CHAPTER 281. COMPOSTING FACILITIES

Subchapter A. GENERAL

Sec. 281.1. Scope.

(a) This chapter sets forth application and operating requirements for composting facilities. The requirements in this chapter are in addition to the applicable requirements in Chapter 271 (relating to municipal waste management—general provisions).
(b) Subchapters B and C (relating to application requirements for general composting facilities; and operating requirements for general composting facilities) set forth application and operating requirements for a person or municipality that operates or proposes to operate a general composting facility.

§ 281.2. [Reserved].

Source

Subchapter B. APPLICATION REQUIREMENTS FOR GENERAL COMPOSTING FACILITIES

GENERAL PROVISIONS

Sec.
281.101. General requirements.

PLANS

281.111. Operating plan.
281.112. Maps and related information.
281.113. Design and related information.
281.114. Description of geology, soils and groundwater.
281.115. Plan for access roads.
281.117. Nuisance control plan.
281.118. Litter control plan.
281.119. Radiation protection action plan.

COMPOSTING

281.121. Composting pad and vessel design.
281.122. Chemical analysis of sludge.
SOIL AND WATER

281.131. Revegetation plan.
281.132. Soil erosion and sedimentation control plan.
281.133. Leachate treatment plan.
281.134. Soil and groundwater monitoring plan.

CONTINGENCIES AND CLOSURE

281.141. Contingency plan.
281.142. Postclosure land use plan.

Cross References


GENERAL PROVISIONS

§ 281.101. General requirements.
(a) An application to operate a general composting facility shall:
   (1) Comply with this subchapter.
   (2) Comply with the applicable requirements of Chapter 271 (relating to municipal waste management—general provisions).
(b) Maps, plans and cross sections submitted to comply with this subchapter shall be on a scale in which 1 inch equals no more than 50 feet with 2-foot maximum contour intervals, unless otherwise approved by the Department.

Source


PLANS

§ 281.111. Operating plan.
An application to operate a general composting facility shall contain the following:
   (1) A narrative description of the general operating plan for the proposed facility, including the origin, composition and weight or volume of solid waste that is proposed to be composted at the facility, the suitability of the waste for composting, the composting process to be used at the facility, the daily operational methodology of the proposed process, the proposed processing and storage capacity of the facility and the expected life of the facility.
(2) A plan for an alternative waste handling or disposal system during periods when the proposed facility is not in operation, including procedures to be followed in case of equipment breakdown. Procedures may include the use of standby equipment, extension of operating hours or contractual agreements for diversion of municipal waste to other facilities.

(3) A plan for sampling and analyzing the compost.

(4) A description of the anticipated quality of the compost.

(5) A plan for the anticipated recovery rate of compost from the process, and plans for the reuse, sale or marketing of the compost.

(6) A plan for managing compost should markets for the sale or reuse of compost become unavailable.

(7) A plan for the proposed location and method for disposal or processing of residue produced by operation of the facility.

(8) A plan for assuring that solid waste received at the facility is consistent with § 281.201 (relating to basic limitations).

(9) A plan for training equipment operators and other personnel concerning the operation and approved design of the facility.

(10) The proposed operating hours of the proposed facility.

(11) A narrative describing the procedures for inspection and monitoring of incoming waste.

Source

The provisions of this § 281.111 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial pages (226349) to (226350).

§ 281.112. Maps and related information.

(a) An application shall contain a topographic map, including necessary narrative descriptions, which shows the following:

(1) The boundaries and names of present owners of record of land, both surface and subsurface, and including easements, rights-of-way and other property interests, for the proposed permit area and adjacent area; the boundaries of the land within the proposed permit area; and a description of title, deed or usage restrictions affecting the proposed permit area.

(2) The boundaries of land to be affected over the estimated total life of the proposed operation.

(3) The location and name of surface water bodies, such as springs, streams, lakes, ponds, wetlands, constructed or natural drains and irrigation ditches located on the proposed permit area and adjacent area.

