(12) A detailed description of how the material will be processed. At a minimum, the description shall include the following:

(a) Whether the owner or operator will utilize the material as a feedstock, bulking agent, or additive.

(b) Whether the owner or operator will shred or screen the material prior to incorporation into the composting process.

(c) What equipment will be utilized.

(d) The percentage of mixture of the feedstock, bulking agent, or additive with other authorized feedstocks, bulking agents, or additives and the resulting carbon to nitrogen ratio.

(e) The method of composting utilized to maintain an appropriate environment for biological decomposition.

(f) The anticipated moisture level of the incoming feedstock, bulking agent, or additive and the anticipated moisture levels after mixing with other authorized feedstocks, bulking agents, or additives.

(13) The revised closure cost estimate prepared in accordance with rule 3745-560-05 of the Administrative Code.

(14) Any other information deemed necessary by Ohio EPA.

(B) The director may approve and condition a request submitted in accordance with this rule when the following are determined:

- (1) The use of the alternative material is technically feasible for composting and the owner or operator will use a technically appropriate composting method.
- (2) The owner or operator has sufficient resources including but not limited to equipment, personnel, and facility capacity to manage and process the alternative material.
- (3) The owner or operator is capable of maintaining an appropriate moisture level, carbon to nitrogen ratio, and an environment suitable to the composting process.
- (4) The process used for composting alternative materials of pathogen concern will minimize the risk of exposure from pathogens and will not cause a substantial threat to public health or safety or the environment.
- (5) The owner or operator of the composting facility is in substantial compliance with Chapter 3734. of the Revised Code, this chapter, and all other applicable laws and regulations.
- (6) The acceptance of the alternative material is unlikely to cause violations of Chapter 3704. or 6111. of the Revised Code, this chapter, or any other applicable federal or state laws.
- (7) The acceptance, processing, and use of the material will not otherwise cause or threaten to cause an adverse effect to public health or safety or the environment.
- (8) The submitted analytical data demonstrates that the alternative material exceeds the parameters specified in rule 3745-560-130 of the Administrative Code, but the applicant has demonstrated that the compost produced with that material will meet the compost quality standards specified in rule 3745-560-130 of the Administrative Code.

(C) The director may establish compost quality standards for the alternative materials requested to protect public health and safety and the environment.

**3745-560-110 Operational requirements for class I composting facilities.**

(A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.

(B) Authorized materials. The owner or operator shall only accept those feedstocks, bulking agents, and additives authorized in the permit to install. The owner or operator may accept alternative materials upon approval of a permit alteration issued by the director pursuant to rule 3745-560-105 of the Administrative Code.

(C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.

(1) Prohibited material includes but is not limited to the following:

- (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
- (b) Hazardous waste.
- (c) Infectious waste.
- (d) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
- (e) Lead acid batteries.
- (f) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
- (g) Scrap tires.
- (h) Any other material that the facility is otherwise prohibited to accept under federal or state laws.

(2) If prohibited material is detected, the owner or operator shall immediately do the following:

- (a) Remove the prohibited material from the materials placement area.
- (b) Manage the prohibited material in accordance with applicable laws and regulations.
- (c) Record incidents in the log of operations.

(D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:

(1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of materials in a pile or windrow to ensure

consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
  - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (G) Containers management. Containers used to transport authorized materials shall be removed, shredded, or otherwise processed to increase the exposed surface area for composting if incorporated into the composting process.
- (H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:
- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
  - (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
- (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
- (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.
- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.
- (I) Facility access. The owner or operator shall do the following:
- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
  - (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
  - (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.
- (J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for the operations of the facility available at all times.
- (K) Facility signage. The owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:
- "This composting facility will not accept hazardous wastes, infectious wastes, asbestos, lead acid batteries, or other prohibited materials."
- (L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:
- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
  - (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree

stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.

- (M) Surface water management. The owner or operator shall do the following:
- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
  - (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
  - (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
  - (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.
- (N) Leachate management. The owner or operator shall do the following:
- (1) Take action to minimize the production of leachate.
  - (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
  - (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.
  - (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:
- (1) Comply with the more stringent testing standard required by rule 3745-560-120 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.
  - (2) Reintroduce the compost or compost product into the composting process.
  - (3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.

(P) Food scraps management. An owner or operator who accepts food scraps shall do the following:

- (1) Incorporate the food scraps into the composting process or combine with bulking agents in a manner to prevent nuisances including but not limited to odor, vectors, and litter no later than the end of operating hours, as specified in the license application, on the date of receipt.
- (2) Maintain a stockpile of biofilter material to provide at a minimum a six inch cover to piles containing food scraps and apply a biofilter cover consisting of at a minimum six inches on the piles if odors, dust, or vectors are present or upon written request by Ohio EPA or the approved board of health.
- (3) Control free liquid from the incoming food scraps using a berm consisting of compost, bulking agents, or other absorbent material placed around the area where the incoming material is handled and mixed.

(Q) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet the applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

**3745-560-115 Record keeping requirements for class I composting facilities.**

- (A) Record retention and availability. The owner or operator shall do the following:
- (1) Maintain records specified in this rule for a period of at least three years.
  - (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
  - (3) Upon request, submit records to Ohio EPA or the approved board of health.
- (B) Log of operation. The owner or operator shall do the following:
- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
  - (2) Complete the log of operation daily at an active composting facility and once per month at an inactive composting facility.
- (C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the following:
- (1) The required information specified in rule 3745-560-

04 of the Administrative Code.

- (2) A summary of any maintenance performed on the waste handling floor and the leachate control system installed at the facility.

**3745-560-120 Compost distribution requirements for class I composting facilities.**

(A) Compost product distribution.

- (1) Compost produced from mixed solid waste shall be disposed at a licensed sanitary landfill facility or may be used at a licensed sanitary landfill facility where the operator has obtained authorization for use of such compost in accordance with Chapter 3745-27 of the Administrative Code.
- (2) Except as provided in paragraph (A)(1) of this rule, an owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-125 of the Administrative Code and meets the compost quality standards of rule 3745-560-130 of the Administrative Code.
- (3) Compost that meets the applicable quality standards of rule 3745-560-130 of the Administrative Code may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
- (4) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.
- (5) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.

[Comment: Compost containing mixed solid waste may only be distributed in accordance with paragraph (A)(1) of this rule.]

(B) Product information and availability of test results.

- (1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:
  - (a) Name and address of the composting facility.
  - (b) Any feedstocks, bulking agents, and additives used.

(c) Recommended uses for the compost product.

- (d) Any owner or operator recommended restrictions on the use of the compost product.

- (2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-125 and 3745-560-130 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

- (1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to produce the compost.
- (2) A copy of the test results of the compost required in accordance with rule 3745-560-130 of the Administrative Code.
- (3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-130 of the Administrative Code.
- (4) A detailed description of the proposed alternative use, if not requesting land application.
- (5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.
- (6) A copy of test results for soil from the proposed location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.
- (7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.
- (8) Any other information deemed necessary by the director.

(D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:

- (1) The compost was not produced from mixed solid waste feedstock.
- (2) The proposed land application or alternative use does not cause or threaten to cause an adverse

effect to the public health or safety or the environment.

- (3) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

**3745-560-125 Compost sampling and testing requirements for class I composting facilities.**

- (A) The owner or operator shall sample the compost in accordance with the following:
  - (1) Determine the volume of the pile of compost and record in the log of operations.
  - (2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:
    - (a) Each composite sample shall consist of nine grab samples of equal volume.
    - (b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.
    - (c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.
  - (3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.
  - (4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.
  - (5) Samples collected for testing of Table 2 in rule 3745-560-130 of the Administrative Code shall be prepared and analysis started within one of the following time frames:
    - (a) Not later than eight hours after the collection of the sample.
    - (b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.
  - (6) Sample collection and preservation shall ensure valid and representative results.
- (B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.

- (C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:

- (1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.
- (2) The feedstocks, bulking agents, and additives accepted at the facility.
- (3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-130 of the Administrative Code.
- (4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.
- (5) If applicable, the scientifically recognized test preparation and analytical method that will provide equivalent or improved test results.
- (6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.
- (7) Any other information deemed necessary by the director.

- (D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-130 of the Administrative Code.

**3745-560-130 Compost quality standards for class I composting facilities.**

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

- (A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, agricultural waste, food scraps, and alternative materials. The owner or operator shall have the samples collected pursuant to rule 3745-560-125 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020C or SW-846 7000B or SW-846 7010	TMECC 04.06-Pb
Mercury	7.8	SW-846 7471B	SW-846 7471B SW-846 6010C or SW-846 6020A or SW-846	TMECC 04.06-Hg

Table 1 - Heavy metals

			7000B or SW-846 7010	
Nickel	420	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-Ni
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se
Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn

Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total solids (dry weight) (1000 MPN/GTS)	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B
Salmonella spp.	Limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.02

Table 3 - Foreign/inert matter

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method	TMECC equivalent method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	SW-846 160.3	Detailed below	TMECC 03.08

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 4 - General parameters

Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-user application that reflect user industry standards.]

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A

(B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.

(1) Upon written notification by the director, the owner or operator shall provide information regarding the feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:

(a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.

(b) A description of the chemical and biological constituents.

(c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.

(2) Upon written notification by the director, the owner

or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.

- (3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

[Comment: Compost containing mixed solid waste does not have testing parameters as it may only be distributed in accordance with paragraph (A)(1) of rule 3745-560-120 of the Administrative Code.]

### **3745-560-135 Closure requirements for class I composting facilities.**

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:
- (1) The facility permit to install has terminated in accordance with paragraph (B) of rule 3745-560-101 of the Administrative Code.
  - (2) The director revokes the facility permit to install pursuant to paragraph (B) of rule 3745-560-101 of the Administrative Code.
  - (3) Any of the following mandatory closure activities occurs:
    - (a) The composting facility ceases to be an active composting facility.
    - (b) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.
    - (c) A solid waste facility license held by the owner or operator of the composting facility expires and a license renewal has been applied for and denied as a final action of the licensing authority.
    - (d) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.
    - (e) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
    - (f) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.

### **(B) Closure requirements.**

- (1) The owner or operator shall continue to comply with rule 3745-560-110 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
- (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."

- (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.
- (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:
  - (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.
  - (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.
  - (c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.

- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date

when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

**3745-560-200 Class II composting facility establishment.**

- (A) No person shall establish a new class II composting facility or continue to operate an existing facility without first having submitted the following:
- (1) A registration application in accordance with this rule.
  - (2) An executed financial assurance instrument pursuant to rule 3745-503-05 of the Administrative Code for an amount not less than the current closure cost estimate established in accordance with rule 3745-560-05 of the Administrative Code. If the closure cost estimate is three thousand five hundred dollars or less, no financial assurance is required.
- (B) No person shall operate a class II composting facility without first having obtained a solid waste license pursuant to Chapter 3745-501 of the Administrative Code.
- (C) Registration of class II composting facility. A registration application shall include the following:
- (1) Registration form prescribed by the director including but not limited to business name, contact person including operator and property owner, contact information, location of the proposed composting facility, closure cost estimate, and notarized statement certifying compliance with the siting criteria specified in paragraph (D) of this rule.
  - (2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:
    - (a) The property lines of all land owned or leased for the composting facility.
    - (b) The boundary lines for the composting facility.
    - (c) Public roads, railroads, and structures.
    - (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
    - (e) The north arrow.
    - (f) Location of the materials placement areas for each of the following:
      - (i) Composting operations.
      - (ii) Storage of feedstocks, bulking agents, or additives.

(iii) Storage of compost product.

- (g) Existing occupied structures.
  - (h) Any leachate management structure.
  - (i) The limits of the one hundred year floodplain.
  - (j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
  - (k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
  - (l) Existing public water supply wells, developed springs, or private potable water supply wells.
- (3) Copies of the letters of intent required in paragraph (E) of this rule.
- (D) On the date the registration application is received by Ohio EPA, the limits of materials placement and leachate management structures shall meet the following siting criteria:
- (1) The materials placement area and leachate management structures shall not be located within the following:
    - (a) Two hundred feet from any surface waters of the state.
    - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
    - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
    - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
    - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
    - (f) Three hundred feet from a transient non-community public water system drinking water supply well.
    - (g) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is

owned or leased by the owner or operator.

(h) Five hundred feet from the following:

- (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
- (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
- (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
- (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.
- (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.

(i) A one hundred year floodplain.

(2) The materials placement area and leachate management structures shall not be located within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.

(3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:

- (a) A national park or national recreation area.
- (b) A state park or an established state park purchase area.
- (c) A candidate area for potential inclusion in the national park system.
- (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.

(E) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility

boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:

- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
- (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
- (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
- (4) The local zoning authority having jurisdiction.
- (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
- (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
- (7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.

(F) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days after receipt of the notification.

(G) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:

- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
- (2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the

existing registration's plan drawing.

- (H) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

**3745-560-201 Criteria for approval and termination of a class II composting facility registration.**

- (A) Criteria for approval.

- (1) A class II composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:

(a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-200 of the Administrative Code.

(b) The siting criteria as established in rule 3745-560-200 of the Administrative Code have been met.

(c) The plan view drawing contains the information required in rule 3745-560-200 of the Administrative Code.

(d) The letters of intent were sent in accordance with rule 3745-560-200 of the Administrative Code.

(e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.

(f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.

(g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.

- (2) If Ohio EPA determines that information in addition to that required by rule 3745-560-200 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

- (B) Criteria for termination of a class II composting facility registration.

A class II composting facility registration shall expire upon receipt by Ohio EPA of written request from the owner or operator that the composting facility registration be terminated.

**3745-560-202 Procedures for commencements of operations at class II composting facilities.**

- (A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the composting facility the following shall be completed:

(1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.

(2) Construction of the materials placement area to allow facility operation during inclement weather.

(3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.

(4) Construction of any planned leachate and surface water management structures.

(5) Signs are posted in accordance with rule 3745-560-210 of the Administrative Code.

- (B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a registration application that complies with paragraph (A) of rule 3745-560-201 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:

(1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.

(2) Ninety days have passed since Ohio EPA received the registration application.

- (C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-201 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner or operator fails to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

**3745-560-205 Alternative materials request for class II composting facilities.**

- (A) The owner or operator of a class II composting facility may submit a written request to the director for approval to accept alternative materials not otherwise authorized in accordance with paragraph (B) of rule

3745-560-210 of the Administrative Code. At a minimum, a request to accept an alternative material shall include the following:

- (1) The name of the composting facility where the material will be accepted and the name of the facility owner and operator.
- (2) A detailed description of the material to be accepted including any available or requested analytical data.
- (3) The source and suppliers of the material.
- (4) The maximum amount of the material that the facility will accept on a daily basis.
- (5) A detailed description that outlines the technical feasibility of the proposal.
- (6) A detailed description of any impact that may result from the acceptance of the material in regard to the management of odor, litter, vectors, and leachate or other operational requirements of rule 3745-560-210 of the Administrative Code including the methods that will be used to control the impacts.
- (7) Whether pathogens are expected to be present in the material and what mechanisms will be in place to prevent exposure for those in contact with the waste or the compost product produced from such wastes.
- (8) Whether the owner or operator is requesting to compost the material as a pilot project or on a permanent basis.
- (9) A description of any known or potential contaminants that may cause or threaten to cause an adverse effect to the public health or safety or the environment.
- (10) How the owner or operator intends to distribute or otherwise utilize the compost product.
- (11) A detailed description of how the material will be processed. At a minimum, the description shall include the following:
  - (a) Whether the owner or operator will utilize the material as a feedstock, bulking agent, or additive.
  - (b) Whether the owner or operator will shred or screen the material prior to incorporation into the composting process.
  - (c) What equipment will be utilized.
  - (d) The percentage of mixture of the feedstock, bulking agent, or additive with other authorized feedstocks, bulking agents, or additives and the resulting carbon to nitrogen ratio.
  - (e) The method of composting utilized to maintain

an appropriate environment for biological decomposition.

- (f) The anticipated moisture level of the incoming feedstock, bulking agent, or additive and the anticipated moisture levels after mixing with other authorized feedstocks, bulking agents, or additives.
  - (12) The revised closure cost estimate prepared in accordance with rule 3745-560-05 of the Administrative Code.
  - (13) Any other information deemed necessary by Ohio EPA.
- (B) The director may approve and condition a request submitted in accordance with this rule when the following are determined:
- (1) The use of the alternative material is technically feasible for composting and the owner or operator will use a technically appropriate composting method.
  - (2) The owner or operator has sufficient resources including but not limited to equipment, personnel, and facility capacity to manage and process the alternative material.
  - (3) The owner or operator is capable of maintaining an appropriate moisture level, carbon to nitrogen ratio, and an environment suitable to the composting process.
  - (4) The process used for composting alternative materials of pathogen concern will minimize the risk of exposure from pathogens and will not cause a substantial threat to public health or safety or the environment.
  - (5) The owner or operator of the composting facility is in substantial compliance with Chapter 3734. of the Revised Code, this chapter, and all other applicable laws and regulations.
  - (6) The acceptance of the alternative material is unlikely to cause violations of Chapter 3704. or 6111. of the Revised Code, this chapter, or any other applicable federal or state laws.
  - (7) The acceptance, processing, and use of the material will not otherwise cause or threaten to cause an adverse effect to public health or safety or the environment.
  - (8) The submitted analytical data demonstrates that the alternative material exceeds the parameters specified in rule 3745-560-230 of the Administrative Code, but the applicant has demonstrated that the compost produced with that material will meet the compost quality standards specified in rule 3745-560-230 of the Administrative Code.
- (C) The director may establish compost quality standards for the alternative materials requested to protect public

health and safety and the environment.

**3745-560-210 Operational requirements for class II composting facilities.**

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept yard waste, agricultural waste, animal waste, food scraps, bulking agents, and additives. The owner or operator may accept alternative materials, as approved by the director pursuant to rule 3745-560-205 of the Administrative Code.
- (C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.
- (1) Prohibited material includes but is not limited to the following:
- (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
  - (b) Commingled yard waste.
  - (c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.
  - (d) Hazardous waste.
  - (e) Infectious waste.
  - (f) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
  - (g) Batteries.
  - (h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
  - (i) Any other material that the facility is otherwise prohibited to accept under federal or state laws.
- (2) If prohibited material is detected, the owner or operator shall immediately do the following:
- (a) Remove the prohibited material from the materials placement area.
  - (b) Manage the prohibited material in accordance with applicable laws and regulations.

(c) Record incidents in the log of operations.

(D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:

- (1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.
  - (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
  - (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
  - (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.
- (E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.
- (F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.

(G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:

- (1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.
- (2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.

(H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:

- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
- (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
- (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
- (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.
- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.

(I) Facility access. The owner or operator shall do the following:

- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
- (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
- (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.

(J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for

the operations of the facility available at all times.

(K) Facility signage. The owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:

"This composting facility only accepts yard waste, agricultural waste, animal waste, and food scraps, and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."

(L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:

- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
- (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.

(M) Surface water management. The owner or operator shall do the following:

- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
- (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
- (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
- (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.

(N) Leachate management. The owner or operator shall do the following:

- (1) Take action to minimize the production of leachate.
- (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
- (3) Collect and contain leachate within the boundary of

the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.

- (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.
- (O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:
- (1) Comply with the more stringent testing standard required by rule 3745-560-220 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.
  - (2) Reintroduce the compost or compost product into the composting process.
  - (3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.
- (P) Food scraps management. An owner or operator who accepts food scraps shall do the following:
- (1) Incorporate the food scraps into the composting process or combine with bulking agents in a manner to prevent nuisances including but not limited to odor, vectors, and litter no later than the end of operating hours, as specified in the license application, on the date of receipt.
  - (2) Maintain a stockpile of biofilter material to provide at a minimum a six inch cover to piles containing food scraps and apply a biofilter cover consisting of at a minimum six inches on the piles if odors, dust, or vectors are present or upon written request by Ohio EPA or the approved board of health.
  - (3) Control free liquid from the incoming food scraps using a berm consisting of compost, bulking agents, or other absorbent material placed around the area where the incoming material is handled and mixed.
- (Q) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet the applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

**3745-560-215 Record keeping requirements for class II composting facilities.**

- (A) Record retention and availability. The owner or operator shall do the following:
- (1) Maintain records specified in this rule for a period of at least three years.
  - (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
  - (3) Upon request, submit records to Ohio EPA or the approved board of health.
- (B) Log of operation. The owner or operator shall do the following:
- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
  - (2) Complete the log of operation daily at an active composting facility and once per month at an inactive composting facility.
- (C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

**3745-560-220 Compost distribution requirements for class II composting facilities.**

- (A) Compost product distribution.
- (1) An owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-225 of the Administrative Code and meets the compost quality standards of rule 3745-560-230 of the Administrative Code.
  - (2) Compost that meets the applicable quality standards may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
  - (3) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.
  - (4) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.
  - (5) Any compost product may be blended with other

compost products prior to distribution.

(B) Product information and availability of test results.

(1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:

- (a) Name and address of the composting facility.
- (b) Any feedstocks, bulking agents, and additives used.
- (c) Recommended uses for the compost product.
- (d) Any owner or operator recommended restrictions on the use of the compost product.

(2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-225 and 3745-560-230 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

- (1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to produce the compost.
- (2) A copy of the test results of the compost required in accordance with rule 3745-560-230 of the Administrative Code.
- (3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-230 of the Administrative Code.
- (4) A detailed description of the proposed alternative use, if not requesting land application.
- (5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.
- (6) A copy of test results for soil from the proposed location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.
- (7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.

(8) Any other information deemed necessary by the director.

(D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:

- (1) The proposed land application or alternative use does not cause or threaten to cause an adverse effect to the public health or safety or the environment.
- (2) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

**3745-560-225 Compost sampling and testing requirements for class II composting facilities.**

(A) The owner or operator shall sample the compost in accordance with the following:

- (1) Determine the volume of the pile of compost and record in the log of operations.
- (2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:
  - (a) Each composite sample shall consist of nine grab samples of equal volume.
  - (b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.
  - (c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.
- (3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.
- (4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.
- (5) Samples collected for testing of Table 2 in rule 3745-560-230 of the Administrative Code shall be prepared and analysis started within one of the following time frames:
  - (a) Not later than eight hours after the collection of the sample.
  - (b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.
- (6) Sample collection and preservation shall ensure valid and representative results.

(B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.

(C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:

- (1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.
- (2) The feedstocks, bulking agents, and additives accepted at the facility.
- (3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-230 of the Administrative Code.
- (4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.
- (5) If applicable, the scientifically recognized test preparation and analytical method that will provide equivalent or improved test results.
- (6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.
- (7) Any other information deemed necessary by the director.

(D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-230 of the Administrative Code.