(4) The location and name of public and private water sources that are located on the proposed permit area and adjacent area.

(5) The location of rights-of-way for high-tension power lines, pipelines, railroads and public and private roads within 300 feet of the proposed facility.
(6) The location of buildings currently in use within 300 feet of the proposed facility.

(7) The anticipated location of water quality monitoring points.

(8) The boundaries of land within the proposed permit area or adjacent area identified in § 281.202 (relating to areas where general composting facilities are prohibited).

(9) The location of underground mine shafts on the proposed permit area and adjacent areas.

(10) The municipalities in which the permit area is proposed to be located.

(11) The location of the 100-year floodplain boundaries in the permit area and adjacent area.

(12) The location of barriers, fences and similar structures required by § 281.213 (relating to access control).

(13) The water diversion, collection, conveyance, sedimentation and erosion control, treatment, storage and discharge facilities to be used.

(14) The composting pads, tipping areas, storage areas, windrows and loading/unloading areas.

(15) The areas of land for which a bond will be posted under Chapter 271, Subchapter D (relating to financial assurances requirements).

(16) The location, size and use of buildings and related facilities which will be used in the operation, including the horizontal and vertical dimensions.

(17) The location of scales and weigh stations to be used in the operation.

(18) The utilities to be installed at the facility.

(19) The location of access loads to the site, including slopes, grades and lengths of the roads.

(20) For a commercial composting facility that will receive sewage sludge or unseparated municipal waste, or both, a designated area for vehicles for use in the event of the detection of waste containing radioactive material. The designated area shall, by location or shielding, protect the environment, facility staff and public from radiation originating in the vehicle. The Department’s “Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities,” Document Number 250-3100-001, describes various factors to consider in determining an appropriate designated area.

(b) The applicant shall also submit a grid coordinate system for the entire proposed permit area. The horizontal control system shall consist of a grid not to exceed 200-foot-square sections. A permanent benchmark for horizontal and vertical control shall be shown. The grid system shall be tied to the benchmark and the baseline.

Source
The provisions of this § 281.112 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial pages (226350) to (226351).
§ 281.113. Design and related information.

The application shall contain a narrative description of the following:

1. Site preparation procedures.
2. The sources, types and volumes of solid waste to be composted on a daily basis.
3. The methods to be used to control the flow of waste to the facility, including a flow chart depicting the processing of solid waste and mechanical components of the processing system.
4. The size, type, capacity and general specifications of equipment for the handling, processing and storage of the solid waste.
5. For composting processes that are not totally enclosed, the frequency schedule for turning, agitation or aeration of the compost; and for totally enclosed composting processes, the design, composting method and operational procedure.
6. The windrow dimensions, design and construction methods.
7. The maximum and minimum length of time necessary to complete the composting process.
8. The method for separation, storage and ultimate disposal of noncompostable materials, including bulky waste.
9. The physical and chemical composition of compost residue produced by the process.
10. The minimum and maximum volume or weight of compost or residue to be stored prior to sale, reuse or disposal, and the minimum and maximum time that material or waste is to be stored.
11. Plans for utilities to be installed at the facility, including onsite or off-site point-of-service connections and points of usage.
12. The flooding frequency of the proposed permit area.

§ 281.114. Description of geology, soils and groundwater.

The application shall contain a description of the geology, soils and groundwater of the proposed permit area, based on a sufficient number of excavations and borings or wells to enable the Department to evaluate whether the proposed activities will be able to comply with the operating requirements in Subchapter C (relating to operating requirements for general composting facilities).

§ 281.115. Plan for access roads.

The application shall contain designs, cross sections and specifications for access roads, including load limits, to demonstrate compliance with § 281.212 (relating to access roads).

Cross References

This section cited in 25 Pa. Code § 281.212 (relating to access roads).
The application shall contain plans sufficient to demonstrate compliance with § 281.213 (relating to access control), including plans showing fencing and barriers to be constructed at the facility in full elevation, fully dimensioned and with the type of construction materials specified.

§ 281.117. Nuisance control plan.
The application shall contain a plan under § 281.218 (relating to nuisance control) to prevent and control hazards or nuisances from vectors, odors, noise, dust and other nuisances not otherwise provided for in the permit application. The plan shall provide for the routine assessment of vector infestation and shall also provide for countermeasures. The plan may include a control program involving a contractual arrangement for services with an exterminator.

§ 281.118. Litter control plan.
The application shall contain a plan under § 281.220 (relating to litter) to control litter.

§ 281.119. Radiation protection action plan.
(a) An application for a commercial composting facility that will receive sewage sludge or unseparated municipal waste, or both, shall contain an action plan specifying procedures for monitoring for and responding to radioactive material entering the facility, as well as related procedures for training, notification, recordkeeping and reporting.

(b) The action plan shall be prepared in accordance with the Department’s “Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities,” Document Number 250-3100-001, or in a manner at least as protective of the environment, facility staff and public health and safety and which meets all statutory and regulatory requirements.

(c) The action plan shall be incorporated into the facility’s approved waste analysis plan under § 271.613 (relating to waste analysis plan).

Source

Cross References
COMPOSTING

§ 281.121. Composting pad and vessel design.
(a) An application shall contain plans and specifications for the design, construction and maintenance of composting pads and vessels that will be required for the proposed facility.
(b) The application shall also contain a plan for inspection of composting pads and vessels to ensure their integrity.
(c) Composting pad and vessel plans and designs shall be consistent with § 281.231 (relating to composting pad or vessel).

Source
The provisions of this § 281.121 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial page (226352).

§ 281.122. Chemical analysis of sludge.
(a) If the application proposes that sewage sludge be composted at the facility, the applicant shall submit to the Department, on forms provided by the Department, a detailed analysis that fully characterizes the chemical and physical properties of the sludge.
(b) The applicant shall also provide the following information for each individual source of sludge:
   (1) Identify the type of treatment carried out at the sewage treatment plant prior to dewatering.
   (2) Identify the dewatering processes utilized, including a description of the equipment or technique used, the chemical reagents employed and a determination of the percent solids achieved.
   (3) Identify the maximum, minimum and average delivery rates anticipated. Quantities shall be expressed on a dry weight basis and the percent solids delivered to the facility.

Cross References

The application shall contain a proposed maximum daily volume for the facility, and a detailed justification for volume, under §§ 271.126 and 271.127 (relating to requirement for environmental assessment; and environmental assessment).

Source
§ 281.131. Revegetation plan.

An application shall contain a plan for revegetation of all or part of the site under §§ 281.241 and 281.242 (relating to general requirements; and standards for successful revegetation). The plan shall identify the species that are proposed to be planted, seeding rates and method of revegetation.

Cross References
This section cited in 25 Pa. Code § 281.142 (relating to postclosure land use plan).

§ 281.132. Soil erosion and sedimentation control plan.

(a) The applicant shall submit a plan to manage surface water and control erosion during all phases of construction and operation at the facility. The plan shall be based on the requirements of Chapter 102 (relating to erosion control), § 281.252 (relating to soil erosion and sedimentation control) and other applicable State and Federal requirements. Calculations indicating water quantities shall be based on the 24-hour precipitation event in inches to be expected once in 25 years. More stringent design standards may be required by the Department based on the most recent edition of the United States Department of Agriculture Soil Conservation Services’ Engineering Field Manual for Conservation Practices.

(b) The plan shall include fully dimensioned diversion ditches, indicating length, gradient and cross section for configuration by reach, and capacities for ditch volume by reach. Calculations which are necessary to support design and siting shall be included in the plan.

Source

§ 281.133. Leachate treatment plan.