**3745-560-230 Compost quality standards for class II composting facilities.**

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

(A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, agricultural waste, food scraps, and alternative materials. The owner or operator shall have the samples collected pursuant to rule 3745-560-225 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020C or SW-846 7000B or SW-846 7010	TMECC 04.06-Pb
Mercury	7.8	SW-846	SW-846	TMECC

Table 1 - Heavy metals

		7471B	7471B SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	04.06-Hg
Nickel	420	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-Ni
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se
Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn

Table 2 - Pathogens

	Number per 4 grams of total solids (3MPN/4GTS)		and either 9222D or 9221E	
--	---	--	---------------------------------	--

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	U.S. EPA 160.3 Methods for Chemical Analysis of Water and Wastes	Detailed below

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total solids (dry weight) (1000 MPN/GTS)	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B
Salmonella spp.	Limit of less than 3 Most Probable	Standard method part 9260D	Standard methods 9260D	TMECC 07.02

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ

Table 4 - General parameters

	Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A
Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-

user application that reflect user industry standards.]

(B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.

(1) Upon written notification by the director, the owner or operator shall provide information regarding the feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:

(a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.

(b) A description of the chemical and biological constituents.

(c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.

(2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.

(3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

**3745-560-235 Closure requirements for class II composting facilities.**

(A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occurs:

(1) The registration has been terminated in accordance with paragraph (B) of rule 3745-560-201 of the Administrative Code.

(2) Any of the following mandatory closure activities occurs:

(a) The composting facility ceases to be an active composting facility.

(b) A solid waste facility license held by the owner or operator of the composting facility expires and no license renewal has been applied for in the manner prescribed in Chapter 3745-501 of the Administrative Code.

(c) A solid waste facility license held by the owner or operator of the composting facility

expires and a license renewal has been applied for and denied as a final action of the licensing authority.

(d) A solid waste facility license held by the owner or operator of the composting facility has been revoked as a final action of the licensing authority.

(e) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.

(f) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.

(3) The director issues a final action for either of the following:

(a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.

(b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.

(B) Closure requirements.

(1) The owner or operator shall continue to comply with rule 3745-560-210 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.

(2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."

(3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.

(4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:

(a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.

(b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.

(c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.

(C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

(D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining a permit to install and annual license for that property as a class I composting facility.

(E) The registrant who requests the termination of the composting facility registration for the purpose of a change to a class III or IV composting facility classification status may submit a written request to the director for alternative closure requirements. The director may approve alternative closure requirements provided the requirements are protective of public health and safety and the environment.

**3745-560-300 Class III composting facility establishment.**

(A) No person shall establish a new class III composting facility or continue to operate an existing facility without first submitting a registration application in accordance with this rule.

(B) Registration of class III composting facility. A registration application shall include the following:

(1) Registration form prescribed by the director including but not limited to business name, contact person including the operator and

property owner, contact information, location of the proposed composting facility, and notarized statement certifying compliance with the siting criteria specified in paragraph (C) of this rule.

(2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:

- (a) The property lines of all land owned or leased for the composting facility.
- (b) The boundary lines for the composting facility.
- (c) Public roads, railroads, and structures.
- (d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.
- (e) The north arrow.
- (f) Location of the materials placement areas for each of the following:
  - (i) Composting operations.
  - (ii) Storage of feedstocks, bulking agents, or additives.
  - (iii) Storage of compost product.
- (g) Existing occupied structures.
- (h) Any leachate management structure.
- (i) The limits of the one hundred year floodplain.
- (j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.
- (k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.
- (l) Existing public water supply wells, developed springs, or private potable water supply wells.

(3) Copies of the letters of intent required in paragraph (D) of this rule.

(C) On the date the registration application is received by Ohio EPA, the limits of materials placement and

leachate management structures shall meet the following siting criteria:

- (1) The materials placement area and leachate management structures shall not be located within the following:
  - (a) Two hundred feet from any surface waters of the state.
  - (b) Three hundred feet from a known sinkhole or agricultural drainage well.
  - (c) The sanitary isolation radius of public water system drinking water supply wells as calculated using the formulas specified in rule 3745-9-04 of the Administrative Code.
  - (d) Three hundred feet from a private water system drinking water supply well that is not controlled by the facility.
  - (e) Fifty feet from a private water system drinking water supply well that is controlled by the facility owner.
  - (f) Three hundred feet from a transient non-community public water system drinking water supply well.
  - (g) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is owned or leased by the owner or operator.
  - (h) Five hundred feet from the following:
    - (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
    - (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
    - (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
    - (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest
    - (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.
- (i) A one hundred year floodplain.

(2) The materials placement area and leachate management structures shall not be located

within the inner management zone (one year time of travel) of a drinking water source protection area for a community or non-transient, non-community public water system using ground water.

(3) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:

- (a) A national park or national recreation area.
- (b) A state park or an established state park purchase area.
- (c) A candidate area for potential inclusion in the national park system.
- (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.

(4) The materials placement area shall not exceed one hundred thirty-five thousand square feet of total area on any one premises.

(D) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:

- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative authority of a municipal corporation, or the board of township trustees.
- (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
- (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
- (4) The local zoning authority having jurisdiction.
- (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
- (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.

(7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.

(E) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days after receipt of the notification.

(F) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:

- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
- (2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the existing registration's plan drawing.

(G) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

**3745-560-301 Criteria for approval and termination of a class III composting facility registration.**

(A) Criteria for approval.

- (1) A class III composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:
  - (a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-300 of the Administrative Code.
  - (b) The siting criteria as established in rule 3745-560-300 of the Administrative Code have been met.
  - (c) The plan view drawing contains the information required in rule 3745-560-300 of the Administrative Code.
  - (d) The letters of intent were sent in accordance

with rule 3745-560-300 of the Administrative Code.

(e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.

(f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.

(g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.

(2) If Ohio EPA determines that information in addition to that required by rule 3745-560-300 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

(B) Criteria for termination of a class III composting facility registration.

A class III composting facility registration shall expire upon receipt by Ohio EPA of a written request from the owner or operator that the composting facility registration be terminated.

**3745-560-302 Procedures for commencement of operations at class III composting facilities.**

(A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the composting facility the following shall be completed:

(1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.

(2) Construction of the materials placement area to allow facility operation during inclement weather.

(3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.

(4) Construction of any planned leachate and surface water management structures.

(5) Signs are posted in accordance with rule 3745-560-310 of the Administrative Code.

(B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a

registration application that complies with paragraph (A) of rule 3745-560-301 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:

(1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.

(2) Ninety days have passed since Ohio EPA received the registration application.

(C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-301 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner and operator fail to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

**3745-560-310 Operational requirements for class III composting facilities.**

(A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.

(B) Authorized materials. The owner or operator shall only accept yard waste, agricultural waste, animal waste, bulking agents, and additives.

(C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.

(1) Prohibited material includes but is not limited to the following:

(a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.

(b) Commingled yard waste.

(c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.

(d) Hazardous waste.

(e) Infectious waste.

(f) Asbestos including "asbestos-containing waste

material" as defined in rule 3745-500-02 of the Administrative Code.

(g) Batteries.

(h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.

(i) Containerized bulk liquids.

(j) Any other material that the facility is otherwise prohibited to accept under federal or state laws.

(2) If prohibited material is detected, the owner or operator shall immediately do the following:

(a) Remove the prohibited material from the materials placement area.

(b) Manage the prohibited material in accordance with applicable laws and regulations.

(c) Record incidents in the log of operations.

(D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:

(1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

(2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.

(3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.

(4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting

process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.

(5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.

(E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.

(F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.

(G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:

(1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.

(2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.

(H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:

(1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.

(2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.

(3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.

(4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.

(5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or

any rules adopted thereunder.

- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.

(I) Facility access. The owner or operator shall do the following:

- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
- (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
- (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.

(J) Equipment availability. The owner or operator shall have that operable equipment of adequate size and quantity for the operations of the facility available at all times.

(K) Facility signage. When public access is allowed, the owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:

"This composting facility only accepts yard waste, agricultural waste, and animal waste, and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."

(L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:

- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
- (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.

(M) Surface water management. The owner or operator shall do the following:

- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.

(2) Manage surface water in accordance with Chapter 6111. of the Revised Code.

(3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.

(4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.

(N) Leachate management. The owner or operator shall do the following:

(1) Take action to minimize the production of leachate.

(2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.

(3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.

(4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.

(O) Cross-contamination. The owner or operator shall prevent and manage cross-contamination of feedstocks, bulking agents, additives, compost, and compost product. If cross-contamination occurs, the owner or operator shall do one of the following:

(1) Comply with the more stringent testing standard required by rule 3745-560-320 of the Administrative Code if the cross-contamination is from a more stringently tested feedstock or material.

(2) Reintroduce the compost or compost product into the composting process.

(3) Remove and properly manage the contaminated feedstock, compost, bulking agent, or additive if the cross-contamination is from a prohibited material.

(P) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determine that the compost or compost product does not meet applicable standards of quality or causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

**3745-560-315 Record keeping requirements for class III composting facilities.**

- (A) Record retention and availability. The owner or operator shall do the following:
- (1) Maintain records specified in this rule for a period of at least three years.
  - (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
  - (3) Upon request, submit records to Ohio EPA or the approved board of health.
- (B) Log of operation. The owner or operator shall do the following:
- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
  - (2) Complete the log of operation at a minimum once per week at an active composting facility and once per month at an inactive composting facility.
  - (3) Complete the log of operation more often than weekly if conditions warrant a higher frequency of completion in order to effectively monitor operations at the composting facility, or when required by Ohio EPA or the approved health department.
- (C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

**3745-560-320 Compost distribution requirements for class III composting facilities.**

- (A) Compost product distribution.
- (1) An owner or operator shall only distribute compost that has been sampled in accordance with rule 3745-560-325 of the Administrative Code and meets the compost quality standards of rule 3745-560-330 of the Administrative Code.
  - (2) Compost that meets the applicable quality standards may be distributed as compost product for use in accordance with accepted agricultural, silvicultural, or horticultural practices.
  - (3) Compost that does not meet the quality standards shall be reintroduced into the composting process, taken to another appropriate class of composting facility for further composting, disposed in a licensed solid waste disposal facility, or distributed for an alternative use after approval by the director in accordance with this rule.

(4) If compost that has been previously sampled and tested is mixed with any amount of additional feedstocks, bulking agents, additives, or other untested compost, then the tested compost is considered to be cross-contaminated and shall be re-sampled and re-tested prior to distribution.

(5) Any compost product may be blended with other compost products prior to distribution.

(B) Product information and availability of test results.

(1) Compost product that is distributed in packaged form shall be conspicuously labeled with product information. Product information shall be available in written form for compost distributed without packaging. At a minimum, product information shall contain the following information:

(a) Name and address of the composting facility.

(b) Any feedstocks, bulking agents, and additives used.

(c) Recommended uses for the compost product.

(d) Any owner or operator recommended restrictions on the use of the compost product.

(2) Upon request, the owner or operator shall provide the customer a summary of results from testing required in accordance with this rule.

(C) Request for approval for land application or alternative use of compost that does not meet applicable standards for compost product. The owner or operator whose compost has been sampled and tested in accordance with rules 3745-560-325 and 3745-560-330 of the Administrative Code and exceeds any of the applicable concentration limits may submit a written request for approval for land application or alternative use of the compost. At a minimum, a request for approval for land application or alternative use shall include the following information:

(1) Total quantity of compost and a detailed list of all feedstocks, bulking agents, and additives utilized to produce the compost.

(2) A copy of the test results of the compost required in accordance with rule 3745-560-330 of the Administrative Code.

(3) An explanation as to why the compost is unable to meet the quality standards specified in rule 3745-560-330 of the Administrative Code.

(4) A detailed description of the proposed alternative use, if not requesting land application.

(5) A detailed narrative of how the requested alternative use will not adversely affect the public health or safety or the environment.

(6) A copy of test results for soil from the proposed

location of land application. The soil tests shall include the same parameters for the standards exceeded by the compost.

(7) The location of proposed land application, total acreage to be utilized, and proposed application rate including justification of specific application rates, safe uses, and any applicable restrictions.

(8) Any other information deemed necessary by the director.

(D) Criteria for approval of a request for land application or alternative use of compost that does not meet applicable standards for compost product. The director may approve and condition a request for land application or alternative use of compost that does not meet applicable quality standards if the director determines the following:

(1) The proposed land application or alternative use does not cause or threaten to cause an adverse effect to the public health or safety or the environment.

(2) The proposed land application or alternative use is in accordance with accepted agricultural, silvicultural, or horticultural practices.

**3745-560-325 Compost sampling and testing requirements for class III composting facilities.**

(A) The owner or operator shall sample the compost in accordance with the following:

(1) Determine the volume of the pile of compost and record in the log of operations.

(2) Obtain one composite sample from each pile no greater than ten thousand cubic yards as follows:

(a) Each composite sample shall consist of nine grab samples of equal volume.

(b) Three grab samples shall be taken at different depths from three equally divided locations of the pile of compost.

(c) Thoroughly mix grab samples in a clean container to form one composite sample of a minimum volume of four quarts.

(3) Extract a sub-sample of a minimum volume of two quarts from the composite sample and place in a clean container.

(4) At a minimum, label the sample container to document the collection date, time, and person obtaining the sample.

(5) Samples collected for testing of Table 2 in rule 3745-560-330 of the Administrative Code shall be prepared and analysis started within one of the following time frames:

(a) Not later than eight hours after the collection of the sample.

(b) Not later than forty-eight hours after the collection of the sample when refrigerated and maintained at four degrees Centigrade.

(6) Sample collection and preservation shall ensure valid and representative results.

(B) Authorization for alternative frequency of sampling, sampling method, or testing method. The director may approve and condition a request for an alternative frequency of sampling, sampling method, or testing method if, in the determination of the director, the alternative frequency or method ensures equivalent protection of public health and safety and the environment. The determination of the director shall be based on the information provided in paragraph (C) of this rule and any other information required by the director.

(C) Request for approval of an alternative frequency of sampling, sampling method, or testing method. After one year of operation, the owner or operator may submit a written request for approval for an alternative frequency of sampling, sampling method, or testing method including at a minimum the following information:

(1) A description of the proposed alternative frequency of sampling, sampling method, or testing method.

(2) The feedstocks, bulking agents, and additives accepted at the facility.

(3) A copy of the test results for at least five consecutive sampling and testing cycles in accordance with this rule and rule 3745-560-330 of the Administrative Code.

(4) A detailed narrative of how the requested alternative frequency of sampling, sampling method, or testing method will ensure compliance with applicable quality standards.

(5) If applicable, the scientifically recognized test preparation and analytical method that will provide equivalent or improved test results.

(6) A description of the composting mix including but not limited to the feedstock to bulking agent ratio.

(7) Any other information deemed necessary by the director.

(D) The owner or operator who has obtained an approval for an alternative frequency of sampling, sampling method, or testing method shall immediately notify the director of changes in the feedstocks, bulking agents, or additives composted or mix ratio for composting and simultaneously shall commence complying with this rule and rule 3745-560-330 of the Administrative Code.

**3745-560-330 Compost quality standards for class III composting facilities.**

[Comment: For dates of non regulatory government publications, publications of recognized organizations and associations, test methods, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-500-03 of the Administrative Code titled "Incorporation by reference."]

(A) The compost quality standards in this paragraph are applicable to all compost produced from yard waste, animal waste, and agricultural waste. The owner or operator shall have the samples collected pursuant to rule 3745-560-325 of the Administrative Code analyzed to demonstrate that concentration limits are not exceeded for the parameters listed in the following tables:

Table 1 - Heavy metals

Parameter	Concentration limit mg/kg dry weight	Preparation methods	Analytical methods	TMECC equivalent methods
Arsenic	41	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-As
Boron	See Table 4			
Cadmium	35	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cd
Copper	1500	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Cu
Lead	300	SW-846 3050B or SW-846	SW-846 6010C or SW-846	TMECC 04.06-Pb

Table 1 - Heavy metals

		3051A	6020C or SW-846 7000B or SW-846 7010	
Mercury	7.8	SW-846 7471B	SW-846 7471B SW-846 6010C or SW-846 6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Hg
Nickel	420	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846 6020A or SW-846 7010	TMECC 04.06-Ni
Selenium	100	SW-846 3050B or SW-846 3051A	SW-846 6010C or SW-846	TMECC 04.06-Se
Zinc	2800	SW-846 3050B or SW-846 3051A	6020A or SW-846 7000B or SW-846 7010	TMECC 04.06-Zn

Table 2 - Pathogens

Parameter	Microbial count	Preparation method	Analytical method	TMECC equivalent method
Fecal coliform	Limit of less than 1000 Most Probable Number per gram of total	Standard methods part 9221E or part 9222D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.01-B

Table 2 - Pathogens

	solids (dry weight) (1000 MPN/GTS)			
Salmonella spp.	Limit of less than 3 Most Probable Number per 4 grams of total solids (3MPN/4GTS)	Standard method part 9260D	Standard methods 9260D and either 9222D or 9221E	TMECC 07.02

Table 3 - Foreign/inert matter

Parameter	Concentration limit mg/kg dry weight	Preparation method	Analytical method
Foreign/inert matter	1.0% by weight on No. 5 sieve (four mm screen) and no more than a fourth of this foreign matter may be plastic	U.S. EPA 160.3 Methods for Chemical Analysis of Water and Wastes	Detailed below

Method for determining percent foreign matter.

Foreign matter content shall be determined by passing a dried, weighed sample of not less than one hundred grams of compost through a U.S. standard No. 5 sieve (four millimeter). The material remaining on the screen shall be inspected and the foreign matter shall be separated and weighed. The weight of the foreign matter divided by the total weight of the compost sample and multiplied by one hundred shall be the per cent dry weight of the foreign matter content.

Table 4 - General parameters

Parameter	Analytical method
Boron	TMECC 04.05-B or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Maturity	TMECC 05.08-A Specific

Table 4 - General parameters

	Oxygen Uptake Rate or TMECC 05.08-B Carbon Dioxide Evolution Rate or TMECC 05.08-C In-situ Oxygen Refresh Rate or TMECC 05.08-D Dewar Self-Heating Test or TMECC 05.08-E Solvita® Maturity Index or TMECC 05.08-F Biologically Available Carbon
pH	TMECC 04.11-A or North central regional (NCR) publication 221 or SW-846 9045D soil pH or ASTM D2976
Salinity	TMECC 04.10 A or NCR publication 221
Total nitrogen	AOAC 968.06 or TMECC 04.02-D or TMECC 04.02-A
Total organic carbon	SW-846 9060 A or TMECC 04.01-A
Total phosphorus	TMECC 04.03-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A
Total potassium	TMECC 04.04-A or Preparation: SW-846 3050B or SW-846 3051A and Analytical: SW-846 6010C or SW-846 6020A or SW-846 7000B

[Comment: The parameters identified for testing in table 4 have no associated concentration limits. The analysis is necessary to ensure that compost quality is appropriate for the recipient's specific use of the compost product.

Acceptable levels of maturity will vary according to end-user application (note: check date of maturity test).

Acceptable pH level will vary according to end-user application and will generally be in the 5.5 - 8.5 range.

Acceptable levels of soluble salts will vary according

to end-user applications. The optimal ranges for growing media (compost amended soil) is 0.5 to 4.5 millimho per centimeter.

Compost producers may provide pH and soluble salts information in product literature for the intended end-user application that reflect user industry standards.]

(B) Supplementary compost quality standards. Additional information or testing of feedstocks, bulking agents, additives, compost, or compost product may be required to ensure the standards are appropriately protective of public health or safety or the environment.

(1) Upon written notification by the director, the owner or operator shall provide information regarding the feedstocks, bulking agents, additives, compost, or compost product including but not limited to the following:

(a) A description of the agricultural, industrial, or commercial process used to produce the feedstock, bulking agents, additives, compost, or compost product.

(b) A description of the chemical and biological constituents.

(c) A description of any known or potential heavy metals and organic compounds that may threaten to cause an adverse effect to public health or safety or the environment.

(2) Upon written notification by the director, the owner or operator shall sample and test for additional parameters as deemed necessary to ensure the standards are appropriately protective of public health and safety and the environment.

(3) Upon review of such additional information, the director may establish additional conditions or quality standards for the compost. The director shall provide written notification to the owner or operator of such conditions or standards.

**3745-560-335 Closure requirements for class III composting facilities.**

(A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:

(1) The registration is terminated in accordance with paragraph (B) of rule 3745-560-301 of the Administrative Code.

(2) The composting facility ceases to be an active composting facility.

(3) The director issues a final action for either of the following:

(a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that has

violated the applicable quality standards established in this chapter.

(b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.

(B) Closure requirements.

(1) The owner or operator shall continue to comply with rule 3745-560-310 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.

(2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."

(3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.

(4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:

(a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.

(b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.

(c) Clean containers, equipment, machines, and materials placement area surfaces that were in contact with solid wastes at any time during the operation of the facility using procedures that substantially reduce or eliminate any remaining constituents or contaminants. This paragraph does not apply to materials placement area surfaces composed of soil, gravel, slag, or other permeable material.

(C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

(D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining appropriate authorization for that property as a class I or class II composting facility.

(E) The registrant who requests the termination of the composting facility registration for the purpose of a change to a IV composting facility classification status may submit a written request to the director for alternative closure requirements. The director may approve alternative closure requirements provided the requirements are protective of public health and safety and the environment.

**3745-560-400 Class IV composting facility establishment.**

(A) No person shall establish a new class IV composting facility or continue to operate an existing facility without first submitting a registration application in accordance with this rule.

(B) Registration of class IV composting facility. A registration application shall include the following:

(1) Registration form prescribed by the director including but not limited to business name, contact person including the operator and property owner, contact information, location of the proposed composting facility, and notarized statement certifying compliance with the siting criteria specified in paragraph (C) of this rule:

(2) Plan view drawing, using a scale of one inch equals no greater than one hundred feet, showing the following information inside the facility boundaries and within five hundred feet beyond the facility boundaries:

(a) The property lines of all land owned or leased for the composting facility.

(b) The boundary lines for the composting facility.

(c) Public roads, railroads, and structures.

(d) Existing topography showing streams, wetlands, lakes, springs, and other surface waters of the state.

(e) The north arrow.

(f) Location of the materials placement areas for each of the following:

(i) Composting operations.

(ii) Storage of feedstocks, bulking agents, or additives.

(iii) Storage of compost product.

(g) Existing occupied structures.

(h) Any leachate management structure.

(i) The limits of the one hundred year floodplain.

(j) National park or national recreation areas, candidate areas for potential inclusion into the national park system, and any state park or established state park purchase areas.

(k) State nature preserves, state wildlife areas, national and state scenic rivers, and national wildlife refuge, special interest areas and research natural areas in the Wayne national forest, state resource waters, outstanding national resource waters, category 3 wetlands, outstanding high quality waters, coldwater habitats, and exceptional warmwater habitats as classified in accordance with Chapter 3745-1 of the Administrative Code.

(l) Existing public water supply wells, developed springs, or private potable water supply wells.

(3) Copies of the letters of intent required in paragraph (D) of this rule.

(C) On the date the registration application is received by Ohio EPA, the limits of materials placement and leachate management structures shall meet the following siting criteria:

(1) The materials placement area and leachate management structures shall not be located within the following:

(a) Two hundred feet from any surface waters of the state.

(b) Two hundred feet from a public water supply well, a developed spring, or a private potable water supply well, unless either of the following conditions are met:

(i) The water supply well or developed spring is controlled by the owner or operator, needed as a source of nonpotable water, and constructed to prevent contamination of the ground water.

(ii) The water supply well or developed spring was constructed and is used solely for monitoring ground water quality.

(c) Two hundred fifty feet from an occupied dwelling, unless the occupied dwelling is

owned or leased by the owner or operator.

(d) Five hundred feet from the following:

- (i) An area designated by the Ohio department of natural resources as either a state nature preserve, a state wildlife area, or a state scenic river.
- (ii) An area designated, owned, and managed by the Ohio historical society as a nature preserve.
- (iii) An area designated by the United States department of the interior as either a national wildlife refuge or a national scenic river.
- (iv) An area designated by the United States forest service as either a special interest area or a research natural area in the Wayne national forest.
- (v) Surface waters of the state designated by Ohio EPA as either a state resource water, an outstanding national resource water, a category 3 wetland, an outstanding high quality water, a coldwater habitat, or an exceptional warmwater habitat.

(e) A one hundred year floodplain.

(2) Except for facilities which exclusively compost wastes generated within state parks or national parks, or national recreation areas, as of the date the initial registration application was submitted, the materials placement areas and leachate management system of the composting facility shall not be located in any one or combination of the following:

- (a) A national park or national recreation area.
- (b) A state park or an established state park purchase area.
- (c) A candidate area for potential inclusion in the national park system.
- (d) A property that lies within the boundaries of a national park or national recreation area but that has not been acquired or is not administered by the secretary of the United States department of the interior.

(D) Concurrent to submittal of the registration application, letters of intent to establish a composting facility which include a description of property and facility boundaries shall be sent by certified mail or any other form of mail accompanied by a receipt requested to the following:

- (1) The governments of the general purpose political subdivisions where the facility is proposed to be located including but not limited to local health departments, county commissioners, legislative

authority of a municipal corporation, or the board of township trustees.

- (2) The single or joint county solid waste management district or districts or regional solid waste management authority or authorities where the facility is proposed to be located.
- (3) The owner or lessee of any easement or right of way bordering or within the proposed facility boundaries which may be affected by the proposed solid waste facility.
- (4) The local zoning authority having jurisdiction.
- (5) The park system administrator, if any part of the proposed facility is to be located within or will share the park boundary.
- (6) The conservancy district, if any part of the proposed facility is to be located within or will share the conservancy district boundary.
- (7) The fire department having responsibility for providing fire control services where the proposed facility is to be located.

(E) Upon written notification by Ohio EPA that the registration application is incomplete, the applicant shall correct noted deficiencies and resubmit the registration application not later than thirty days of receipt after the notification.

(F) Amendments to an existing registration. The registrant shall ensure that changes to the composting facility are in compliance with applicable regulations and all information contained on the plan view drawing and registration application is current by submitting an amended registration application as follows:

- (1) An amendment to an existing registration is required for changes in the information on the registration application, which may include but is not limited to, facility name, registrant, and contact information including the operator and property owner.
- (2) An amendment to an existing registration involving any proposed change to the materials placement area shall include a revised plan view drawing submitted prior to implementation of any change. The plan view drawing shall include the information required in this rule. Any change to the materials placement area requires written concurrence from Ohio EPA acknowledging compliance with this chapter. If the amendment to the existing registration does not involve any proposed changes to the existing registration's plan drawing, the amendment may reference the existing registration's plan drawing.

(G) Composting facilities registered prior to the effective date of this rule shall comply with siting criteria in effect on the date of initial registration.

**3745-560-401 Criteria for approval and termination of a class IV composting facility registration.**

(A) Criteria for approval.

- (1) A class IV composting facility shall not be considered registered unless compliance with the following are determined by Ohio EPA:
  - (a) The registration application contains the information required in forms prescribed by the director as established in rule 3745-560-400 of the Administrative Code.
  - (b) The siting criteria as established in rule 3745-560-400 of the Administrative Code have been met.
  - (c) The plan view drawing contains the information required in rule 3745-560-400 of the Administrative Code.
  - (d) The letters of intent were sent in accordance with rule 3745-560-400 of the Administrative Code.
  - (e) If the proposed composting facility is established on land where a hazardous or solid waste facility was operated, the owner or operator has obtained previous authorization as required by rule 3745-27-13 of the Administrative Code.
  - (f) The owner or operator is in substantial compliance at other solid waste disposal facilities that are owned or operated by the owner or operator.
  - (g) The establishment and operation of the composting facility will not violate Chapter 3704., 3734., or 6111. of the Revised Code.
- (2) If Ohio EPA determines that information in addition to that required by rule 3745-560-400 of the Administrative Code is necessary to determine whether the criteria set forth in paragraph (A) of this rule are satisfied, Ohio EPA may require that the applicant supply such information as a precondition to further consideration of the registration application.

(B) Criteria for termination of a class IV composting facility registration.

A class IV composting facility registration shall expire upon receipt by Ohio EPA of written request from the owner or operator that the composting facility registration be terminated.

**3745-560-402 Procedures for commencement of operations at class IV composting facilities.**

(A) Facility site preparation. Prior to initial acceptance of feedstocks, bulking agents, or additives at the

composting facility the following shall be completed:

- (1) The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope so as to direct surface water to collection points or otherwise control the surface water drainage.
  - (2) Construction of the materials placement area to allow facility operation during inclement weather.
  - (3) Construction of roads within the facility boundary to allow for passage of vehicles at all times.
  - (4) Construction of any planned leachate and surface water management structures.
  - (5) Signs are posted in accordance with rule 3745-560-410 of the Administrative Code.
- (B) Initial acceptance of feedstocks. The owner or operator may begin to accept feedstocks, bulking agents, or additives if the owner or operator has submitted a registration application that complies with paragraph (A) of rule 3745-560-401 of the Administrative Code and the owner or operator has complied with paragraph (A) of this rule and one of the following occurs:
- (1) The prepared composting facility has been inspected and written concurrence has been received from Ohio EPA acknowledging compliance with this rule.
  - (2) Ninety days have passed since Ohio EPA received the registration application.

(C) Notwithstanding the provisions of paragraph (B) of this rule, the owner and operator shall not begin to accept feedstocks, bulking agents, or additives if not later than ninety days after Ohio EPA received the registration application, the director has provided a written notification of deficiency to the owner or operator that the registration application does not comply with paragraph (A) of rule 3745-560-401 of the Administrative Code or that the owner or operator has not complied with paragraph (A) of this rule. If the owner and operator fail to address the deficiencies, the director may deny the registration application or approve the registration application with a variance or exemption.

**3745-560-410 Operational requirements for class IV composting facilities.**

- (A) Authorizing documents. The owner or operator shall operate the facility in accordance with applicable authorizing documents. The owner or operator shall have a copy of applicable authorizing documents available for inspection by Ohio EPA or the approved board of health during normal operating hours.
- (B) Authorized materials. The owner or operator shall only accept yard waste, bulking agents, and additives consisting only of urea and bacterial or fungal

inoculum.

(C) Prohibited material management. The owner or operator shall not accept any prohibited material at the facility.

(1) Prohibited material includes but is not limited to the following:

- (a) Any solid waste, feedstock, bulking agent, or additive other than those feedstocks, bulking agents, or additives authorized by paragraph (B) of this rule.
- (b) Commingled yard waste.
- (c) Construction and demolition debris, except for construction and demolition debris that meets the definition of clean untreated wood.
- (d) Hazardous waste.
- (e) Infectious waste.
- (f) Asbestos including "asbestos-containing waste material" as defined in rule 3745-500-02 of the Administrative Code.
- (g) Batteries.
- (h) Wastes that may include heat stable toxins produced by microorganisms including but not limited to improperly processed foods that are contaminated or likely to be contaminated with *Clostridium botulinum*.
- (i) Containerized bulk liquids.
- (j) Any other material that the facility is otherwise prohibited to accept under federal or state laws.

(2) If prohibited material is detected, the owner or operator shall immediately do the following:

- (a) Remove the prohibited material from the materials placement area.
- (b) Manage the prohibited material in accordance with applicable laws and regulations.
- (c) Record incidents in the log of operations.

(D) Methods of composting. The owner or operator shall manage authorized materials by utilizing one of the following methods of composting:

(1) Windrow composting. The windrow construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Windrows shall be constructed parallel to the line of slope on the site and turned at a minimum four times per year to mix materials, distribute moisture and heat, increase porosity, and change the location of

materials in a pile or windrow to ensure consistent composting. If a windrow is in place for at least twelve months, it shall have been turned a minimum of four times during that that period.

- (2) In-vessel composting. The construction, loading, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
- (3) Aerated static pile composting. The construction, including the aeration system, carbon to nitrogen ratio, and moisture content, shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process.
- (4) Static pile composting. The construction, carbon to nitrogen ratio, moisture content, and turning frequency shall enable controlled biological decomposition under primarily aerobic conditions to be maintained throughout the composting process. Static piles shall be turned at a minimum two times per year to reintroduce oxygen into the composting process.
- (5) Other methods. The owner or operator may submit a written request to the director for approval of an alternative composting method. The request shall include at a minimum a detailed description of the alternative composting method and how the method will enable controlled biological decomposition and comply with the operational requirements specified in this rule.

(E) Authorized materials management. The owner or operator shall distribute compost product at a minimum rate of one fourth the amount of material received the previous calendar year.

(F) Certified operator. The owner or operator shall ensure that the technical operation and maintenance of the composting facility is under the responsible charge of an operator certified by the director as having completed the operator training required by Chapter 3734. of the Revised Code and rules adopted thereunder.

(G) Containers management. The owner or operator shall properly manage any containers used to transport authorized materials to a composting facility according to the following:

- (1) Compostable containers shall be shredded or otherwise processed to increase the exposed surface area for composting prior to incorporation into the composting process.
- (2) Feedstocks, bulking agents, and additives shall be removed from containers that do not meet the definition of compostable containers prior to incorporation into the composting process. These containers shall not be shredded and shall be managed as solid waste.

(H) Operational control. The owner or operator shall operate the composting facility in such a manner that does the following:

- (1) Controls noise, dust, and odors so as not to cause a nuisance or a health hazard.
- (2) Controls the attraction, breeding, and emergence of insects, birds, rodents, and other vectors so as not to cause a nuisance or a health hazard. The owner or operator shall initiate vector control measures as deemed necessary by the approved board of health or Ohio EPA.
- (3) Prevents the occurrence of fire, the spread of fire, and extinguishes fire. The owner or operator shall act immediately to prevent the spread of fire and extinguish fire.
- (4) Employs reasonable measures to collect, properly contain, and dispose of scattered litter.
- (5) Prevents the creation of water pollution as to not violate Chapter 6111. of the Revised Code or any rules adopted thereunder.
- (6) Prevents the creation of air pollution as to not violate Chapter 3704. of the Revised Code or any rules adopted thereunder.

(I) Facility access. The owner or operator shall do the following:

- (1) Employ reasonable measures to limit access to the composting facility by non-employees during non-operating hours or in the absence of operating personnel.
- (2) Maintain materials placement areas and access roads within the facility boundary in such a manner to allow facility operations and access at all times with minimum erosion and ponding of surface water.
- (3) Exclude domestic and farm animals from the facility, except for animals utilized for security purposes or vector control.

(J) Equipment availability. The owner or operator shall have operable equipment of adequate size and quantity for the operations of the facility available at all times.

(K) Facility signage. When public access is allowed, the owner or operator shall post signs with letters not less than three inches in height at the composting facility including the receiving and distribution areas. The owner or operator shall post signs at the entrance of the composting facility that include the following statement:

"This composting facility only accepts yard waste and will not accept hazardous wastes, infectious wastes, asbestos, batteries, or other prohibited materials."

(L) Wood processing. The owner or operator when accepting tree stumps, trunks, limbs, or clean untreated wood shall do the following:

- (1) Shred or chip the tree stumps, trunks, limbs, or the clean untreated wood, prior to incorporation into the composting process and remove foreign materials including but not limited to nails and banding.
- (2) Shred, chip, or remove tree stumps, trunks, limbs, and clean untreated wood at a minimum on an annual basis or more often than annually if conditions causing a nuisance or safety hazard warrant processing or removal of the tree stumps, trunks, limbs, and clean untreated wood, or when required by Ohio EPA or the approved board of health.

(M) Surface water management. The owner or operator shall do the following:

- (1) Control surface water runoff and runoff, prevent ponding and erosion, and minimize the impact to surface water and ground water.
- (2) Manage surface water in accordance with Chapter 6111. of the Revised Code.
- (3) Divert surface water from the materials placement area. The land surface of the materials placement area shall be greater than or equal to one per cent in slope and less than or equal to six per cent in slope to direct surface water to collection points or otherwise control the surface water drainage.
- (4) Monitor surface water runoff or ground water as required by the director or approved board of health if a substantial threat of surface water or ground water pollution exists.

(N) Leachate management. The owner or operator shall do the following:

- (1) Take action to minimize the production of leachate.
- (2) Eliminate ponding of leachate and the conditions that contribute to the discharge of leachate from the composting facility.
- (3) Collect and contain leachate within the boundary of the composting facility and prevent leachate from discharging to waters of the state. Leachate may be collected and contained for reintroduction into the composting process.
- (4) If applicable, maintain any structures or mechanisms used for the collection or containment of leachate to prevent blockage, clogging, leakage, or breakage that may impede proper collection or containment of leachate.

(O) The director, health commissioner, or board of health may order that compost or compost product be disposed in a licensed solid waste landfill if the director, health commissioner, or board of health determined that the compost or compost product causes or threatens to cause a nuisance or adversely affects the public health or safety or the environment.

**3745-560-415 Record keeping requirements for class IV composting facilities.**

- (A) Record retention and availability. The owner or operator shall do the following:
- (1) Maintain records specified in this rule for a period of at least three years.
  - (2) Have records available for inspection by the approved board of health or Ohio EPA during normal operating hours.
  - (3) Upon request, submit records to Ohio EPA or the approved board of health.
- (B) Log of operation. The owner or operator shall do the following:
- (1) Record the facility operations on the log of operation forms as specified in rule 3745-560-04 of the Administrative Code.
  - (2) Complete the log of operation at a minimum once per week at an active composting facility and once per month at an inactive composting facility.
  - (3) Complete the log of operation more often than weekly if conditions warrant a higher frequency of completion in order to effectively monitor operations at the composting facility, or when required by Ohio EPA or the approved health department.
- (C) Annual report. Not later than February first of each year, the owner or operator shall submit an annual report to Ohio EPA. The annual report shall include the required information specified in rule 3745-560-04 of the Administrative Code.

**3745-560-435 Closure requirements for class IV composting facilities.**

- (A) The owner or operator of a composting facility shall perform closure as specified in this rule if any of the following occur:
- (1) The registration is terminated in accordance with paragraph (B) of rule 3745-560-401 of the Administrative Code.
  - (2) Any of the following mandatory closure activities occur:
    - (a) The composting facility ceases to be an active composting facility.
    - (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.
  - (3) The director issues a final action for either of the following:

- (a) The owner or operator sells or offers for sale at retail or wholesale, uses, distributes for use, or gives away any compost that does not comply with the applicable quality standards established in this chapter.
- (b) The establishment or operation of the composting facility has violated Chapter 3704., 3734., or 6111. of the Revised Code or rules adopted thereunder.

(B) Closure requirements.

- (1) The owner or operator shall continue to comply with rule 3745-560-410 of the Administrative Code until the closure certification statement is submitted and concurrence is received from Ohio EPA.
- (2) Not later than seven days after closure is required under paragraph (A) of this rule, the owner or operator of a composting facility that allowed public access shall post signs, stating in letters not less than three inches high that the facility is closed. The signs shall be posted in such a manner as to be easily visible at all access points into the facility and must be maintained in legible condition for not less than one year, or until the facility re-opens as a registered composting facility or is converted to an alternative use. The text of the signs shall be the following:

"This facility is closed for all composting activities and all receipt of waste materials. Depositing solid wastes at this site constitutes open dumping which is a violation of Chapter 3734. of the Revised Code."
- (3) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall remove compost products and solid wastes from the composting facility.
- (4) Not later than thirty days after closure is required under paragraph (A) of this rule, the owner or operator shall do the following:

- (a) Remove and properly dispose of leachate remaining on the site in accordance with applicable laws and regulations.
- (b) Modify, remove, or seal the leachate collection system to prevent discharges from the system to surface waters of the state or ground water unless such discharges are otherwise regulated in accordance with Chapter 6111. of the Revised Code.

- (C) Not later than thirty days after completing the requirements as outlined in paragraph (B) of this rule or before the closed facility may be converted to other uses, the owner or operator shall certify to Ohio EPA and the approved board of health that the facility has been closed pursuant to paragraph (B) of this rule. At a minimum, the certification shall include the registration number of the composting facility, the date

when closure was completed, and a statement certifying that closure was completed in accordance with this rule.

- (D) This rule does not apply when the registrant requests the termination of the composting facility registration due to obtaining appropriate authorization for that property as a class I, II, or III composting facility.

# Ohio Administrative Code (OAC) Chapter 500

## MULTI – PROGRAM REGULATIONS

3745-500-01	General administration - applicability	3745-500-130	Retention and distribution of authorizing documents – procedures for boards of health and Ohio EPA
3745-500-02	General administration - definitions	3745-500-150	Alteration to a solid waste permit to install
3745-500-03	Incorporation by reference	3745-500-210	Variances for solid waste facilities
		3745-500-220	Variances for solid waste facilities
3745-500-35	Relationships among authorizing documents, rules, and the authority of the director and board of health	3745-500-330	Termination of a permit to install issued under Chapter 3734. of the Revised Code
3745-500-50	Signatures	3745-500-350	Causes for revoking a permit to install issued under Chapter 3734. of the Revised Code
3745-500-120	Procedures for issuing, denying, modifying, transferring, and revoking licenses and permits to install	3745-500-360	Administrative change to a permit to install

### 3745-500-01 General administration - applicability.

(A) The rules in this multi-program chapter shall apply when referenced in either of the following:

- (1) A rule in a program chapter.
- (2) A rule in another multi-program chapter that was made applicable by a rule in a program chapter.

Program chapters are Chapters 3745-520 to 3745-599 of the Administrative Code.

(B) Notwithstanding paragraph (A) of this rule, no person shall conduct, permit, or allow open dumping. In the event that open dumping is occurring or has occurred at a property, the person responsible for the open dumping, the owner of the property, or the person who allows or allowed open dumping to occur, shall promptly remove and dispose or otherwise manage the solid waste in accordance with Chapter 3734. of the Revised Code, and shall submit verification that the solid waste has been properly managed.

[Comment: Prompt removal and disposal of solid waste does not relieve any obligations under state or federal environmental statutes. This may include environmental clean-up of the site or remediation of ground water contamination resulting from the open dumping.]

(C) Notwithstanding paragraph (A) of this rule, disposal of solid waste under Chapter 3734. of the Revised Code by means of open burning, as defined in Chapter 3745-19 of the Administrative Code, is permitted only as provided therein.

### 3745-500-02 General administration- definitions.

As used in this chapter and any chapter making these definitions applicable, terms in this rule are defined as follows:

(A)

- (1) "Administrative change" means an amendment to an authorizing document that does not constitute a modification or alteration to the facility or permit to install for the facility. An administrative change is not an action.

(2) "Applicant" means any person who has applied for authorization in accordance with rules adopted under Chapter 3734. of the Revised Code.

(3) "Approved board of health" means a board of health of a health district placed on the approved list by the director in accordance with section 3734.08 of the Revised Code.

(4) "Asbestos-containing waste materials" has the same meaning as in rule 3745-20-01 of the Administrative Code.

[Comment: Asbestos-containing waste materials includes asbestos-containing materials regulated under NESHAP, 40 CFR Part 61, Subpart M as described in rule 3745-500-03 of the Administrative Code.]

(5) "Assets" means all existing and all probable future economic benefits obtained or controlled by a particular person.

(6) "Authorizing document" means a document issued, approved, or concurred with by the director, Ohio EPA, an approved board of health, the Ohio environmental review appeals commission, or a court of competent jurisdiction that describes activities that a person is either required to do, allowed to do, or prohibited from doing, pursuant to and in compliance with applicable rules, statutes, and orders. Authorizing document includes but is not limited to a permit, license, registration, acknowledgment of registration, plan, alteration, approval to use an alternative material, and order.

(B) "Board of health" means the board of health of a city or general health district, the authority having the duties of a board of health in any city as authorized by section 3709.05 of the Revised Code, or a representative delegated by the board of health to act on behalf of the board of health.

(C)

(1) "Compost facility" means a site, location, tract of land, installation, or building used for composting of solid waste in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder. The composting facility includes the area of materials placement and any leachate

management system structures.

- (2) "Constituent" means a compound or element suspended in, dissolved in, mixed in, or comprising a liquid, gas, or solid.
- (3) "Construct" means to build, reconstruct, or repair when such activity affects any engineered component of a facility. Construct does not include routine maintenance activities.
- (4) "Construction and demolition debris" or "C&DD" has the same meaning as section 3714.01 of the Revised Code.

(D)

- (1) "Developed spring" means any spring that has been modified by the addition of pipes or a collection basin to facilitate the collection and use of the spring water.
- (2) "Director" means the director of environmental protection or the director's authorized representative.
- (3) "Disposal" has the same meaning as in section 3734.01 of the Revised Code.
- (4) "Disposal limits" means the horizontal and vertical boundaries within the solid waste facility where solid waste has been disposed, is being disposed, or will be disposed within those boundaries.

(E)

- (1) "Establish" or "establishment" of a facility means to dispose of waste or construct or install any facility components and includes excavation that is related to the construction of a facility or any components thereof. Establish or establishment includes conducting such activities at any location not authorized to dispose of waste. Establish or establishment does not include clearing, grubbing, or installing ground water monitoring wells.
- (2) "Execute" means to complete and sign a document acceptable to the director for the purpose of establishing a financial assurance instrument.
- (3) "Exemption" means a discretionary action of the director that relieves the applicant from a requirement of Chapter 3734. of the Revised Code or any rule adopted thereunder.

(F) [Reserved.]

(G) "Ground water" means any water below the surface of the earth in a zone of saturation.

(H)

- (1) "Hazardous waste" means hazardous waste as defined in Chapter 3734. of the Revised Code and includes waste that is listed specifically as

hazardous waste or exhibits one or more characteristics of hazardous waste as defined in Chapter 3745-51 of the Administrative Code.

(2) "Health commissioner" means the individual occupying the office created by section 3709.11 or 3709.14 of the Revised Code or the health commissioner's authorized representative.

(3) "Health district" means a city or general health district created by or under the authority of Chapter 3709. of the Revised Code.

(I) "Independently audited" means reviewed by an independent certified public accountant in accordance with generally accepted accounting standards, or for a publicly-owned facility, an equivalent comprehensive audit performed by the auditor of the state of Ohio pursuant to Chapter 117. of the Revised Code.

(J) [Reserved.]

(K) [Reserved.]

(L)

(1) "Leachate" means liquid that has come in contact with or been released from solid waste.

(2) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other persons in the future as a result of past transactions or events.

(3) "Licensing authority" means the approved board of health or in the absence of an approved board of health, the director.

(M) [Reserved.]

(N) "Nuisance" means anything that is injurious to human health or offensive to the senses; interferes with the comfortable enjoyment of life or property; and affects a community, neighborhood, or any considerable number of persons (although the extent of annoyance or damage inflicted upon individual persons may be unequal).

(O)

(1) "Occupied dwelling" means the following, but does not include a dwelling owned or controlled by the owner or operator of a facility to which the siting criteria are being applied:

(a) A building used or intended to be used in whole or in part as a personal residence by the owner, part-time owner, or lessee of the building or any person authorized by the owner, part-time owner, or lessee to use the building as a personal residence. For the purposes of this definition, "owner" means a person with the right to exclusive use, control, or possess a building.

(b) A place of worship as defined in section

5104.01 of the Revised Code.

- (c) A child day-care center as defined in section 5104.01 of the Revised Code.
  - (d) A hospital as defined in section 3727.01 of the Revised Code.
  - (e) A nursing home as defined in section 3721.01 of the Revised Code.
  - (f) A school.
  - (g) A restaurant or other eating establishment.
- (2) "Occupied structure" means an enclosed structure where one or more human beings may be present, but does not include structures that are open to natural free air circulation such that the explosive gas hazard is minimized.
- (3) "Ohio EPA" means Ohio environmental protection agency.
- (4) "Open burning" means one of the following:
- (a) The burning of solid wastes in an open area.
  - (b) The burning of solid wastes in a type of chamber or vessel that is not approved or authorized in rules adopted by the director under section 3734.02 of the Revised Code or, if the solid wastes consist of scrap tires, in rules adopted by the director under section 3734.73 of the Revised Code.
- (5) "Open dumping" means the following:
- (a) The deposition of solid wastes, other than scrap tires, into waters of the state, and also means the final deposition of solid wastes on or into the ground at any place other than a solid waste facility operated in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.
  - (b) The deposition of solid wastes that consist of scrap tires into waters of the state, and also means the final deposition of scrap tires on or into the ground at any place other than a scrap tire collection, storage, monofill, monocell, or recovery facility licensed under section 3734.81 of the Revised Code, or at a site or in a manner not specifically identified in division (C)(2), (C)(3), (C)(4), (C)(5), (C)(7), or (C)(10) of section 3734.85 of the Revised Code, or at any licensed solid waste facility if the deposition is not in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.
  - (c) The deposition of solid wastes that consist of scrap tires in buildings, trailers, or other vehicles, unless for fewer than fourteen days at a scrap tire transporter's registered

business location, a licensed scrap tire facility, or an unregistered scrap tire facility operating in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.

- (d) The deposition of untreated or treated infectious wastes into waters of the state, and also means the final deposition of untreated or treated infectious wastes on or into the ground at any place other than a licensed solid waste facility operated in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.
- (6) "Operator" or "facility operator" means any person who has supervisory authority or the authority to make discretionary decisions concerning the construction, operation, maintenance, or monitoring of a solid waste facility, C&DD facility, infectious waste treatment facility, or scrap tire transportation business.
- (7) "Owner" means the person who holds title to the land on which the solid waste facility, C&DD facility, infectious waste treatment facility, or scrap tire transportation business is located or the person who owns a majority or controlling interest in the facility or business.
- (P)
- (1) "Parameter" means a measurable factor of a liquid, gas, or solid such as temperature, pH, length, or elevation, and includes constituents of the liquid, gas, or solid.
- (2) "Permitting authority" means the director.
- (3) "Person" includes the state, any political subdivision of the state or other state or local body, the United States and any agency or instrumentality thereof, and any legal entity or organization defined as a person under section 1.59 of the Revised Code, or other entity.
- (4) "Premises" means either of the following:
- (a) Geographically contiguous property owned by the same person.
  - (b) Noncontiguous property that is owned by the same person and connected by a right-of-way that the person controls and to which the public does not have access. Two or more pieces of property that are geographically contiguous and divided by one or more public or private right-of-way are a single premises.
- (5) "Professional engineer" means an individual authorized to practice the profession of engineering pursuant to Chapter 4733. of the Revised Code.
- (6) "Public water supply well" means any well

connected to a public water system as defined by division (A) of section 6109.01 of the Revised Code.

(Q) [Reserved.]

(R) "Registrant" means any person to whom a registration has been issued.

(S)

(1) "Scrap tire" has the same meaning as section 3734.01 of the Revised Code.

(2) "Solid waste" has the same meaning as section 3734.01 of the Revised Code.

(3) "Solid waste disposal facility" means any site, location, tract of land, installation, or building used for incineration, composting, sanitary landfilling, or other approved methods of disposal of solid wastes.

(4) "Solid waste facility" means a site, location, tract of land, installation, or building used for incineration, composting, sanitary landfilling, or other methods of disposal of solid wastes or, if the solid wastes consist of scrap tires, for collection, storage, or processing of the solid wastes; or for the transfer of solid wastes.

(5) "Solid waste management district" means a county that has established a resolution, or joint counties that have entered into an agreement, for the purposes of preparing, adopting, submitting, and implementing a solid waste management plan for the county or joint counties and for the purposes of providing for, or causing to be provided for, the safe and sanitary management of solid waste within all of the incorporated and unincorporated territory of the county or joint counties and in compliance with Chapters 343. and 3734. of the Revised Code.

(6) "Surface water" means any water on the surface of the earth.

(T) [Reserved.]

(U) [Reserved.]

(V) "Variance" means an action of the director that changes a requirement of a rule adopted under Chapter 3734. of the Revised Code.

(W)

(1) "Water pollution" means the unpermitted release of sediment from disturbed areas, solid waste or waste-derived constituents, or leachate to the waters of the state.

(2) "Waters of the state" means all streams, lakes, ponds, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or

artificial, regardless of the depth of the strata in which underground water is located, that are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters that do not combine or effect a junction with natural surface or underground waters, including those waters that are presently used, have been used, or are susceptible to use for transporting interstate commerce up to the head of navigation.

(3) "Water supply well" includes potable and non-potable water supply wells.

(4) "Wetland" has the same meaning as in rule 3745-1-02 of the Administrative Code.

(X) [Reserved.]

(Y) [Reserved.]

(Z) "Zone of saturation" or "saturated zone" means that part of the earth's crust in which all voids are filled with water. Zone of saturation or saturated zone does not include the capillary zone.

#### **3745-500-03 Incorporation by reference.**

Incorporation by reference. The text of the incorporated materials is not included in the rules contained in Chapters 3745-500 to 3745-599 of the Administrative Code. The materials listed in paragraph (B) of this rule are hereby made a part of the rules in Chapters 3745-500 to 3745-599 of the Administrative Code. For materials subject to change, only the specific version specified in this rule is incorporated. Any amendment or revision to a referenced document is not incorporated until this rule has been amended to specify the new version.

(A) Availability. The materials incorporated by reference are available as follows:

(1) Code of federal regulations (C.F.R.). Information and copies may be obtained by writing to: "U.S. Government Printing Office, P.O. Box 979050, St. Louis, MO 63197-9000." The full text of the C.F.R. is also available in electronic format at <http://www.gpoaccess.gov/cfr/>. The C.F.R. compilations are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(2) Federal statutes. The full text is available in electronic format at <http://www.gpoaccess.gov/uscode/index.html>. These laws are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(3) Government literature. The availability of these documents is provided in paragraph (B)(3) of this rule. However, many of the documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

- (4) Specifications of the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, third edition, including Volume II, Field Manual (SW-846)." Information and copies may be obtained by writing to: "National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161." The full text is also available in electronic format at <http://www.epa.gov/epawaste/index.htm>. These test methods are also available for inspection and copying at most public libraries and "The State Library of Ohio."
- (5) Specifications of the "American Society for Testing and Materials" (ASTM). Information and copies may be obtained by writing to: "ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, Pennsylvania 19428-2959." These documents are available for purchase at <http://www.astm.org>.
- (6) Other publications. The availability of these documents is provided in paragraph (B)(6) of this rule. However, many of the documents are also available for inspection and copying at most public libraries and "The State Library of Ohio."

(B) Incorporated materials.

- (1) Appropriate "Code of Federal Regulations," the regulations listed in this rule are those effective on July 1, 2011 and include 40 C.F.R. Part 61, "National Emission Standards for Hazardous Air Pollutants (NESHAP)."
- (2) Appropriate "Government Literature," including the following:
- (a) Investment Company Act of 1940, 15 U.S.C. 80A-1 et seq.
- (b) U.S. Bureau of Economic Analysis document, available at <http://www.bea.gov> or by writing to U.S. Bureau of Economic Analysis, 1441 L Street NW, Washington, DC 20230: "Survey of Current Business", July 2011.
- (c) U.S.C. Title 11, Bankruptcy.
- (d) U.S. environmental protection agency documents, available at <http://www.epa.gov/nscep> or by writing to U.S. Environmental Protection Agency/National Service Center for Environmental Publications, P. O. Box 42419, Cincinnati, OH 45242-0419, including "Methods for Chemical Analysis of Water and Wastes, EPA 600/4-79-020", published in 1983.
- (e) U.S. department of treasury document, available at <http://www.fms.treas.gov>: "Circular 570" published in the July 1, 2011 C.F.R.
- (3) Appropriate "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846),"

as amended through January 3, 2008, including the following:

- (a) Method 3050B, "Acid Digestion of Sediments, Sludges, and Soils."
- (b) Method 3051A, "Microwave assisted acid digestion of sediments, sludges, soils, and oils."
- (c) Method 6010C, "Inductively Coupled Plasma - Atomic Emission Spectrometry."
- (d) Method 6020A, "Inductively Coupled Plasma - Mass Spectrometry."
- (e) Method 7000B, "Flame Atomic Absorption Spectrophotometry."
- (f) Method 7010, "Graphite Furnace Atomic Absorption Spectrophotometry."
- (g) Method 7471B, "Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)."
- (h) Method 9045D, "Soil and Waste pH."
- (i) Method 9060, "Total Organic Carbon."

- (4) Appropriate "American Society for Testing and Materials." Each of the following ASTM standards are regulated by the date specified, another standard may be used if it is at least equivalent to those cited in this rule and is acceptable to Ohio EPA. ASTM standards include the following:
- (a) ASTM D2976-71, "Standard Test Method for pH of Peat Materials;" approved in 1971; reapproved in 1998 and 2004.
- (b) ASTM D6270-08e1, "Standard Practice for Use of Scrap Tires in Civil Engineering Applications;" approved in 1998; reapproved in 2004; amended in 2008.
- (c) ASTM D6868-11, "Standard Specification for Labeling of End Items that Incorporate Plastics and Polymers as Coatings or Additives with Paper and Other Substrates Designed to be Aerobically Composted in Municipal or Industrial Facilities;" approved in 2003; superseded in 2011.
- (5) Other publications as follows:
- (a) American public health association book: "Standard Methods for the Examination of Water and Wastewater" (Andrew D. Eaton, Lenore S. Clesceri, Eugene W. Rice, Arnold E. Greenberg eds., 21st ed. 2005). Available for purchase at <http://www.standardmethods.org/>. Standard methods include the following:
- (i) 9221 "Multi-Tube Fermentation Technique for Members of the Coliform Group."

- (ii) 9222 "Membrane Filter Technique for Members of the Coliform Group."
- (iii) 9260 "Detection of Pathogenic Bacteria."
- (b) Association of Official Analytical Chemists (AOAC) book: "Official Methods of Analysis," (Dr. William Horwitz and Dr. George Latimer, Jr. eds., 18th ed. Rev. 2 2007). Available for purchase at <http://www.aoac.org>.
- (c) North central region (NCR) document: "Recommended Chemical Soil Test Procedures for the North Central Region," (J. R. Brown ed., Pub. No. 221, 1998). The full text is available in electronic format at <http://extension.missouri.edu/publications/>. Copies may be purchased by writing to: "MU Extension Publications, 2800 Maguire Blvd., Columbia, MO 65211" or at <http://extension.missouri.edu/explore/shop/>.
- (d) U.S. Composting Council document: "Test Methods for Evaluation of Compost and Composting (TMECC)", August 12, 2011. Available for purchase at <http://compostingcouncil.org/publications/>. TMECC methods include the following:
  - (i) 03.08-A "Classification of inerts."
  - (ii) 04.01-A "Combustion with CO2 detection."
  - (iii) 04.02-A "Total kjeldahl nitrogen, semi-micro kjeldahl technique."
  - (iv) 04.02-D "Total nitrogen by combustion."
  - (v) 04.03-A "Total phosphorus."
  - (vi) 04.04-A "Total potassium."
  - (vii) 04.05-B "Boron."
  - (viii) 04.06-As "Arsenic."
  - (ix) 04.06-Cd "Cadmium."
  - (x) 04.06-Pb "Lead."
  - (xi) 04.06-Hg "Mercury."
  - (xii) 04.06-Ni "Nickel."
  - (xiii) 04.06-Se "Selenium."
  - (xiv) 04.06-Zn "Zinc."
  - (xv) 04.10-A "1:5 slurry method, mass basis."
  - (xvi) 04.11-A "1:5 slurry pH."
  - (xvii) 05.08-A "SOUR: Specific oxygen uptake rate."
  - (xviii) 05.08-B "Carbon dioxide evolution

rate."

- (xix) 05.08-C "In-situ oxygen refresh rate."
- (xx) 05.08-D "Dewar self-heating test."
- (xxi) 05.08-E "Solvita maturity index."
- (xxii) 05.08-F "Biologically available carbon."

**3745-500-35 Relationships among authorizing documents, rules, and the authority of the director and board of health.**

- (A) When direct conflict occurs between an authorizing document approved prior to the effective date of this rule under Chapter 3734. of the Revised Code and rules adopted under Chapters 3745-500 to 3745-599 of the Administrative Code, the owner or operator shall comply with the authorizing document until the obligation in the authorizing document ceases. After the obligation ceases, the owner or operator shall comply with the rules.
- (B) When a direct conflict occurs between an order issued by the director, approved board of health, or court having competent jurisdiction prior to the effective date of this rule and rules adopted under Chapters 3745-500 to 3745-599 of the Administrative Code, the owner or operator shall comply with the order until the order is terminated or until the obligation in the order ceases. After the obligation in the order has ceased, the owner or operator shall comply with the rules.
- (C) Nothing in Chapters 3745-500 to 3745-599 of the Administrative Code is intended nor shall be construed to limit or infringe upon any authority granted by statute to the director or a board of health, including but not limited to issuing orders, conducting inspections, and enforcing the standards and requirements of statutes and rules adopted thereunder.

**3745-500-50 Signatures.**

- (A) When a document is required to be signed in accordance with this rule, the applicant, owner, or operator signing that document shall be one of the following:
  - (1) In the case of a corporation, a principal executive officer of at least the level of vice president or a duly authorized representative, if such representative is responsible for the overall operation of the facility.
  - (2) In the case of a partnership, a general partner.
  - (3) In the case of a limited liability company, a manager, member, or other duly authorized representative of the limited liability company, if such representative is responsible for the overall operation of the facility.

- (4) In the case of sole proprietorship, the owner.
- (5) In the case of a municipal, state, federal, or other governmental facility, the principal executive officer, the ranking elected official, or other duly authorized employee.

- (B) The signature on the document signed in accordance with this rule shall constitute personal affirmation that all statements and all assertions of fact made in the document to the best of the signatory's knowledge and belief are true and accurate, include all required information, and comply fully with applicable rules.
- (C) Unless an alternate certification is specifically required, a document signed in accordance with this rule shall include the following certification statement:

"By signing this document I hereby certify that all statements and all assertions of fact made in the document to the best of my knowledge and belief are true and accurate, include all required information, and comply fully with applicable rules."

**3745-500-120 Procedures for issuing, denying, modifying, transferring, and revoking licenses and permits to install.**

[Comment: Procedures for suspending a license can be found in rule 3745-501-40 of the Administrative Code.]

- (A) In deciding whether to issue, deny, or modify a permit to install, the director shall solicit the input and coordinate the issuance of the permit to install with all relevant divisions of Ohio EPA, as specified in the table below. The director may consult with other divisions or persons as the director deems appropriate.

Projects to be reviewed by relevant divisions:

Project Type	Division of Surface Water	Division of Air Pollution Control	Division of Drinking and Ground Waters
Class I composting facility	X	X	X

- (B) When issuing, denying, modifying, approving, or denying transfer of, or revoking a license or a permit to install for a solid waste facility, the director shall act in accordance with Chapters 119., 3734., and 3745. of the Revised Code, as applicable.
- (C) When issuing, denying, modifying, approving, or denying transfer of, or revoking a license for a solid waste facility, the approved board of health shall act in accordance with Chapter 3734. and section 3709.20

of the Revised Code.

- (D) When denying, revoking, or denying transfer of a license for a solid waste facility, the approved board of health shall provide, at a minimum, the following:

- (1) To the owner or operator of the facility or the applicant for the license or permit to install the following:
  - (a) Notice of the approved board of health's intent to deny or revoke a license or permit to install. This notice shall include a provision informing the applicant, owner, or operator of the right to a hearing prior to the issuance by the approved board of health of a final action denying or revoking a license or permit. This notice shall provide a period of thirty days in which to request a hearing.
  - (b) Upon request, a hearing, held in accordance with section 3709.20 of the Revised Code, at which the persons that have requested the hearing are provided the following:
    - (i) The right to appear in person, by attorney, or by other such representation permitted to appear before the approved board of health.
    - (ii) The opportunity to present evidence at the hearing, including the testimony of witnesses under oath, and the opportunity to cross examine opposing witnesses.
    - (iii) Following the rulings on the admissibility of evidence, the opportunity to proffer evidence that has been determined to be inadmissible.
    - (iv) A stenographic record of the hearing.
  - (c) Prior to the issuance of a final action and subsequent to a hearing conducted by a referee or examiner in accordance with division (B) of section 3709.20 of the Revised Code, written recommendations presented to the approved board of health and an opportunity to submit written objections.
  - (d) A copy of the final action of the approved board of health regarding the denial or revocation of the license or permit, with findings of fact and conclusions of law based on the hearing held in accordance with section 3709.20 of the Revised Code. The copy with a statement of how and within what time period the final action may be appealed to the environmental review appeals commission shall be sent by certified mail or any other form of mail accompanied by a receipt. Such copy and statement shall also be sent by certified mail or any other form of mail accompanied by a receipt to persons who have requested

a hearing.

- (2) To persons who have requested a hearing, upon receipt of a written signed request for a hearing, notice of the hearing date, time, and place not later than twenty days prior to the hearing.

**3745-500-130 Retention and distribution of authorizing documents - procedures for boards of health and Ohio EPA.**

(A) Procedures for boards of health.

If required by rules adopted under Chapter 3734. of the Revised Code, copies of an authorizing document issued by the approved board of health and all associated plans, specifications, and information shall be retained and distributed in accordance with the following:

- (1) The board of health shall retain at least one copy of the authorizing document and all associated plans, specifications, and information.
- (2) Copies of authorizing documents shall be distributed by certified mail or another form of mail accompanied by a receipt not later than the end of the third business day following issuance of the authorizing document, except that any plans, specifications, and information accompanying an authorizing document need not be distributed by certified mail or another form of mail accompanied by a receipt.
- (3) The board of health shall distribute copies of the authorizing document and any associated plans, specifications, and information as follows:
  - (a) Return one copy to the entity who submitted the application or request for the authorizing document.
  - (b) Send one copy to Ohio EPA.

(B) Procedures for Ohio EPA.

Copies of an authorizing document issued by Ohio EPA and associated plans, specifications, and information shall be retained and distributed in accordance with agency procedural rules adopted pursuant to Chapter 119. of the Revised Code.

**3745-500-150 Alteration to a solid waste permit to install.**

(A) Applicant procedures.

- (1) A request to alter the solid waste permit to install, and subsequent revisions to the request, shall be submitted in writing to Ohio EPA. Revisions to the request shall be accompanied by the following:
  - (a) An index listing each change and the page where each change occurred.

- (b) For plan drawings, a schedule on the drawing indicating what has changed.

- (2) A request to alter the permit to install shall include a certification statement and signature in accordance with rule 3745-500-50 of the Administrative Code.

- (3) Upon request from Ohio EPA, the applicant shall submit additional and identically complete copies of the request to alter the permit to install.

(B) Ohio EPA procedures for acting on a request to alter a solid waste permit to install.

- (1) Ohio EPA may decline to act on the request to alter a permit to install.
- (2) Ohio EPA shall not concur with a request to alter a permit to install unless Ohio EPA determines that the following criteria are satisfied:
  - (a) The request to alter a permit to install is at least equivalent to the applicable rule requirements.
  - (b) The request is not for a modification.
  - (c) The alteration will not interfere with the ability of the applicant, owner, or operator to construct, operate, and close the facility in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder, and with the terms and conditions of the permit to install.
  - (d) The alteration will not interfere with the ability of the applicant, owner, or operator to comply with Chapters 3704., 3714., 3734., and 6111. of the Revised Code and rules adopted under those chapters.

- (3) When determining whether to concur with an alteration, Ohio EPA may consider the owner's and operator's compliance with Chapters 3704., 3714., 3734., and 6111. of the Revised Code, the rules adopted under those chapters, and any authorizing documents.

- (4) Upon Ohio EPA's concurrence with a request to alter a permit to install, Ohio EPA shall retain and distribute copies of the alteration request and any altered drawings and information pursuant to rule 3745-500-130 of the Administrative Code.

**3745-500-210 Variances for solid waste facilities.**

- (A) An application for a variance for a solid waste facility shall include the following:
  - (1) The provision or provisions of the state law for which the variance is requested.
  - (2) Information regarding the reason and justification for the variance.

(3) Any other pertinent data regarding the application required by the director.

(4) A certification statement and signature in accordance with rule 3745-500-50 of the Administrative Code.

(B) In accordance with division (S)(1) of section 3745.11 of the Revised Code, the nonrefundable fee shall be paid at the time the application for a variance is submitted. If the application for a variance is part of an application for a permit to install, the variance application fee shall be paid in addition to the permit to install application fee.

(C) The director shall issue, renew, or deny an application for a variance or renewal of a variance for a solid waste facility not later than six months after the date upon which the director receives a complete application with all pertinent information and data required unless the application for a variance is part of an application for a permit to install. If an application for a variance is part of an application for a permit to install, the director shall issue, renew, or deny an application for a variance or renewal of a variance concurrent with a final or proposed action on the permit to install application.

(D) When issuing a variance for a solid waste facility, the director shall act in accordance with Chapters 119., 3734., and 3745. of the Revised Code, as applicable.

**3745-500-220 Exemptions from solid waste requirements.**

(A) An application for an exemption from a solid waste requirement shall include the following:

(1) The provision or provisions of the state law for which the exemption is requested.

(2) Information regarding the reason and justification for the exemption including any effects on the public health and safety and the environment if the exemption is granted.

(3) Any other pertinent data regarding the application required by the director.

(4) A certification statement and signature in accordance with rule 3745-500-50 of the Administrative Code.

(B) Pursuant to division (G) of section 3734.02 of the Revised Code, the director may exempt any person generating, collecting, storing, treating, disposing of, or transporting solid wastes, including scrap tires, from any requirement of Chapter 3734. of the Revised Code or any rules adopted thereunder if granting the exemption is unlikely to adversely affect the public health or safety or the environment.

(C) When issuing an exemption from a solid waste

requirement, the director shall act in accordance with Chapters 119., 3734., and 3745. of the Revised Code, as applicable.

(D) The director may decline to act on a request for an exemption from a solid waste requirement.

**3745-500-330 Termination of a permit to install issued under Chapter 3734. of the Revised Code.**

(A) A permit to install issued under Chapter 3734. of the Revised Code for a new facility shall terminate three years after the effective date of the permit to install if the owner or operator has neither undertaken a continuing program of installation nor entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation of the new facility.

(B) The owner or operator may request an extension of the termination date. Such request shall be submitted to the director and provide justification for the extension of time and an analysis demonstrating that the facility meets all applicable siting criteria and design standards established in the rules in effect on the date the permit to install is to expire.

(C) The director may extend the termination date of a permit to install for a period of time not to exceed twelve months if the director determines that the owner or operator has adequately justified an extension of time and has demonstrated that the facility meets all applicable siting criteria and design standards established in the rules in effect on the date the permit to install is to expire.

**3745-500-350 Causes for revoking a permit to install issued under Chapter 3734. of the Revised Code.**

The director may revoke a permit to install issued under Chapter 3734. of the Revised Code, without limitation as to other lawful grounds, for any of the causes listed in section 3734.45 of the Revised Code.

**3745-500-360 Administrative change to a permit to install.**

(A) The permitting authority may make an administrative change to a permit to install in order to do the following:

(1) Update or correct administrative information including but not limited to the telephone number, address, or name of the facility, the name of the owner or operator or person to whom the permit to install has been issued, or other facility contact information.

(2) Correct typographical errors contained in a permit to install.

(B) Procedures for requesting an administrative change to a permit to install. Unless a transfer of a permit to install

has been approved, a person to whom a permit to install has been issued shall do the following:

- (1) Submit a written request for an administrative change to the permitting authority. The request shall include a copy of the information proposed to be administratively changed with the desired change, and all locations in the permit to install where the change is proposed.
- (2) If the approved board of health is the permitting authority, notify Ohio EPA of the submittal of a request for an administrative change concurrent to initially submitting the request to the approved board of health. The notification shall be in writing and shall contain sufficient detail to understand the scope and nature of the request.
- (3) Upon request from Ohio EPA or the approved board of health, submit additional and identically complete copies of the request for an administrative change.
- (4) If the permitting authority makes the administrative change, retain a copy of the administrative change with the permit to install.

(C) Permitting authority procedures are as follows:

- (1) The permitting authority shall make an administrative change to a permit to install after approving transfer of a permit to install to update administrative information including but not limited to the name, address, and contact information of the permittee.
- (2) The permitting authority may make an administrative change to a permit to install when requested by a permittee or when the permitting authority discovers the need for an administrative change. The permitting authority may decline to make a requested administrative change.
- (3) Upon making an administrative change to a permit to install, the permitting authority shall provide written notification to the permittee of the administrative change.
- (4) Copies of the changed pages shall be retained and distributed pursuant to rule 3745-500-130 of the Administrative Code.

# Ohio Administrative Code (OAC) Chapter 501

## LICENSING REGULATIONS

3745-501-01	Licensing – applicability.	3745-501-15	Criteria for issuing or denying facility licenses.
3745-501-02	Licensing – definitions.	3745-501-20	Procedures for the licensing authority for reviewing and considering license applications.
3745-501-05	Licenses required for solid waste, infectious waste treatment, and construction and demolition debris facilities.	3745-501-35	Transfer of licenses.
3745-501-10	License applications, application procedures, and remittal of fees after license issuance.	3745-501-40	Suspension or revocation of a license.

### **3745-501-01 Licensing - applicability.**

The rules in this multi-program chapter shall apply when referenced in either of the following:

- (A) A rule in a program chapter.
- (B) A rule in another multi-program chapter that was made applicable by a rule in a program chapter.

Program chapters are Chapters 3745-520 to 3745-599 of the Administrative Code.

### **3745-501-02 Licensing - definitions.**

If a term used in this chapter is defined in rule 3745-500-02 of the Administrative Code, the definition in rule 3745-500-02 of the Administrative Code is applicable to this chapter unless the term is defined in this rule. As used in this chapter:

- (A) [Reserved.]
- (B) [Reserved.]
- (C) [Reserved.]
- (D) [Reserved.]
- (E) [Reserved.]
- (F) "Facility" means a "solid waste facility."

### **3745-501-05 Licenses required for solid waste facilities.**

- (A) No person shall operate a facility without possessing a separate, valid license for each operation, as required by Chapter 3734. of the Revised Code and rules adopted thereunder. Failure to obtain a renewal license is grounds for closure.
- (B) Each license shall be obtained from the licensing authority.
- (C) A license issued pursuant to this chapter shall be effective until December thirty-first of the year for which it is issued, unless revoked.

### **3745-501-10 License applications, application procedures, and remittal of fees after license issuance.**

#### (A) Application.

- (1) The applicant for a facility license shall be either the owner of the facility or operator of the facility who has written permission from the land owner to apply for a license.
- (2) Applications for facility licenses required by rule 3745-501-05 of the Administrative Code shall be made on forms prescribed by the director and at a minimum shall contain information regarding the applicant, owner, operator, facility contacts, property, and operations; signatures; certifications; and any other information the director may require.

#### (B) License application and application procedures.

- (1) Each application for a solid waste facility license shall be accompanied by a nonrefundable fee in the amount specified in section 3734.05 of the Revised Code. For annual renewal license applications received by a licensing authority between October first and December thirty-first, the applicant shall pay an additional late fee in the amount specified in section 3734.05 of the Revised Code for each whole or partial week the application is submitted beyond September thirtieth, which is the application deadline.
- (2) If the licensing authority determines that information in addition to that required by the application form is necessary to determine whether the application satisfies the requirements of Chapter 3734. of the Revised Code and rules adopted thereunder, the applicant shall upon request supply such additional information.
- (3) Signature. An application for a license shall be signed in accordance with rule 3745-500-50 of the Administrative Code.
- (4) Time frame for application submittal.

#### (a) A license application shall be submitted to the licensing authority in accordance with the following:

- (i) For a facility that has not previously received a license, the applicant shall submit a license application not later

than ninety days prior to the proposed date for accepting solid waste.

[Comment: Chapter 3734. of the Revised Code requires an applicant for a solid waste facility permit to install to concurrently submit an initial application for an operating license even though the facility is not yet constructed or operating.]

- (ii) For a facility that will continue operations beyond the expiration date of the current license, the applicant shall submit a license application on or before September thirtieth of the year preceding that for which the renewal license is sought.

- (b) Any complete solid waste facility renewal license application submitted to the licensing authority between October first and December thirty-first of the current license period shall be considered by the licensing authority if the owner or operator pays the license application fee and the late fees specified in paragraph (B)(1) of this rule.

- (c) Any renewal license application not submitted to the licensing authority by December thirty-first of the current license period shall not be considered for approval or denial, and the facility will be subject to all applicable closure requirements.

[Comment: Absent any obligation to cease facility operations, any requirement pursuant to Chapter 3734. of the Revised Code and rules adopted under those chapters, or any administrative or court order, a current licensee who has filed an application for a renewal license within the time and in the manner provided in this rule is not required to discontinue operations in the event that the licensing authority has not taken a final action on the application.]

- (C) License fees required after issuance of a license. Not later than thirty days after issuance of a license for a solid waste facility, the owner or operator shall pay a license fee in the amount established by division (A) of section 3734.06 of the Revised Code, as applicable. The license application fee shall be deducted from the license fee amount. Late fees for license applications shall not be deducted from the license fee amount.

**3745-501-15 Criteria for issuing or denying facility licenses.**

- (A) A licensing authority shall not issue a facility license unless the following criteria are met:

- (1) The applicant for the license is the owner of the facility or operator of the facility who has written

permission from the land owner to apply for the license.

- (2) The owner or operator holds a valid permit to install or a registration, if required by Chapter 3734. of the Revised Code and rules adopted thereunder.
- (3) In the case of an initial facility license where a permit to install or registration has been issued pursuant to Chapter 3734. of the Revised Code and rules adopted thereunder, the facility has been inspected by Ohio EPA and the approved health district, if applicable, and has been determined to be constructed in accordance with all authorizing documents and applicable rules and is adequately prepared for acceptance of solid waste.
- (4) The owner or operator has demonstrated that all approvals and authorizations have been obtained including but not limited to approvals and authorizations required pursuant to Chapters 3704. and 6111. of the Revised Code.
- (5) The license application is complete pursuant to rule 3745-501-20 of the Administrative Code.
- (6) The owner or operator is not required to conduct closure in accordance with any applicable closure rule.
- (7) The owner or operator submitted the license application for renewal to the licensing authority by December thirty-first of the current license period.
- (8) Financial assurance for the facility has been established and maintained for closure and post-closure care, as applicable, and documentation of the financial assurance has been submitted in accordance with Chapter 3734. of the Revised Code and rules adopted thereunder.
- (9) The owner and operator, at facilities they own or operate, are in substantial compliance with, or are on a legally enforceable schedule through issuance of an administrative consent order or judicial consent order to attain compliance with, environmental laws in this state and other jurisdictions. An owner or operator is not in substantial compliance with the environmental laws of this state or other jurisdictions if the owner or operator has committed a significant or material violation of an environmental law or has committed numerous, other violations of environmental laws such that the violations reveal a practice of noncompliance with environmental laws.
- (10) The owner and operator, at facilities they own or operate or facilities they previously owned or operated, have maintained a history of compliance with environmental laws in this state and other jurisdictions by resolving all administrative and judicial enforcement actions that were brought against them which were based on a significant or material violation of an

environmental law, or were based on numerous, other violations of environmental laws that revealed a practice of noncompliance with environmental laws. For purposes of this rule, an enforcement action has been resolved if the owner or operator has entered into an administrative consent order or judicial consent order with regard to the violation of environmental laws, or the owner or operator has adjudicated the issue of whether they are in violation of environmental laws to finality.

- (11) The owner and operator exhibit sufficient reliability, expertise, and competency to operate the facility in substantial compliance with environmental laws in this state as a result of, and including but not limited to, the assets, employees, equipment, and other resources available at, and dedicated to, the facility.

(B) Grounds for denial. The licensing authority may deny a license application request for any of the following reasons:

- (1) Any of the criteria in paragraph (A) of this rule that are applicable to the facility are not met.
- (2) The license application is incomplete and the applicant has not addressed a notice of deficiency by the licensing authority.
- (3) For a solid waste facility, the following additional grounds:
  - (a) Falsification of any material information that is required to be submitted to a licensing authority as part of the license application.
  - (b) A violation of Chapter 3734. of the Revised Code, any rule adopted under that chapter, including a term or condition of the facility's license has occurred.

**3745-501-20 Procedures for the licensing authority for reviewing and considering license applications.**

- (A) If a license application is incomplete, the licensing authority shall, not later than sixty days after the receipt of an incomplete application, notify the applicant of the nature of the deficiency. If the applicant has not resubmitted a complete application to the licensing authority, the licensing authority may deny the incomplete application. An application is complete when the application contains all of the information that the applicable statute and rules required to be submitted, including such other information as the licensing authority may reasonably require to determine that the application satisfies the requirements of the applicable statute and rules.
- (B) Not more than sixty days prior to issuing a license, a licensing authority shall inspect the facility and certify that the owner and operator are in substantial compliance with Chapter 3734. of the Revised Code and rules adopted thereunder.

(C) Procedure.

- (1) When acting upon a facility license, the licensing authority shall follow the applicable procedures set forth in rule 3745-500-120 of the Administrative Code.
- (2) In deciding whether to issue or deny a license, the licensing authority shall comply with rule 3745-501-15 of the Administrative Code.
- (3) A renewal license application shall not be considered for issuance or denial for a facility where the owner or operator is required to conduct closure requirements in accordance with any applicable closure rule or where the owner or operator has failed to submit the license application to the licensing authority by December thirty-first of the current license period.
- (4) Time frames for license actions. The licensing authority shall either issue or deny a license as follows:
  - (a) For a renewal license, not later than ninety days after the date upon which a complete application is received.
  - (b) For a facility not previously licensed, not later than forty-five days after written concurrence from Ohio EPA and the approved health district, if applicable, indicating that the site has been inspected and is prepared for operations pursuant to paragraph (A)(3) of rule 3745-501-15 of the Administrative Code.
- (5) Terms and conditions. A licensing authority may impose such special terms and conditions as are necessary to protect public health and safety and the environment and to ensure that an owner and operator of a facility will comply with Chapter 3734. of the Revised Code and rules adopted thereunder.

(D) Requirements after license issuance.

- (1) Upon issuance of a license, the licensing authority shall stamp all copies of the license application and approved plans, specifications, and information with the word "Approved" and the date of license issuance.
- (2) Copies of the signed license and stamped copies of the license application and approved plans, specifications, and information shall be retained and distributed by the licensing authority in accordance with rule 3745-500-130 of the Administrative Code.

(E) License fees. For solid waste facilities, the licensing authority shall collect the required license fees, including any applicable late fees, and manage those funds in accordance with the applicable sections of Chapter 3734. of the Revised Code and rules adopted thereunder.

**3745-501-35 Transfer of licenses.**

(A) License transfer requests.

- (1) A solid waste facility licensee may transfer the license after receiving written authorization from both the director and the approved board of health.
- (2) Licensee transfer procedures.
  - (a) Not later than one hundred twenty days prior to the proposed date of a license transfer, the current licensee shall notify the director and, if applicable, the approved board of health, in writing specifying the identity of the proposed transferee and the proposed date for the transferee's assumption of the licensee's obligations.
  - (b) The proposed license transfer shall be made on forms prescribed by the director and at a minimum shall contain information regarding the applicant, owner, operator, facility contacts, property, and operations; signatures; certifications; and any other information the director may require.

(B) License transfer criteria. A license transfer request shall not be approved unless applicable criteria of Chapter 3734. of the Revised Code and the following criteria are met:

- (1) The prospective license transferee meets the requirements as specified in rule 3745-501-15 of the Administrative Code.
- (2) The prospective license transferee has established and submitted documentation of financial assurance in accordance with Chapter 3734. of the Revised Code and the rules adopted thereunder.
- (3) The prospective transferee of the license is the owner or operator of the facility who has written permission from the land owner.

(C) Licensing authority procedures.

- (1) When acting upon a license transfer request, the licensing authority shall follow the appropriate procedures set forth in rule 3745-500-120 of the Administrative Code.
- (2) Not later than one hundred twenty days after receiving the request as described in paragraph (B) of this rule, the licensing authority shall approve or deny the transfer.

**3745-501-40 Suspension or revocation of a license.**

(A) The licensing authority may suspend or revoke a license by order for any cause that would be grounds for suspension or revocation pursuant to Chapter 3734. of the Revised Code and rules adopted thereunder.

Grounds include but are not limited to the following:

- (1) Entry pursuant to applicable law to inspect or investigate, obtain samples, and examine or copy records to determine compliance is refused, hindered, or thwarted.
- (2) The owner or operator violates Chapter 3734. of the Revised Code and rules adopted thereunder.
- (3) The facility is not being operated in substantial compliance with applicable environmental laws.
- (4) A nuisance, fire hazard, or health hazard exists at the facility.
- (5) For a solid waste facility, fraud, deceit, or misrepresentation and other grounds pursuant to section 3734.45 of the Revised Code.

(B) Procedures for suspending a facility license. When suspending a facility license, the licensing authority shall do at least the following:

- (1) The director shall act in accordance with applicable provisions of Chapters 119., 3734., and 3745. of the Revised Code. The approved board of health shall act in accordance with section 3709.20 of the Revised Code and the applicable provisions of Chapter 3734. of the Revised Code.
- (2) Unless an emergency exists requiring immediate action to protect public health or safety or the environment, make a suspension of a license effective only after the licensee has been given notice in writing of the conditions or violations that need to be corrected and has been given a reasonable period of time to respond to the notice to make corrections.
- (3) Issue a written order to suspend the license that contains at a minimum the following information:
  - (a) Information identifying the licensee and the facility.
  - (b) The findings upon which the suspension is based.
  - (c) The effective date of the order.
  - (d) A notice of appeal rights.
- (4) Retain and distribute copies of the order suspending the facility license pursuant to rule 3745-500-130 of the Administrative Code.

(C) Licensee procedures if a facility license has been suspended.

- (1) The acceptance of solid waste at the facility shall cease upon the effective date of the order suspending the facility license, unless the order suspending the facility license provides otherwise.
- (2) The owner or operator shall comply with the

operational requirements specified in the applicable rules.

- (3) The acceptance of solid waste shall not recommence unless the licensing authority has by order reinstated the facility license.

(D) Licensing authority procedures for reinstating a suspended facility license.

- (1) The licensing authority shall reinstate a suspended facility license through issuance of a written order. The written order shall at a minimum contain the following information:

- (a) Information identifying the licensee and the facility.

- (b) The findings upon which the suspended license is reinstated.

- (c) The effective date of the order.

- (d) A notice of appeal rights.

- (2) The licensing authority shall retain and distribute copies of the order reinstating the facility license pursuant to rule 3745-500-130 of the Administrative Code.

(E) Procedures for revoking a facility license. When revoking a facility license, the licensing authority shall comply with the applicable procedures set forth in rule 3745-500-120 of the Administrative Code.

# Ohio Administrative Code (OAC) Chapter 503

## FINANCIAL ASSURANCE REGULATIONS

3745-503-01 Financial assurance – applicability.  
3745-503-02 Financial assurance – definitions.

3745-503-05 Financial assurance for a solid waste facility closure.  
3745-503-20 Wording of financial assurance instruments.

### 3745-503-01 Financial assurance - applicability.

The rules in this multi-program chapter shall apply when referenced in either of the following:

- (A) A rule in a program chapter.
- (B) A rule in another multi-program chapter that was made applicable by a rule in a program chapter.

Program chapters are Chapters 3745-520 to 3745-599 of the Administrative Code.

### 3745-503-02 Financial assurance - definitions.

If a term used in this chapter is defined in rule 3745-500-02 of the Administrative Code, the definition in rule 3745-500-02 of the Administrative Code is applicable to this chapter unless the term is defined in this rule. As used in this chapter:

- (A) [Reserved.]
- (B) [Reserved.]
- (C)
  - (1) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of a business.
  - (2) "Current liabilities" means obligations the liquidation of which is reasonably expected to require either the use of existing resources properly classifiable as current assets or the creation of other current liabilities.
- (D) [Reserved.]
- (E) [Reserved.]
- (F) "Face amount" means the total amount the insurer is obligated to pay under the policy.
- (G) [Reserved.]
- (H) [Reserved.]
- (I) [Reserved.]
- (J) [Reserved.]
- (K) [Reserved.]

(L) "Local government" means a subdivision of the state of Ohio including, but not limited to, a municipal corporation, a county, a township, a single or joint county solid waste management district, or a solid waste management authority.

(M) [Reserved.]

(N)

(1) "Net working capital" means current assets minus current liabilities.

(2) "Net worth" means total assets minus total liabilities and is equivalent to a person's equity.

(O) [Reserved.]

(P) "Parent corporation" means a corporation or the ultimate corporation that directly owns at least fifty per cent of the voting stock of the corporation that holds a permit or license issued in accordance with applicable program chapters of the Administrative Code.

(Q) [Reserved.]

(R) [Reserved.]

(S) [Reserved.]

(T) "Tangible net worth" means the tangible assets that remain after deducting liabilities. For the purpose of this definition "tangible assets" do not include such intangibles as goodwill and rights to patents or royalties.

### 3745-503-05 Financial assurance for closure.

(A) [Reserved.]

(B)

(1) The owner or operator shall execute and fund a financial assurance instrument in an amount not less than the current closure cost estimate and meeting the requirements of paragraph (E) of this rule.

(2) Financial assurance for closure shall be maintained and may be released only in accordance with paragraph (O) of this rule.

(C) [Reserved.]

(D) [Reserved.]

(E) The owner or operator shall select a closure financial assurance mechanism from the list of mechanisms specified in paragraphs (F), (G), (H), (I), (J), (K), and (L) of this rule, except as otherwise specified by this rule, provided the owner or operator satisfies the criteria for use of that mechanism.

(F) Closure trust fund.

(1) The owner or operator may satisfy the requirements of this rule by establishing a closure trust fund which conforms to the requirements of this paragraph, by sending an originally signed duplicate of the trust agreement to the director prior to license issuance, and by submitting a copy of the trust agreement into the operating record, if applicable. The trustee shall be an entity that has the authority to act as a trustee and which trust operations are regulated and examined by a federal or state agency.

(2) The wording of the trust agreement shall be identical to the wording specified in paragraph (A)(1) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director, and the trust agreement shall be accompanied by a formal certification of acknowledgment. "Schedule A" of the trust agreement shall be updated not later than sixty days after a change in the amount of the current closure cost estimate provided for in the agreement.

(3) A closure trust fund shall be established to secure an amount at least equal to the current closure cost estimate, except as provided in paragraph (M) of this rule. Except for payments made in accordance with paragraphs (F)(3)(d) and (F)(4) of this rule, payments to the trust fund shall be made annually by the owner or operator during the pay-in period. The pay-in period shall be the anticipated life of the sanitary landfill facility as calculated using the authorized maximum daily waste receipt and the approved volume of the sanitary landfill facility as shown in the approved permit. The first payment into the closure trust fund shall be made in accordance with paragraph (B) of this rule. Subsequent payments to the closure trust fund shall be made as follows:

(a) A receipt from the trustee for each payment shall be submitted by the owner or operator to the director. The first payment shall be at least equal to the current closure cost estimate divided by the number of years in the pay-in period, except as provided in paragraph (M) of this rule. Subsequent payments shall be made not later than thirty days after each anniversary date of the first payment. The amount of each subsequent payment shall be determined by performing the following calculation:

$$\text{Next payment} = (\text{CE} - \text{CV}) / Y$$

Where CE is the current closure cost estimate, CV is the current value of the trust

fund, and Y is the number of years remaining in the pay-in period.

(b) If the owner or operator establishes a trust fund, as specified in this rule, and the value of the trust fund is less than any revised current closure cost estimate made during the pay-in period, the amount of the current closure cost estimate still to be paid into the trust fund shall be paid in over the pay-in period, as defined in paragraph (F)(3) of this rule. Payments shall continue to be made not later than thirty days after each anniversary date of the first payment pursuant to paragraph (F)(3)(a) of this rule. The amount of each payment shall be determined by performing the following calculation:

$$\text{Next payment} = (\text{CE} - \text{CV}) / Y$$

Where CE is the current closure cost estimate, CV is the current value of the trust fund, and Y is the number of years remaining in the pay-in period.

(c) The owner or operator may make the first installment required under paragraph (F)(3)(a) or (F)(3)(b) of this rule by providing alternate financial insurance using one of the mechanisms specified in paragraph (G), (I), or (J) of this rule in an amount at least equal to the first installment. On the anniversary date of the first installment, the owner or operator shall pay into the trust an amount at least equal to the first and second installments required under paragraph (F)(3)(a) or (F)(3)(b) of this rule or select an alternate financial assurance mechanism.

(d) For other facilities as described below, the trust fund shall be fully funded as follows:

(i) For a class I or a class II composting facility, the trust fund shall be funded in five annual payments of not less than twenty per cent of the total closure cost estimate. The first trust fund payment shall be made prior to the initial license issuance. Each subsequent trust fund payment shall be made on or before the anniversary of the initial trust fund payment.

(4) The owner or operator may accelerate payments into the trust fund, or the owner or operator may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator shall maintain the value of the fund at no less than the value the fund would have if annual payments were made as specified in paragraph (F)(3) of this rule.

(5) If the owner or operator establishes a closure trust fund after having begun funding closure under

any mechanism specified in this rule, the closure trust fund shall be established by depositing the total value of all prior mechanisms into the newly established trust fund. The subsequent annual payments shall be made as specified in paragraph (F)(3) of this rule.

(6) After the pay-in period of a trust fund has ended and the current closure cost estimate changes, the owner or operator shall compare the revised estimate to the trustee's most recent annual valuation of the trust fund. If the value of the trust fund is less than the amount of the revised estimate, the owner or operator shall, not later than sixty days after the change in the cost estimate, either deposit a sufficient amount into the trust fund so that its value after payment at least equals the amount of the current closure cost estimate, or obtain alternate financial assurance as specified in this rule to compensate for the difference.

(7) The director shall instruct the trustee to release to the owner or operator such funds as the director specifies in writing, after receiving one of the following requests from the owner or operator for a release of funds:

(a) The owner or operator may submit a written request to the director for the release of the amount in excess of the current closure cost estimate, if the value of the trust fund is greater than the total amount of the current closure cost estimate.

(b) The owner or operator may submit a written request to the director for release of the amount in the trust fund that exceeds the amount required as a result of such substitution, if the owner or operator substitutes any of the alternate financial assurance mechanisms specified in this rule for all or part of the trust fund.

(8) Reimbursement for closure at solid waste facilities.

After beginning closure, the owner or operator, or any other person authorized by the owner, operator, or director to perform closure, may request reimbursement for closure expenditures by submitting itemized bills to the director. After receiving itemized bills for closure activities, the director shall determine whether the closure expenditures are in accordance with the closure or post-closure plan, permit or registration requirements, or applicable rules, or are otherwise justified, and if so, will instruct the trustee to make reimbursement in such amounts as the director specifies in writing. If the director determines that the cost of closure will be greater than the value of the trust fund, the director may withhold reimbursement of such amounts as deemed prudent until the director determines, in accordance with paragraph (O) of this rule, that the owner or operator is no longer required to maintain financial assurance for closure of the facility.

(9) The director will agree to termination of the trust fund when one of the following occurs:

(a) The owner or operator substitutes alternate financial assurance for closure as specified in paragraph (F)(6) of this rule.

(b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required by this rule to maintain financial assurance for closure of the facility.

(G) Surety bond guaranteeing payment into a closure trust fund.

(1) The owner or operator may satisfy the requirements of this rule by obtaining a surety bond that conforms to the requirements of this paragraph and by delivering the originally signed bond to the director by certified mail or any other form of mail accompanied by a receipt prior to license issuance and by submitting a copy of the bond into the operating record, if applicable. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in "Circular 570" of the U.S. department of the treasury.

[Comment: "Circular 570" is published in the "Federal Register" annually on the first day of July; interim changes in the circular are also published in the "Federal Register."]

(2) The wording of the surety bond shall be identical to the wording specified in paragraph (B) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director.

(3) The owner or operator who uses a surety bond to satisfy the requirements of this rule shall also establish a standby trust fund not later than when the bond is obtained. Under the terms of the surety bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund shall meet the requirements specified in paragraph (F) of this rule, except that:

(a) An originally signed duplicate of the standby trust agreement shall be delivered to the director with the surety bond, and a copy of the standby trust agreement shall be placed in the operating record, if applicable.

(b) Until the standby trust fund is funded, pursuant to the requirements of this rule, the following are not required:

(i) Payments into the trust fund as specified in paragraph (F) of this rule.

(ii) Revisions of "Schedule A" of the trust agreement to show current closure cost estimate or scrap tire transporter closure cost estimate.

- (iii) Annual valuations as required by the trust agreement.
  - (iv) Notices of nonpayment as required by the trust agreement.
- (4) The bond shall guarantee that the surety will become liable on the bond obligation unless the owner or operator does one of the following, as applicable:
- (a) Funds the standby trust fund in an amount equal to the penal sum of the bond before the beginning of closure of the facility.
  - (b) For a solid waste facility, funds the standby trust fund in an amount equal to the penal sum not later than fifteen days after a mandatory closure in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules.
  - (c) Provides alternate financial assurance as specified in this rule, and obtains the director's written approval of the alternate financial assurance provided, not later than ninety days after both the owner or operator and the director receive notice of cancellation of the bond from the surety.
- (5) Under the terms of the bond, the surety shall become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- (6) The penal sum of the bond shall be in an amount at least equal to the current closure cost estimate except as provided in paragraph (M) of this rule.
- (7) Whenever the current closure cost estimate increases to an amount greater than the penal sum of the bond, the owner or operator shall, not later than sixty days after the increase in the estimate, either cause the penal sum of the bond to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the director, and into the operating record, if applicable, or obtain alternate financial assurance, as specified in this rule, to compensate for the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the director. Notice of an increase or a proposed decrease in the penal sum shall be sent to the director not later than sixty days after the change.
- (8) Under the terms of the bond, the bond shall remain in force unless the surety sends written notice of cancellation by certified mail or any other form of mail accompanied by a receipt to the owner or operator and to the director. Cancellation cannot occur, however, during the one hundred twenty day period beginning on the first day that both the owner or operator and the director have received the notice of cancellation, as evidenced by the return receipts.
- (9) The owner or operator may cancel the bond if the director has given prior written consent. The director will provide such written consent to the surety bond company when one of the following occurs:
- (a) The owner or operator substitutes alternative financial assurance for closure of a facility as specified in this rule.
  - (b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required to maintain financial assurance for closure of a facility.
- (H) Surety bond guaranteeing performance of closure.
- (1) The owner or operator may satisfy the requirements of this rule by obtaining a surety bond which conforms to the requirements of this paragraph and by delivering the originally signed bond to the director prior to license issuance and by submitting a copy of the surety bond into the operating record of the facility, if applicable. The surety company issuing the bond shall, at a minimum, be among those listed as acceptable sureties on federal bonds in "Circular 570" of the U.S. department of the treasury.
- [Comment: "Circular 570" is published in the "Federal Register" annually on the first day of July; interim changes in the circular are also published in the "Federal Register."]
- (2) The wording of the surety bond shall be identical to the wording specified in paragraph (C) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director.
  - (3) The owner or operator who uses a surety bond to satisfy the requirements of this rule shall also establish a standby trust fund. Under the terms of the surety bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the director. This standby trust fund shall meet the requirements specified in paragraph (F) of this rule except that:
    - (a) An originally signed duplicate of the standby trust agreement shall be delivered to the director with the surety bond, and a copy of the standby trust agreement shall be placed in the operating record, if applicable.
    - (b) Unless the standby trust fund is funded pursuant to the requirements of this rule, the following are not required:
      - (i) Payments into the trust fund as specified in paragraph (F) of this rule.
      - (ii) Revisions of "Schedule A" of the trust

agreement to show current closure cost estimate.

(iii) Annual valuations as required by the trust agreement.

(iv) Notices of nonpayment as required by the trust agreement.

(4) The bond shall guarantee that the surety will become liable on the bond obligation unless the owner or operator does one of the following, as applicable:

(a) For solid waste facilities, performs closure in accordance with the closure or post-closure plan, permit or registration requirements, and applicable rules.

(b) Provides alternate financial assurance as specified in this rule, and obtains the director's written approval of the alternate financial assurance provided, not later than ninety days after both the owner or operator and the director receive notice of cancellation of the bond from the surety.

(5) Performing activities.

(a) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a determination by the director that the owner or operator of the solid waste facility has failed to perform closure activities in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules, the surety shall perform closure in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules, or will deposit the amount of the penal sum into the standby trust fund.

(6) The penal sum of the bond shall be in an amount at least equal to the current closure cost estimate.

(7) Whenever the current closure cost estimate increases to an amount greater than the penal sum of the bond, the owner or operator shall, not later than sixty days after the increase in the estimate or prior to waste acceptance in accordance with paragraph (B)(2) of this rule, either cause the penal sum of the bond to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the director, and into the operating record, if applicable, or obtain alternate financial assurance, as specified in this rule, to compensate for the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the director. Notice of an increase or a proposed decrease in the penal sum shall be sent to the director by certified mail or any other

form of mail accompanied by a receipt not later than sixty days after the change.

(8) Under the terms of the bond, the bond shall remain in force unless the surety sends written notice of cancellation by certified mail or any other form of mail accompanied by a receipt to the owner or operator and to the director. Cancellation cannot occur, however, during the one hundred twenty day period beginning on the first day that both the owner or operator and the director have received the notice of cancellation as evidenced by the return receipts.

(9) The owner or operator may cancel the bond if the director has given prior written consent. The director will provide such written consent to the surety bond company when one of the following occurs:

(a) The owner or operator substitutes alternate financial assurance for closure of a facility as specified in this rule.

(b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required by this rule to maintain financial assurance for closure of a facility.

(10) The surety shall not be liable for deficiencies in the completion of closure of a facility by the owner or operator after the owner or operator has been notified by the director, in accordance with this rule, that the owner or operator is no longer required to maintain financial assurance for closure of a facility.

(I) Closure letter of credit.

(1) The owner or operator may satisfy the requirements of this rule by obtaining an irrevocable standby letter of credit ("letter of credit") which conforms to the requirements of this paragraph and by having the originally signed letter of credit delivered to the director by certified mail or any other form of mail accompanied by a receipt prior to license issuance and by submitting a copy of the letter of credit into the operating record of the facility, if applicable. The issuing institution shall be an entity which has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(2) The wording of the letter of credit shall be identical to the wording specified in paragraph (D) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director.

(3) An owner or operator who uses a letter of credit to satisfy the requirements of this rule shall also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the director shall be deposited promptly and directly by the issuing institution into the standby trust fund in accordance with

instructions from the director. The standby trust fund shall meet the requirements of the trust fund specified in paragraph (F) of this rule, except that:

- (a) An originally signed duplicate of the standby trust agreement shall be delivered to the director with the letter of credit, and a copy of the standby trust agreement shall be placed in the operating record, if applicable.
- (b) Unless the standby trust fund is funded pursuant to the requirements of this rule, the following are not required:
  - (i) Payments into the trust fund as specified in paragraph (F) of this rule.
  - (ii) Updating of "Schedule A" of the trust agreement to show current closure cost estimate.
  - (iii) Annual valuations as required by the trust agreement.
  - (iv) Notices of nonpayment as required by the trust agreement.
- (4) The letter of credit shall be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date, and providing the following information: the names and addresses of the solid waste facility and the owner and the operator and the amount of funds assured for closure of the facility by the letter of credit.
- (5) The letter of credit shall be irrevocable and issued for a period of at least one year. The letter of credit shall provide that the expiration date will be automatically extended for a period of at least one year unless, not later than one hundred twenty days prior to the current expiration date, the issuing institution notifies both the owner and operator and the director by certified mail or any other form of mail accompanied by a receipt of a decision not to extend the expiration date. Under the terms of the letter of credit, the one hundred twenty day period shall begin on the day when both the owner or operator and the director have received the notice, as evidenced by the return receipts.
- (6) The letter of credit shall be issued in an amount at least equal to the current closure cost estimate except as provided in paragraph (M) of this rule.
- (7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator shall, not later than sixty days after the increase, either cause the amount of the credit to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the director, and into the operating record, if applicable, or obtain alternate financial assurance, as specified in this rule, to

compensate for the increase. Whenever the current closure cost estimate decreases, the letter of credit may be reduced to the amount of the current closure cost estimate following written approval by the director. Notice of an increase or a proposed decrease in the amount of the letter of credit shall be sent to the director by certified mail or any other form of mail accompanied by a receipt not later than sixty days after the change.

- (8) Under the terms of the letter of credit, the director may draw on the letter of credit following a determination that the owner or operator has failed to do the following:
  - (a) For solid waste facilities, perform closure in accordance with the closure/ post-closure care plan, permit or registration requirements, and applicable rules.
  - (b) Provide alternate financial assurance as specified in this rule and obtain written approval of such alternate financial assurance from the director not later than ninety days after the owner and operator and the director have received notice from the issuing institution that it will not extend the letter of credit beyond the current expiration date, the director shall draw on the letter of credit. The director may delay the drawing if the issuing institution grants an extension of the term of the credit. During the thirty days of any such extension the director shall draw on the letter of credit if the owner or operator has failed to provide alternate financial assurance as specified in this rule and has failed to obtain written approval of such alternate financial assurance from the director.
- (9) The director shall return the original letter of credit to the issuing institution for termination when either of the following occur:
  - (a) The owner or operator substitutes alternate financial assurance for closure of a facility as specified in this rule.
  - (b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required to maintain financial assurance for closure of a facility.
- (J) Closure insurance.
  - (1) The owner or operator may satisfy the requirements of this rule by obtaining closure insurance which conforms to the requirements of this paragraph and by submitting an originally signed certificate of such insurance to the director by certified mail or any other form of mail accompanied by a receipt prior to license issuance, and by submitting a copy of the certificate of insurance into the operating record, if applicable. At a minimum, the insurer shall be licensed to

transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states.

- (2) The owner or operator using insurance as a financial assurance mechanism shall submit documentation stating whether the insurer is a subsidiary or has a corporate, legal, or financial affiliation with the owner or operator. If the closure insurance is issued by a subsidiary or affiliate, the owner or operator shall include a detailed written description of the relationship between the insurer and the owner and the operator.
- (3) An insurer issuing an insurance policy in satisfaction of this rule shall be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states. The owner or operator shall submit to the director the following information regarding the insurer's qualifications:
  - (a) The most recent A.M. Best rating of the insurer.
  - (b) Documentation demonstrating that the insurer is domiciled in the United States.
  - (c) The most recent report on examination from the insurance department from the insurer's state of domicile.
  - (d) Documentation demonstrating that the insurer has capital and surplus of at least one hundred million dollars.
  - (e) Documentation demonstrating that the insurer received an unqualified opinion of the insurer's annual financial statements from an independent certified public accountant.
- (4) The director may disallow use of the insurer by the owner or operator on the basis of one or more of the following:
  - (a) The A.M. Best rating is less than A-.
  - (b) The report on examination does not demonstrate that the status of the insurer is satisfactory.
  - (c) The opinion expressed by the independent certified public accountant in the report on examination of the insurer's financial statements.
- (5) The wording of the certificate of insurance shall be identical to the wording specified in paragraph (E) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director.
- (6) The closure insurance policy shall be issued for a face amount at least equal to the current closure cost estimate cost estimate, except as provided in paragraph (M) of this rule. Actual payments by the insurer will not change the face amount,

although the insurer's future liability will be lowered by the amount of the payments.

- (7) Guaranteeing of funds. The closure insurance policy shall guarantee that funds will be available to close the facility whenever closure is mandated. The policy shall also guarantee that once closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the director, to such party or parties as the director specifies
- (8) Reimbursement for closure.

The owner or operator, or any other person authorized by the owner, operator, or director to perform closure, may request reimbursement for closure expenditures by submitting itemized bills to the director. After receiving itemized bills for closure activities, the director shall determine whether the closure expenditures are in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules, or are otherwise justified, and if so, shall instruct the insurer to make reimbursement in such amounts as the director specifies in writing. If the director has reason to believe that the cost of closure will be greater than the face amount of the policy, the director may withhold reimbursement of such amounts as deemed prudent until the director determines, in accordance with paragraph (O) of this rule that the owner or operator is no longer required to maintain financial assurance for closure of the facility.
- (9) The owner or operator shall maintain the policy in full force and effect until the director consents to termination of the policy by the owner or operator as specified in paragraph (J)(13) of this rule. Failure to pay the premium, without substitution of alternate financial assurance as specified in this rule, will constitute a violation of these rules, warranting such remedy as the director deems necessary. Such violation shall be deemed to begin upon receipt by the director of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- (10) Each policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- (11) The policy shall provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy shall, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail or any other form of mail accompanied by a

receipt to the owner or operator and to the director not later than one hundred twenty days prior to the date of cancellation. The one hundred and twenty days shall begin with the date of receipt of the cancellation notice by both the director and the owner or operator, as evidenced by the return receipts.

(12) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator shall, not later than sixty days after the increase, either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the director, and into the operating record, if applicable, or obtain alternate financial assurance as specified in this rule to compensate for the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the director.

(13) The director may give written consent to the owner or operator to terminate the insurance policy when either of the following occurs:

(a) The owner or operator substitutes alternate financial assurance for closure of a facility as specified in this rule.

(b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required to maintain financial assurance for closure of a facility.

(K) Financial test and corporate guarantee for closure of a solid waste facility.

(1) The owner or operator may satisfy the requirements of this rule by demonstrating that the owner or operator passes a financial test as specified in this paragraph. The owner or operator who uses this test shall be operating for a minimum of five years. To pass this test the owner or operator shall demonstrate that less than fifty per cent of the parent corporation's gross revenues are derived from solid waste disposal facility operations, or if there is no parent corporation, the owner or operator shall demonstrate that less than fifty per cent of its gross revenues are derived from solid waste disposal facility operations and shall satisfy the requirements of paragraph (K)(1)(a) or (K)(1)(b) of this rule.

(a) The owner or operator shall have the following:

(i) Satisfaction of at least two of the following ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization minus ten million dollars to total liabilities greater than 0.1; a ratio of current assets to current liabilities greater than 1.5.

(ii) Net working capital and tangible net worth each at least six times the sum of the current closure and current post-closure care cost estimates, any corrective actions cost estimates, and any other obligations assured by a financial test.

(iii) Tangible net worth of at least ten million dollars.

(iv) Assets in the United States amounting to at least ninety per cent of total assets or at least six times the sum of the current closure and current post-closure care cost estimates, any current corrective actions cost estimates, and any other assured by a financial test.

(b) The owner or operator shall have:

(i) Issued a corporate bond for which the owner or operator, as the issuing entity, has not received a current rating of less than BBB as issued by "Standard and Poor's" or Baa as issued by "Moody's." Owners or operators using bonds that are secured by collateral or a guarantee shall meet the minimum rating without that security.

(ii) Tangible net worth at least six times the sum of the current closure and current post-closure care cost estimates, any corrective actions cost estimates, and any other obligations assured by a financial test.

(iii) Tangible net worth of at least ten million dollars.

(iv) Assets in the United States amounting to at least ninety per cent of total assets or at least six times the sum of the current closure and current post-closure care cost estimates, any current corrective actions cost estimates, and any other obligations assured by a financial test.

(2) Current closure and current post-closure care cost estimates, any current corrective actions cost estimates, and any other obligations assured by a financial test as used in paragraph (K)(1) of this rule refers to the cost estimates required to be shown in the letter from the owner's or operator's chief financial officer.

(3) To demonstrate that requirements of this test are met, the owner or operator shall submit the following items to the director, and into the operating record, if applicable:

(a) A letter signed by the owner's or operator's chief financial officer and worded as

specified in paragraph (F) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director.

- (b) A copy of a report by an independent certified public accountant examining the owner's or the operator's financial statements for the most recently completed fiscal year.
- (c) A special report from the owner's or the operator's independent certified public accountant, in the form of an agreed-upon procedures report, to the owner or operator stating the following:
  - (i) The public accountant has compared the data which the letter from the chief financial officer specifies as having been derived from the independently audited year-end financial statements for the most recent fiscal year with the amounts in such financial statements.
  - (ii) In connection with the agreed-upon procedures report, the public accountant states that the public accountant agrees the specified data is accurate.
- (4) After the initial submission of the items specified in paragraph (K)(3) of this rule, the owner or operator shall send updated information to the director, and submit updated information into the operating record, if applicable, not later than ninety days after the close of each succeeding fiscal year. This information shall include all three items specified in paragraph (K)(3) of this rule.
- (5) If the owner or operator no longer meets the requirements of paragraph (K)(1) of this rule, notice shall be sent to the director of the intent to establish alternate financial assurance as specified in this rule. The notice shall be sent by certified mail or any other form of mail accompanied by a receipt not later than ninety days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. A copy of the notice shall also be placed in the operating record, if applicable. The owner or operator shall provide alternate financial assurance not later than one hundred twenty days after the end of such fiscal year.
- (6) The director may, based on a reasonable belief that the owner or operator no longer meets the requirements of paragraph (K)(1) of this rule, require reports of financial condition at any time from the owner or operator in addition to those specified in paragraph (K)(3) of this rule. If the director finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of paragraph (K)(1) of this rule, the owner or operator shall provide alternate financial assurance as specified in this rule not later than thirty days after notification of such a finding.
- (7) The director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the report on examination of the owner's or operator's financial statements. An adverse opinion or disclaimer of opinion will be cause for disallowance. The director shall evaluate other qualifications on an individual basis. The owner or operator shall provide alternate financial assurance as specified in this rule not later than thirty days after notification of the disallowance.
- (8) The owner or operator is no longer required to submit the items specified in paragraph (K)(3) of this rule when either of the following occur:
  - (a) The owner or operator substitutes alternate financial assurance for closure of a facility as specified in this rule.
  - (b) The director notifies the owner or operator, in accordance with paragraph (O) of this rule that the owner or operator is no longer required to maintain financial assurance for closure of a facility.
- (9) The owner or operator may meet the requirements of this rule by obtaining a written guarantee, hereafter referred to as a corporate guarantee. The guarantor shall be the parent corporation of the owner or operator. The guarantor shall meet the requirements for an owner or operator in paragraphs (K)(1) to (K)(7) of this rule and shall comply with the terms of the corporate guarantee. The wording of the corporate guarantee shall be identical to the wording specified in paragraph (G) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director. The corporate guarantee shall accompany the items sent to the director as specified in paragraph (K)(3) of this rule. The terms of the corporate guarantee shall provide that:
  - (a) The owner or operator shall perform closure of a facility provided for by the corporate guarantee in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules.
  - (b) The guarantor shall perform the activities in paragraph (K)(9)(a) of this rule or shall establish a trust fund in the name of the owner or operator as specified in paragraph (F) of this rule if the owner or operator fails to perform those activities.
  - (c) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail or any other form of mail accompanied by a receipt to the owner or operator and to the director. Cancellation may not occur, however, during the one hundred twenty day period beginning on the first day that both the owner or operator and the director have

received notice of cancellation, as evidenced by the return receipts.

- (d) If the owner or operator fails to provide alternate financial assurance as specified in this rule, and fails to obtain the written approval of such alternate financial assurance from the director not later than ninety days after both the owner or operator and the director have received notice of cancellation of the corporate guarantee from the guarantor, the guarantor shall provide such alternate financial assurance in the name of the owner or operator.

(L) Local government financial test for closure.

- (1) In order to satisfy the requirements of this rule, a local government shall, by resolution, establish a restricted "Local Government Financial Test" (LGFT) fund specifically for funding the estimated cost of closure of the solid waste facility. The LGFT fund shall be established to accumulate an amount at least equal to the current estimate of the cost of closure. The LGFT fund shall be maintained throughout the operating life of the solid waste facility. For a new facility, the first payment into the LGFT fund shall be calculated using the average daily waste receipt and the approved volume of the solid waste facility provided in the permit to install, registration, or license, as applicable. For existing facilities, annual payments to the LGFT fund shall be calculated based on the amount of waste that was accepted for disposal at the facility as listed on the annual report for the previous operating year, unless an alternative calculation or amount is authorized by Ohio EPA. Payments shall be made annually not later than thirty days after the anniversary date of the initial deposit as follows:

$(CE-CV)/R$

Where CE is the current closure cost estimate, CV is the current value of the fund, and R is the number of years remaining in the operating life of the solid waste facility based on the amount of waste that was accepted for disposal at the facility as listed on the annual report for the previous operating year. To maintain compliance with this rule, a local government shall annually submit to Ohio EPA an affidavit affirming the continued existence of the LGFT fund and the balance in the LGFT fund as of the end of the fiscal year. A copy of the current estimate of the cost of closure and the calculated amount of the annual payment shall also be provided to Ohio EPA.

- (2) A local government may satisfy the requirements of this rule by demonstrating that the local government passes a financial test as specified in this paragraph. This test consists of a financial component, a public notice component, and a record-keeping and reporting component. In order to satisfy the financial component of the

test, a local government shall meet the following criteria:

- (a) A local government's financial statements shall be prepared in accordance with "Generally Accepted Accounting Principles" for local governments.
- (b) A local government shall not have operated at a deficit equal to five per cent or more of total annual revenue in either of the past two fiscal years.
- (c) A local government shall not currently be in default on any outstanding general obligation bonds.
- (d) A local government shall not have any outstanding general obligation bonds rated lower than BBB as issued by "Standard and Poor's" or Baa as issued by "Moody's." Local governments using bonds that are secured by collateral or a guarantee shall meet the minimum rating without that security.
- (3) In addition, to satisfy the local government financial test for closure, a local government shall satisfy the requirements of paragraph (L)(3)(a) or (L)(3)(b) of this rule.
- (a) A local government shall demonstrate the following:
- (i) A ratio of cash plus marketable securities to total expenditures greater than or equal to 0.05.
- (ii) A ratio of annual debt service to total expenditures less than or equal to 0.20.
- (iii) A ratio of long term debt issued and outstanding to capital expenditures less than or equal to 2.00.
- (iv) A ratio of the current cost estimates for closure, post-closure care, corrective actions, and any other obligations assured by a financial test, to total revenue less than or equal to 0.43.
- (b) A local government shall demonstrate the following:
- (i) Outstanding general obligation bonds for which the local government, as the issuing entity, has not received a current rating of less than BBB as issued by "Standard and Poor's" or Baa as issued by "Moody's." Local governments using bonds that are secured by collateral or a guarantee shall meet the minimum rating without that security.
- (ii) A ratio of the current cost estimates for

closure, post-closure care, corrective actions, and any other obligations assured by a financial test, to total revenue less than or equal to 0.43.

the letter from the chief financial officer specifies as having been derived from the independently audited year-end financial statements for the most recent fiscal year with the amounts in such financial statements.

- (4) In order to satisfy the public notice component of the test, a local government shall in each year that the test is used, identify the current cost estimates in either its budget or its comprehensive annual financial report. The facility covered, the categories of expenditures, including closure, post-closure care, corrective actions, the corresponding cost estimate for each expenditure, and the anticipated year of the required activity shall be recorded. If the financial assurance obligation is to be included in the budget, it should either be listed as an approved budgeted line item, if the obligation will arise during the budget period, or in an appropriate supplementary data section, if the obligation will not arise during the budget period. If the information is to be included in the comprehensive annual financial report, it is to be included in the financial section as a footnote to the annual financial statements.
- (5) To demonstrate that the local government meets the requirements of this test, the following three items shall be provided to the director, and submitted into the operating record, if applicable:
  - (a) A letter signed by the local government's chief financial officer and worded as specified in paragraph (H) of rule 3745-503-20 of the Administrative Code on forms prescribed by the director that:
    - (i) Lists all current cost estimates covered by a financial test.
    - (ii) Certifies that the local government meets the conditions of paragraph (L)(2) of this rule.
    - (iii) Provides evidence and certifies that the local government meets the conditions of either paragraph (L)(3)(a) or (L)(3)(b) of this rule.
  - (b) A copy of the local government's independently audited year-end financial statements for the latest fiscal year, including the unqualified opinion of the auditor. The auditor shall be an independent, certified public accountant or auditor of state. This may be provided in written form or in electronic format.
  - (c) A special report, provided in written form or in electronic format, from the independent certified public accountant or auditor of state, in the form of an agreed-upon procedures report, to the local government stating that:
    - (i) The certified public accountant or auditor of state has compared the data which
- (ii) In connection with the agreed-upon procedures report, the public accountant states that the public accountant agrees the specified data is accurate.
- (6) After the initial submission of the items specified in this rule, a local government shall send updated information to the director on forms prescribed by the director, and submit updated information into the operating record, if applicable, not later than one hundred eighty days after the close of each succeeding fiscal year. This information shall include all items specified in this rule.
- (7) If a local government no longer meets the requirements of this rule, notice shall be sent to the director of the intent to establish alternate financial assurance as specified in this rule. The notice shall be sent by certified mail or any other form of mail accompanied by a receipt not later than one hundred fifty days after the end of the fiscal year for which the year-end financial data show that the local government no longer meets the requirements. A copy of the notice shall also be placed in the operating record, if applicable. The local government shall provide alternate financial assurance not later than one hundred eighty days after the end of such fiscal year.
- (8) The director may, based on a reasonable belief that the local government no longer meets the requirements of this rule, require reports of financial condition at any time from the local government in addition to those specified in this rule. If the director finds, on the basis of such reports or other information, that the local government no longer meets the requirements of this rule, the local government shall provide alternate financial assurance as specified in this rule not later than thirty days after notification of such a finding.
- (9) The director may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant or auditor of state in the report on examination of the local government's financial statements. An adverse opinion or disclaimer of opinion will be cause for disallowance. The director shall evaluate other qualifications on an individual basis. The local government shall provide alternate financial assurance as specified in this rule not later than thirty days after notification of the disallowance.
- (10) A local government is no longer required to submit the items specified in this rule when one of the following occur:

(a) The local government substitutes alternate financial assurance for closure as specified in this rule.

(b) The director notifies the local government, in accordance with paragraph (O) of this rule, that the local government is no longer required to maintain financial assurance for closure of a facility.

(M) Use of multiple financial assurance mechanisms.

The owner or operator may satisfy the requirements of this rule by establishing more than one financial assurance mechanism for each facility. These mechanisms are limited to a trust fund, surety bond guaranteeing payment into a closure trust fund, letter of credit, insurance, and the local government financial test. The mechanisms shall be as specified in paragraphs (F), (G), (I), (J), and (L) respectively of this rule, except that it is the combination of mechanisms, rather than each single mechanism, which shall provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, the owner or operator may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The director may invoke use of any or all of the mechanisms, in accordance with paragraphs (F), (G), (I), (J), and (L) of this rule, to provide for closure of the facility.

(N) Use of a financial assurance mechanism for multiple facilities.

The owner or operator may use a financial assurance mechanism specified in this rule to meet the requirements of this rule for more than one facility. Evidence of financial assurance submitted to the director shall include a list showing, for each facility, the name, address, and the amount of funds for closure assured by the financial assurance mechanism. The amount of funds available through the financial assurance mechanism shall be no less than the sum of the funds that would be available if a separate financial assurance mechanism had been established and maintained for each facility.

(O) Release of the owner or operator of a solid waste facility from the requirements of this rule.

The director shall notify the owner or operator in writing that the owner or operator is no longer required, by this rule, to maintain financial assurance for closure of the particular facility, unless the director has reason to believe that closure has not been completed in accordance with the requirements, as applicable, or the closure/post-closure care plan after receiving certifications from the owner or operator and an independent professional skilled in the appropriate discipline that closure has been completed in accordance with the closure/post-closure care plan, permit or registration requirements, and applicable rules.

[Comment: The notice releases the owner or operator only from the requirements for financial assurance for closure of the facility; it does not release the owner or operator from legal responsibility for meeting the post-closure care standards or corrective actions, if applicable.]

**3745-503-20 Wording of financial assurance instruments.**

(A)

(1) A trust agreement for a trust fund as specified in paragraph (F) of rule 3745-503-05 of the Administrative Code, must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

"Trust agreement"

Trust agreement. The "agreement," entered into as of [date] by and between [name of the owner or operator], a [state] [corporation, partnership, association, proprietorship], the "grantor," and [name of corporate trustee], ["incorporated in the state of \_\_\_\_\_" or "a national bank"], the "trustee."

Whereas, the Ohio Environmental Protection Agency, ("Ohio EPA"), has established certain rules applicable to the grantor, requiring that the owner or operator of a facility or a scrap tire transporter provide assurance that funds will be available when needed for closure, post-closure care, or corrective actions at the facility, or for scrap tire transporter closure.

Whereas, the grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein.

Whereas, the grantor, acting through its duly authorized officers, has selected the trustee to be the trustee under this agreement, and the trustee is willing to act as trustee,

Now, therefore, the grantor and the trustee agree as follows:

Section 1. Definitions. As used in this agreement:

(a) The term "grantor" means the owner or operator who enters into this agreement and any successors or assigns of the grantor.

(b) The term "trustee" means the trustee who enters into this agreement and any successor trustee.

(c) The term "director" means the director of environmental protection or a representative delegated by the director to act on the director's behalf.

Section 2. Identification of facilities and cost estimates. This agreement pertains to a solid waste facility or a scrap tire transporter and cost estimates identified on attached schedule A [on schedule A, for each facility and scrap tire transporter list the name, address, and the current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, or portions thereof, for which financial assurance is demonstrated by this agreement].

Section 3. Establishment of fund. The grantor and the trustee hereby establish a trust fund, the "fund," for the benefit of the Ohio EPA. The grantor and the trustee intend that no third party have access to the fund except as herein provided. The fund is established initially as consisting of the property, which is acceptable to the trustee, described in schedule B attached hereto. Such property and any other property subsequently transferred to the trustee is referred to as the fund, together with all earnings and profits thereon, less any payments or distributions made by the trustee pursuant to this agreement. The fund will be held by the trustee, in trust, as hereinafter provided. The trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the grantor, any payments necessary to discharge any liabilities of the grantor established by the Ohio EPA.

Section 4. Payment for closure and post-closure care, scrap tire transporter closure, and corrective actions. The trustee will make such payments from the fund as the director will direct, in writing, to provide for the payment of the costs of closure, post-closure care, or corrective actions at the facility or scrap tire transporter closure covered by this agreement. The trustee will reimburse the grantor or other persons as specified by the director from the fund for closure, post-closure care, scrap tire transporter closure, or corrective actions expenditures in such amounts as the director will direct, in writing. In addition, the trustee will refund to the grantor such amounts as the director specifies in writing. Upon refund, such funds will no longer constitute part of the fund as defined herein.

Section 5. Payments comprising the fund. Payments made to the trustee for the fund will consist of cash or securities acceptable to the trustee.

Section 6. Trustee management. The trustee will invest and reinvest the principal and income of the fund and keep the fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the grantor may communicate in writing to the trustee periodically, subject, however, to the provisions of this section. In investing, reinvesting, exchanging, selling, and managing the fund, the trustee will discharge the duties with respect to the trust fund solely in the interest of the

beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(a) Securities or other obligations of the grantor, or any other owner or operator of the facilities or scrap tire transporter, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. section 80a-2(a), will not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(b) The trustee is authorized to invest the fund in time or demand deposits of the trustee, to the extent insured by an agency of the federal or state government;

(c) The trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and investment. The trustee is expressly authorized in its discretion:

(a) To transfer periodically any or all of the assets of the fund to any common, commingled, or collective trust fund created by the trustee in which the fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein;

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. sections 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the trustee. The trustee may vote such shares in its discretion.

Section 8. Express powers of trustee. Without in any way limiting the powers and discretion conferred upon the trustee by the other provisions of this agreement or by law, the trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the trustee will be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the fund in

its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States government, or any agency or instrumentality thereof, with a Federal Reserve Bank, but the books and records of the trustee will at all times show that all such securities are part of the fund;

(d) To deposit any cash in the fund in interest-bearing accounts maintained or savings certificates issued by the trustee, in its separate corporate capacity, or in any other banking institution affiliated with the trustee, to the extent insured by an agency of the federal or state government;

(e) To compromise or otherwise adjust all claims in favor of or against the fund.

Section 9. Taxes and expenses. All taxes of any kind that may be assessed or levied against or in respect of the fund and all brokerage commissions incurred by the fund will be paid from the fund. All other expenses, proper charges, and disbursements, incurred by the trustee in connection with the administration of this trust, including fees for legal services rendered to the trustee, the compensation of the trustee to the extent not paid directly by the grantor, and all other proper charges and disbursements of the trustee will be paid from the fund. Expenses, proper charges, and disbursements include fees for legal services, rendered to the trustee and the compensation of the trustee to the extent the grantor fails to compensate the trustee pursuant to section 12.

Section 10. Annual valuation. The trustee will annually, not later than thirty days prior to the anniversary date of the establishment of the fund, furnish to the grantor and to the director a statement confirming the value of the trust. Any securities in the fund will be valued at market value as of no more than sixty days prior to the anniversary date of establishment of the fund. The failure of the grantor to object in writing to the trustee not later than ninety days after the statement has been furnished to the grantor and the director will constitute a conclusively binding assent by the grantor, barring the grantor from asserting any claim or liability against the trustee with respect to matters disclosed in the statement.

Section 11. Advice of counsel. The trustee may periodically consult with counsel, who may be counsel to the grantor, with respect to any

question arising as to the construction of this agreement or any action to be taken hereunder. The trustee will be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee compensation. The trustee will be entitled to reasonable compensation from the grantor for the trustee's services as agreed upon in writing periodically with the grantor.

Section 13. Successor trustee. The trustee may resign or the grantor may replace the trustee, but such resignation or replacement shall not be effective until the grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee will have the same powers and duties as those conferred upon the trustee hereunder. Upon the successor trustee's acceptance of the appointment, and upon the director's written approval, the trustee will assign, transfer, and pay over to the successor trustee the funds and properties then constituting the fund. If for any reason the grantor cannot or does not act in the event of the resignation of the trustee, the trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the grantor, the director, and the present trustee by certified mail or any other form of mail accompanied by a receipt not later than ten days before such change becomes effective. The director's written approval must be given prior to the ten days notice provided by the successor trustee. Any expenses incurred by the trustee as a result of any of the acts contemplated by this section will be paid as provided in section 9.

Section 14. Instructions to the trustee. All orders, requests, and instructions by the grantor to the trustee will be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the grantor may designate by amendment to Exhibit A. The trustee will be fully protected in acting without inquiry in accordance with the grantor's orders, requests, and instructions. All orders, requests, and instructions by the director to the trustee will be in writing, signed by the director, and the trustee will act and will be fully protected in acting in accordance with such orders, requests, and instructions. The trustee will have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the grantor or the director hereunder has occurred. The trustee will have no duty to act in the absence of such orders, requests, and instructions from the grantor or the director except as provided for herein.

Section 15. Notice of nonpayment. The trustee will notify the grantor and the director by certified mail or any other form of mail accompanied by a

receipt not later than ten days after the expiration of the thirty-day period following the anniversary of the establishment of the trust, if no payment is received from the grantor during the period. After the pay-in period is completed, the trustee is not required to send a notice of nonpayment.

Section 16. Amendment of agreement. This agreement may be amended by an instrument in writing executed by the grantor, the trustee, and the director, or by the trustee and the director if the grantor ceases to exist.

Section 17. Irrevocability and termination. Subject to the right of the parties to amend this agreement as provided in section 16, this trust will be irrevocable and will continue until termination at the written agreement of the grantor, the trustee, and the director, or by the trustee and the director if the grantor ceases to exist. Upon termination of the trust, all remaining trust property, less final trust administration expenses, will be delivered to the grantor, unless the trust is a standby trust fund created in accordance with a surety bond guaranteeing payment into a trust fund, a surety bond guaranteeing performance, or a letter of credit, in which case all remaining trust property, less final trust administration expenses, will be delivered to the provider of the financial assurance.

Section 18. Immunity and indemnification. The trustee will not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this trust, or in carrying out any directions by the grantor or the director issued in accordance with this agreement. The trustee will be indemnified and saved harmless by the grantor or from the trust fund, or both, from and against any personal liability to which the trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the grantor fails to provide such defense.

Section 19. Choice of law. This agreement will be administered, construed, and enforced according to the laws of the state of Ohio.

Section 20. Interpretation. As used in this agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this agreement will not affect the interpretation or the legal efficacy of this agreement.

In witness whereof the parties have caused this agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: the parties below certify that the wording of this agreement is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire

transporter as such rules were constituted on the date first above written.

[Signature of grantor]

[Title]

Attest:

[Title]

[Seal]

[Signature of trustee]

Attest:

[Title]

[Seal]"

- (2) The following is an example of the certification of acknowledgment, which must accompany the trust agreement for a trust fund as specified in paragraph (F) of rule 3745-503-05 of the Administrative Code:

"State of \_\_\_\_\_

County of \_\_\_\_\_

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], and the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the board of directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of notary public]"

[Comment: As required in paragraph (F)(2) of rule 3745-503-05 of the Administrative Code, the trust agreement must be accompanied by a formal certification of acknowledgment. The previous paragraph is only an example.]

- (B) A surety bond guaranteeing payment into a trust fund, as specified in paragraph (G) of rule 3745-503-05 of the Administrative Code, must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

"Financial guarantee bond

Date bond executed: \_\_\_\_\_

Effective date: \_\_\_\_\_

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: \_\_\_\_\_

Surety(ies): [name(s) and business address(es)]

Name, address, and closure, post-closure care, scrap tire transporter closure, or corrective actions amount(s) for each facility or scrap tire transporter guaranteed by this bond [indicate closure, post-closure care, scrap tire transporter closure, or corrective actions amounts separately]:

\$ \_\_\_\_\_

Total penal sum of bond: \$ \_\_\_\_\_

Surety's bond number: \_\_\_\_\_

Know all persons by these presents, that we, the principal and surety(ies) hereto are firmly bound to the Ohio Environmental Protection Agency ("Ohio EPA"), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally; provided that, where the surety(ies) are corporations acting as co-sureties, we, the sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each surety binds itself, jointly and severally with the principal, for the payment of such sum only as is set forth opposite the name of such surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas, said principal is required to have an Ohio EPA permit(s) or registration, in order to operate each facility identified above, or a scrap tire transporter registration;

Whereas, said principal is required to provide financial assurance for closure, or closure and post-closure care, or post-closure care, or corrective actions of the facility or scrap tire transporter closure as a condition of Chapter 3734. of the Revised Code;

Whereas said principal shall establish a standby trust fund in accordance with rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.

Now, therefore, for a facility, the conditions of the obligation are such that if the principal shall faithfully, before the beginning of closure, post-closure care or corrective actions, of each facility identified above, fund the standby trust fund in the amount identified above for the facility,

Now, therefore, for a scrap tire transporter, the conditions of the obligation are such that if the principal shall faithfully, before the registration expires, fund the standby trust fund in the amount identified above for the scrap tire transporter,

Or, if the principal shall fund the standby trust fund in such an amount not later than fifteen days after an order to begin closure is issued by the director, or an Ohio court, or a U.S. district court, or other court of competent jurisdiction, or not later than fifteen days after a notice of revocation of the facility license or the denial, suspension, or revocation of the registration,

Or, if the principal shall provide alternate financial assurance in accordance with rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter, and obtain the director's written approval of such alternate financial assurance, not later than ninety days after the first day that notice of cancellation has been received by both the principal and the director from the surety(ies), then this obligation will be null and void; otherwise it is to remain in full force and effect.

The surety(ies) shall become liable on this bond obligation only when the principal has failed to fulfill the conditions described above. Upon notification by the director that the principal has failed to perform as guaranteed by this bond, the surety(ies) shall place funds in the amount guaranteed for the facility or scrap tire transporter into the standby trust fund as directed by the director.

The liability of the surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the surety(ies) hereunder exceed the amount of said penal sum.

The surety(ies) may cancel the bond by sending notice of cancellation by certified mail or any other form of mail accompanied by a receipt to the principal and to the director, provided, however, that cancellation shall not occur during the one hundred twenty day period beginning on the first day of receipt of the notice of cancellation by both the principal and the director as evidenced by the return receipt(s).

The principal may terminate this bond by sending written notice to the surety(ies) and to the director, provided, however, that no such notice shall become effective until the surety(ies) receive(s) written authorization for termination of the bond by the director.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and surety(ies) hereby agree to adjust the penal sum of the bond annually so that it guarantees a new closure, post-closure care, scrap tire transporter closure, or corrective actions amount, provided that the penal sum does not increase by more than twenty per cent in any one year, and no decrease in the penal sum takes place without the written permission of the director.

In witness whereof, the principal and surety(ies) have executed this financial guarantee bond and have

affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the principal and surety(ies) and that the wording of this surety bond is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date this bond was executed.

Principal

Signature(s): \_\_\_\_\_

Name(s) and title(s) [typed]: \_\_\_\_\_

Corporate seal:

Corporate surety(ies)

Name and address: \_\_\_\_\_

State of incorporation: \_\_\_\_\_

Liability limit: \$ \_\_\_\_\_

Signature(s): \_\_\_\_\_

Name(s) and title(s) [typed]: \_\_\_\_\_

Corporate seal:

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for surety above.]

Bond premium: \$ \_\_\_\_\_ "

(C) A surety bond guaranteeing performance of closure, post-closure care, scrap tire transporter closure, or corrective actions, as specified in paragraph (H) of rule 3745-503-05 of the Administrative Code, must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced by the relevant information and the brackets deleted:

"Performance bond

Date bond executed: \_\_\_\_\_

Effective date: \_\_\_\_\_

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: \_\_\_\_\_

Surety(ies): [name(s) and business address(es)]

Name, address, and closure, post-closure care, scrap tire transporter closure, or corrective actions amount for each facility or scrap tire transporter guaranteed by this bond [indicate closure, post-closure care, scrap

tire transporter closure, and corrective actions amounts separately]: \$ \_\_\_\_\_

Total penal sum of bond: \$ \_\_\_\_\_

Surety's bond number: \_\_\_\_\_

Know all persons by these presents, that we, the principal and surety(ies) hereto are firmly bound to the Ohio Environmental Protection Agency ("Ohio EPA"), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the surety(ies) are corporations acting as co-sureties, we, the sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each surety binds itself, jointly and severally with the principal, for the payment of such sum only as is set forth opposite the name of such surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas, said principal is required to have an Ohio EPA permit(s) or registration in order to operate each facility or scrap tire transporter identified above, and

Whereas said principal is required to provide financial assurance for closure, or closure and post-closure care, or post-closure care, or corrective actions as a condition of the permit(s) or registration(s), and

Whereas said principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, therefore, for a facility, the conditions of this obligation are such that if the principal shall faithfully perform closure whenever required to do so, of each facility for which this bond guarantees closure, in accordance with the closure or post-closure care plan, and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended.

And, for a facility, if the principal shall faithfully perform post-closure care of each facility for which this bond guarantees post-closure care, in accordance with the closure/post-closure care plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended.

And, for a facility, if the principal shall faithfully perform corrective actions at each facility for which this bond guarantees corrective actions in accordance with the corrective actions plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended.

Now, for a scrap tire transporter, if the principal shall

faithfully perform the activities specified in rules adopted under Chapter 3734. of the Revised Code for which this bond guarantees, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended.

Or, if the principal shall provide alternate financial assurance as specified in rules adopted under Chapter 3734. of the Revised Code and obtain the director's written approval of such alternate financial assurance not later than ninety days after the date notice of cancellation is received by both the principal and the director from surety(ies), then this obligation will be null and void, otherwise it is to remain in full force and effect.

The surety(ies) shall become liable on this bond obligation only when the principal has failed to fulfill the conditions described above.

[The following paragraph is only required for those facilities required to conduct closure activities and should not be included in surety bonds for scrap tire transporters.]

Upon notification by the director that the principal has been found in violation of the closure requirements of rules adopted under Chapter 3734. of the Revised Code for a facility for which this bond guarantees performance of closure, the surety(ies) shall either perform closure in accordance with the closure/post-closure care plan and other permit or registration requirements or place the closure amount guaranteed for the facility into the standby trust fund as directed by the director.

[The following paragraph is only required for sanitary landfill facilities because only they are required to conduct post-closure care activities.]

Upon notification by the director that the principal has been found in violation of the post-closure care requirements of rules adopted under Chapter 3734. of the Revised Code for a facility for which this bond guarantees performance of post-closure care, the surety(ies) shall either perform post-closure care in accordance with the closure/post-closure care plan and other permit requirements or place the post-closure care amount guaranteed for the facility into the standby trust fund as directed by the director.

[The following paragraph is only required for municipal solid waste landfill facilities, because only they are required to conduct corrective actions activities.]

Upon notification by the director that the principal has been found in violation of the corrective actions requirements of rules adopted under Chapter 3734. of the Revised Code for a facility for which this bond guarantees performance of corrective actions, the surety(ies) shall either perform the corrective actions in accordance with the corrective actions plan and other permit requirements or place the corrective actions amount guaranteed for the facility into the standby trust fund as directed by the director.

[The following paragraph is only required for scrap tire

transporters.]

Upon notification by the director that the principal has failed to remove accumulations of scrap tires, delivered by the scrap tire transporter to a location not authorized to receive scrap tires by rules adopted under Chapter 3734. of the Revised Code, or failed to remove and properly dispose of any scrap tires which have been open dumped by the scrap tire transporter, or has been found to be in violation of rules adopted under Chapter 3734. of the Revised Code, the surety(ies) shall either perform the required activities in accordance with applicable rules or place the amount guaranteed for the scrap tire transporter into the standby trust fund as directed by the director.

Upon notification by the director that the principal has failed to provide alternate financial assurance as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter and obtain written approval of such alternate financial assurance from the director not later than ninety days after receipt by both the principal and the director of a notice of cancellation of the bond, the surety(ies) shall place funds in the amount guaranteed for the facility or scrap tire transporter into the standby trust fund as directed by the director.

The surety(ies) hereby waive(s) notification of amendments to the closure/post-closure care plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the surety(ies) hereunder exceed the amount of said penal sum.

The surety(ies) may cancel the bond by sending notice of cancellation by certified mail or any other form of mail accompanied by a receipt to the owner or operator and to the director, provided, however, that cancellation cannot occur during the one hundred twenty day period beginning on the first day of receipt of the notice of cancellation by both the principal and the director as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the surety(ies) and to the director, provided, however, that no such notice shall become effective until the surety(ies) receive(s) written approval for termination of the bond by the director.

[The following paragraph is an optional rider that may be included but is not required.]

Principal and surety(ies) hereby agree to adjust the penal sum of the bond annually so that it guarantees a new closure, post-closure care, scrap tire transporter closure, or corrective actions amount, provided that the penal sum does not increase by more than twenty per cent in any one year, and no

decrease in the penal sum occurs without the written approval of the director.

In witness whereof, the principal and surety(ies) have executed this performance bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the principal and surety(ies) and that the wording of this surety bond is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date this bond was executed.

Principal

Signature(s): \_\_\_\_\_

Name(s) and title(s) [typed]: \_\_\_\_\_

Corporate seal: \_\_\_\_\_

Corporate surety(ies)

Name and address: \_\_\_\_\_

State of incorporation: \_\_\_\_\_

Liability limit: \$ \_\_\_\_\_

Signature(s): \_\_\_\_\_

Name(s) and title(s) [typed]: \_\_\_\_\_

Corporate seal:

[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for surety above.]

Bond premium: \$ \_\_\_\_\_ "

(D) A letter of credit as specified in paragraph (I) of rule 3745-503-05 of the Administrative Code must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted [note: A letter of credit may also contain provisions used by the issuing institution in its regular course of business, provided that such provisions do not alter the terms and conditions in this paragraph]:

"Irrevocable standby letter of credit

[Director]

Ohio Environmental Protection Agency

Dear sir or madam: We hereby establish our irrevocable standby letter of credit no. \_\_\_\_\_ in your favor, at the request and for the account of [owner's or operator's name and address] up to the aggregate amount of [in words] U.S. dollars (\$ \_\_\_\_\_), available upon presentation of

(1) Your sight draft, bearing reference to this letter of credit no. \_\_\_\_\_, and

(2) Your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to regulations issued under the authority of Chapter 3734. of the Revised Code as amended."

This letter of credit is effective as of [date] and will expire on [date of at least one year later], but such expiration date will be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least one hundred twenty days prior to the current expiration date, we notify both you and [owner's or operator's name] by certified mail or any other form of mail accompanied by a receipt that we have decided not to extend this letter of credit beyond the current expiration date. In the event that you are so notified, any unused portion of the credit will be available upon presentation of your sight draft for one hundred twenty days after the first day of receipt by both you and [owner's or operator's name] as evidenced by the return receipts.

Whenever this letter of credit is drawn under and in compliance with the terms of this credit, we will duly honor such draft upon presentation to us, and we will deposit the amount of the draft directly into the standby trust fund by [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [date]

This credit is subject to [insert "the most recent edition of the "Uniform Customs and Practice for Documentary Credits," published by the International Chamber of Commerce" or "The Uniform Commercial Code"]."

[Comment: In the event that the owner or operator ceases to exist, any unused portion of the credit will be available for the one hundred twenty day period after the date of receipt by the director, as evidenced by the return receipt.]

(E) A certificate of insurance, as specified in rule 3745-503-05 of the Administrative Code, must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

"Certificate of insurance for closure, post-closure care, corrective actions, or scrap tire transporter closure

Name and address of insurer

(Herein called the "insurer"): \_\_\_\_\_

Name and address of insured

(Herein called the "insured"): \_\_\_\_\_

Facilities or scrap tire transporters covered: [list for each facility or scrap tire transporter: name, address, county in which the facility or scrap tire transporter is located, and the amount of insurance for closure, post-closure care, scrap tire transporter closure or corrective actions provided under the insurance policy (the aggregate amount for all facilities or scrap tire transporters covered must total the face amount shown below).]

Face amount: \$ \_\_\_\_\_

Policy number: \_\_\_\_\_

Effective date: \_\_\_\_\_

The insurer hereby certifies that it has issued to the insured the policy of insurance identified above to provide financial assurance for [insert "closure," "closure and post-closure care," "post-closure care," "corrective actions," or "scrap tire transporter closure"] for the facilities or scrap tire transporters identified above. The insurer further warrants that such insurance policy conforms in all respects with the requirements of rules adopted under Chapter 3734. of the Revised Code as such rules were constituted on the date shown immediately below. It is agreed that any provision of the insurance policy inconsistent with such regulations is hereby amended to eliminate such inconsistency.

Whenever requested by the director of the Ohio Environmental Protection Agency, the insurer agrees to furnish to the director a duplicate original of the insurance policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date shown immediately below.

[Authorized signature for insurer]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: \_\_\_\_\_

[Date]"

(F) A letter from the chief financial officer, as specified in paragraph (K) of rule 3745-503-05 of the Administrative Code must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

"Letter from chief financial officer

[Address to director, Ohio Environmental Protection Agency.]

I am the chief financial officer of [name and address of firm]. This letter is in support of this firm's use of the financial test to demonstrate financial assurance, as specified in rules adopted under Chapter 3734. of the Revised Code.

[Fill out the following three paragraphs regarding facilities or scrap tire transporters and associated cost estimates. If your firm has no facilities or scrap tire transporters that belong in a particular paragraph, write "none" in the space indicated. For each facility or scrap tire transporter, include its name, address, county, and current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates and any other environmental obligations, if any. Identify each cost estimate as to whether it is for closure, post-closure care, scrap tire transporter closure, or corrective actions.]

- (1) This firm is the owner or operator of the following facilities or scrap tire transporters for which financial assurance for closure, post-closure care, corrective actions, or scrap tire transporter closure is demonstrated through the financial test specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter or this firm is the owner or operator of the following facilities for which financial assurance for any other environmental obligations are assured by a financial test. The current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations, provided for by a financial test are shown for each facility or scrap tire transporter: \$ \_\_\_\_\_.
- (2) This firm guarantees, through the corporate guarantee specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter, the closure, post-closure care, or corrective actions of the following facilities permitted by subsidiaries of this firm or closure for scrap tire transporters or this firm guarantees, through the corporate guarantee, any other environmental obligations of the following facilities permitted by subsidiaries of this firm. The current cost estimates for the closure, post-closure care, scrap tire transporter closure, or corrective actions, and any other environmental obligations, so guaranteed are shown for each facility or scrap tire transporter closure: \$ \_\_\_\_\_.
- (3) This firm is the owner or operator of the following facilities or scrap tire transporters for which financial assurance requirements for closure, scrap tire transporter closure, post-closure care, or corrective actions or any other environmental obligations are satisfied through a financial test other than that required by rules adopted under Chapter 3734. of the Revised Code concerning

financial assurance for solid waste facilities or a scrap tire transporter. The current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, or any other environmental obligations covered by such financial assurance are shown for each facility or scrap tire transporter:

\$ \_\_\_\_\_.

This firm [insert "is required" or "is not required"] to file a form 10k with the Securities and Exchange Commission (SEC) for the most recent fiscal year.

The fiscal year of this firm ends on [month, day]. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the most recently completed fiscal year, ended [date].

[Fill in Alternative I if the criteria of paragraph (K)(1)(a) of rule 3745-503-05 of the Administrative Code is used. Fill in Alternative II if the criteria of paragraph (K)(1)(b) of rule 3745-503-05 of the Administrative Code is used.]

	firm's assets are located in the U.S.): \$ _____.
--	--

		Yes	No
10.	Is line 3 at least \$10 million? . . .		
11.	Is line 3 at least 6 times line 1? . . .		
12.	Is line 7 at least 6 times line 1? . . .		
*13.	Are at least 90% of firm's assets located in the U.S.? . . . If not, complete line 14.		
14.	Is line 9 at least 6 times line 1? . . .		
15.	Is line 2 divided by line 4 less than 2.0? . . .		
16.	Is line 8 divided by line 2 greater than 0.1? . . .		
17.	Is line 5 divided by line 6 greater than 1.5? . . .		

Alternative I	
1.	Sum of current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations assured by a financial test (total of all cost estimates shown in the three paragraphs above): \$ _____.
*2.	Total liabilities [if any portion of the closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimate is included in total liabilities, you may deduct the amount of that portion from this line and add that amount to lines 3 and 4]: \$ _____.
*3.	Tangible net worth: \$ _____.
*4.	Net worth: \$ _____.
*5.	Current assets: \$ _____.
*6.	Current liabilities: \$ _____.
*7.	Net working capital [line 5 minus line 6]: \$ _____.
*8.	The sum of net income plus depreciation, depletion, and amortization minus \$10 million: \$ _____.
*9.	Total assets in U.S. (required only if less than 90% of

Alternative II	
1.	Sum of current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations assured by a financial test (total of all cost estimates shown in the three paragraphs above): \$ _____.
2.	Current bond rating of most recent issuance of this firm and name of rating service: _____.
3.	Date of issuance of bond: _____.
4.	Date of maturity of bond: _____.
*5.	Tangible net worth [if any portion of the closure, post-closure care, scrap tire transporter closure, and corrective actions cost estimates is included in total liabilities on your firm's financial statements, you may add the amount of that portion to this line]: \$ _____.
*6.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.): \$ _____.

		Yes	No
7.	Is line 5 at least \$10 million? . . .		
8.	Is line 5 at least 6 times line 1? . . .		
*9.	Are at least 90% of firm's assets located in the U.S.? . . . If not, complete line 10.		
10.	Is line 6 at least 6 times line 1? . . .		

I hereby certify that the wording of this letter is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date shown immediately below.

[Signature]

[Name]

[Title]

[Date]"

(G) A corporate guarantee, as specified in paragraph (K) of rule 3745-503-05 of the Administrative Code, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

"Corporate guarantee for closure, post-closure care, corrective actions, or scrap tire transporter closure.

Guarantee made this [date] by [name of guaranteeing entity], a business corporation organized under the laws of the state of [insert name of state], herein referred to as guarantor, to the Ohio Environmental Protection Agency ("Ohio EPA"), obligee on behalf of our subsidiary [owner or operator] of [business address].

Recitals

1. Guarantor meets or exceeds the financial test criteria and agrees to comply with the reporting requirements for guarantors as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.

2. [Owner or operator] responsible for the following facility(ies) or scrap tire transporter(s) covered by this guarantee: [List for each facility or scrap tire transporter: name and address. Indicate for each whether guarantee is for closure, post-closure care, both, corrective actions, or for scrap tire transporter closure].

3. Closure/post-closure care plans, or corrective actions plans as used below refer to the plans maintained as required by rules adopted under

Chapter 3734. of the Revised Code for the closure, post-closure care, and corrective actions of a facility, as identified above.

4. For value received from [owner or operator], guarantor guarantees to the Ohio EPA that in the event that [owner or operator] fails to perform [insert "closure," "post-closure care," "closure and post-closure care," or "corrective actions"] of the above facility in accordance with the closure/post-closure care plans or corrective actions plans and other permit requirements, as applicable, or, for a scrap tire transporter, in the event the owner or operator fails to remove and properly dispose of any accumulation of scrap tires delivered to a location not authorized to receive scrap tires by rules adopted under Chapter 3734. of the Revised Code, or fails to remove and properly dispose of any scrap tires which have been open dumped by the scrap tire transporter, or has been found to be in violation of rules adopted under Chapter 3734. of the Revised Code, the guarantor shall remove and properly dispose of the scrap tires or establish a trust fund as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter, in the name of [owner or operator] in the amount of the current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.

5. Guarantor agrees that if, at the end of any fiscal year before termination of this guarantee, the guarantor fails to meet the financial test criteria, guarantor shall send notice to the director, Ohio EPA, and to [owner or operator], not later than ninety days after the end of such fiscal year, by certified mail or any other form of mail accompanied by a receipt, that the guarantor intends to provide alternate financial assurance as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter, in the name of [owner or operator]. Not later than one hundred twenty days after the end of such fiscal year, the guarantor shall establish such alternate financial assurance unless [owner or operator] has done so.

6. The guarantor agrees to notify the director by certified mail or any other form of mail accompanied by a receipt, of a voluntary or involuntary proceeding under "Title 11 (bankruptcy)," U.S. Code, naming guarantor as debtor, not later than ten days after commencement of the proceeding.

7. Guarantor agrees that not later than thirty days after being notified by the director of a determination that guarantor no longer meets the financial test criteria or that the guarantor is disallowed from continuing as a guarantor of closure, post-closure care, corrective actions, or scrap tire transporter closure, the guarantor shall establish alternate financial assurance as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap

tire transporter, in the name of [owner or operator] unless [owner or operator] has done so.

8. Guarantor agrees to remain bound under this guarantee notwithstanding any or all of the following: amendment or modification of the closure/post-closure care plan or corrective actions plan, amendment or modification of the permit or registration, extension or reduction of the time of performance of closure, post-closure care, or corrective actions, or any other modification or alteration of an obligation of the owner or operator pursuant to rules adopted under Chapter 3734. of the Revised Code.

9. Guarantor agrees to remain bound under this guarantee for so long as [owner or operator] shall comply with the applicable financial assurance requirements of rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter for the above listed facilities or scrap tire transporter, except that guarantor may cancel this guarantee by sending notice by certified mail or any other form of mail accompanied by a receipt to the director and [owner or operator], such cancellation to become effective not earlier than one hundred twenty days after receipt of such notice by both Ohio EPA and [owner or operator], as evidenced by the return receipts.

10. Guarantor agrees that if [owner or operator] fails to provide alternate financial assurance as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter, and obtain written approval of such alternate financial assurance from the director not later than ninety days after a notice of cancellation by the guarantor is received by the director from guarantor, guarantor shall provide such alternate financial assurance in the name of [owner or operator].

11. Guarantor expressly waives notice of acceptance of this guarantee by the Ohio EPA or by [owner or operator]. Guarantor also expressly waives notice of amendments or modifications of the facility permit(s) or registration(s) or the scrap tire transporter registration.

I hereby certify that the wording of this guarantee is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted on the date first above written.

Effective date: \_\_\_\_\_

[Name of guarantor]

[Authorized signature for guarantor]

[Name of person signing]

[Title of person signing]

Signature of witness or notary: \_\_\_\_\_"

(H) A letter from the chief financial officer of a local government, as specified in paragraph (L) of rule 3745-503-05 of the Administrative Code must be worded as follows on forms prescribed by the director, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

[Comment: For the purposes of this rule, local government is defined as a subdivision of the state of Ohio including, but not limited to, a municipal corporation, a county, a township, a single or joint county solid waste management district, or a solid waste management authority.]

"Letter from chief financial officer of a local government

[Address to director, Ohio Environmental Protection Agency.]

I am the chief financial officer of [name and address of local government]. This letter is in support of this local government's use of the financial test to demonstrate financial assurance, as specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.

[Fill out the following paragraphs regarding facilities and scrap tire transporters and the associated cost estimates. If there are no facilities or scrap tire transporters that belong in a particular paragraph, write "none" in the space indicated. For each facility or scrap tire transporter, include its name, address, county, and current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations. Identify each cost estimate as to whether it is for closure, post-closure care, scrap tire transporter closure, or corrective actions, and all other environmental obligations.]

(1) This local government is the owner or operator of the following facilities or scrap tire transporters for which financial assurance for closure, post-closure care, scrap tire transporter closure, or corrective actions is demonstrated through the financial test specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter or this local government is the owner or operator of the following facilities for which financial assurance for any other environmental obligations are assured by a financial test. The current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations provided for by a test are shown: \$ \_\_\_\_\_.

(2) This local government is the owner or operator of the following facilities or scrap tire transporter for which financial assurance requirements for closure, post-closure care, scrap tire transporter closure, corrective actions, or any other environmental obligations are satisfied through a financial test other than that required by rules

adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter. The current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, or any other environmental obligations covered by such financial assurance are shown for each facility or scrap tire transporter:  
\$ \_\_\_\_\_.

The fiscal year of this local government ends on [month, day]. The figures for the following items marked with an asterisk are derived from this local government's independently audited, year-end financial statements for the most recently completed fiscal year, ended [date]. [Comment: The figures for the following items must be contained in the audited financial statements from the most recently completed fiscal year.]

[Fill in Alternative I if the criteria of paragraph (L)(3)(a) of rule 3745-503-05 of the Administrative Code is used. Fill in Alternative II if the criteria of paragraph (L)(3)(b) of rule 3745-503-05 of the Administrative Code is used.]

11.	Is line 5 divided by line 6 less than or equal to 2.00? . . .		
12.	Is line 7 divided by line 8 less than or equal to 0.43? . . . If not, complete lines 13 and 14.		
13.	Multiply line 8 by 0.43 = \$_____. This is the maximum amount allowed to assure environmental costs.		
14.	Line 13 subtracted from line 7 = \$_____. This amount must be assured by another financial assurance mechanism listed in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.		

Alternative I	
1.	Sum of current closure, post-closure care, scrap tire transporter closure, or corrective actions cost estimates, and any other environmental obligations assured by a financial test (total of all cost estimates shown in the paragraphs above): \$ _____.
*2.	Sum of cash and marketable securities: \$ _____.
*3.	Total expenditures: \$ _____.
*4.	Annual debt service: \$ _____.
*5.	Long-term debt: \$ _____.
*6.	Capital expenditures: \$ _____.
*7.	Total assured environmental costs: \$ _____.
*8.	Total annual revenue: \$ _____.

Alternative II	
1.	Sum of current closure, post-closure care, scrap tire transporter closure, corrective actions cost estimates, and any other environmental obligations assured by a financial test (total of all cost estimates shown in the paragraphs above): \$ _____.
2.	Current bond rating of most recent issuance and name of rating service: _____.
3.	Date of issuance of bond: _____.
4.	Date of maturity of bond: _____.
5.	Total assured environmental costs: \$ _____.
*6.	Total annual revenue: \$ _____.

		Yes	No
9.	Is line 2 divided by line 3 greater than or equal to 0.05? . . .		
10.	Is line 4 divided by line 3 less than or equal to 0.20? . . .		

		Yes	No
7.	Is line 5 divided by line 6 less than or equal to 0.43? . . . . If not, complete lines 8 and 9.		
8.	Multiply line 6 by 0.43 = \$_____. This is the maximum amount allowed to assure environmental costs.		
9.	Line 8 subtracted from line 5 = \$_____. This amount		

	must be assured by another financial assurance mechanism listed in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter.		
--	---	--	--

I hereby certify that the wording of this letter is identical to the wording specified in rules adopted under Chapter 3734. of the Revised Code concerning financial assurance for solid waste facilities or a scrap tire transporter as such rules were constituted shown immediately below. I further certify the following: (1) that the local government's financial statements are prepared in conformity with generally accepted accounting principles for governments; (2) that the local government has not operated at a deficit equal to five per cent or more of total annual revenue in either of the past two fiscal years; (3) that the local government is not in default on any outstanding general obligation bonds; and, (4) that the local government does not have outstanding general obligations rated less than BBB as issued by "Standard and Poor's" or Baa as issued by "Moody's."

[Signature]

[Name]

[Title]

[Date]"