An application shall contain a plan for collection, storage and treatment of leachate and wastewater from the facility in a manner that complies with The Clean Streams Law (35 P. S. §§ 691.1—691.1001) and regulations thereunder.

§ 281.134. Soil and groundwater monitoring plan.

(a) If required by the Department, the applicant shall submit a groundwater monitoring plan to detect groundwater degradation from the facility.

(b) If required by the Department, the applicant shall submit a soil monitoring plan capable of detecting the contamination from the facility.

(273223) No. 316 Mar. 01
§ 281.141. Contingency plan.
An application shall contain a contingency plan consistent with §§ 281.261—
281.263 (relating to emergency procedures). The plan shall include a Prepared-
ness, Prevention, and Contingency (PPC) Plan that is consistent with the Depart-
ment’s most recent guidelines for the development and implementation of PPC
plans.

§ 281.142. Postclosure land use plan.
An application shall contain a detailed description of the proposed use follow-
ing closure of the proposed facility, including a discussion of the utility and
capacity of the revegetated land to support a variety of alternative uses, and the
relationship of the use to existing land use policies and plans. The description
shall explain the following:
   (1) How the proposed postclosure land use is to be achieved and the nec-
       essary support activities which may be needed to achieve the proposed land
       use.
   (2) The consideration which has been given to making the proposed post-
       closure land use consistent with landowner plans and applicable State and local
       land use plans and programs.
   (3) The specific postclosure land use of areas that are not proposed to be
       revegetated under § 281.131 (relating to revegetation plan).

Cross References
This section cited in 25 Pa. Code § 281.241 (relating to general requirements).
DAILY OPERATIONS

281.211. Signs and markers.
281.212. Access roads.
281.213. Access control.
281.216. Operations.
281.217. Air resources protection.
281.218. Nuisance minimization and control.
281.219. Salvaging.
281.220. Litter.
281.221. Radiation monitoring and response.
281.222. Daily volume.

COMPOSTING PROVISIONS

281.231. Composting pad or vessel.
281.234. Sale or utilization of compost.
281.235. Availability of plans and designs.

REVEGETATION

281.241. General requirements.

SOIL AND WATER PROTECTION

281.251. General requirements.
281.252. Soil erosion and sedimentation control.
281.254. Soil and groundwater monitoring.
281.255. Water supply replacement.

EMERGENCY PROCEDURES

281.262. Emergency equipment.
281.263. Implementation of contingency plan.

281-11

(273225) No. 316 Mar. 01
RECORDKEEPING AND REPORTING

281.271. Daily operational records.
281.272. Annual operation report.

CESSATION AND CLOSURE

281.281. Temporary shutdown.
281.282. Cessation of operations.

Cross References

GENERAL PROVISIONS

§ 281.201. Basic limitations.

(a) A person or municipality may not own or operate a general composting facility unless the Department has first issued a permit to the person or municipality for the facility under this chapter.

(b) A person or municipality that operates a general composting facility shall comply with the following:

(1) The operating requirements of the act, this subchapter and the applicable requirements of Chapter 271 (relating to municipal waste management—general provisions).

(2) The plans and specifications in the permit, the terms and conditions of the permit, the environmental protection acts, this title and orders issued by the Department.

(c) A person or municipality that operates a general composting facility may not allow residual waste or special handling waste to be handled at the facility unless the Department has specifically approved special measures for managing the waste as part of the permit.

(d) A person or municipality that operates a general composting facility may not:

(1) Mix solid waste with, or store solid waste in close proximity to, other solid waste to create a risk of fire or explosion, or a risk of the accumulation of poisonous or otherwise harmful vapors or gases.

(2) Allow explosive waste to be processed at the facility.

(e) Hazardous waste subject to Article VII (relating to hazardous waste management) may not be disposed, processed or stored where general composting facilities are operated.
(f) The approved mitigation measures identified in the permit application shall be completed before a facility may accept waste, unless a later date is authorized in writing by the Department for technical reasons.

(g) The following radioactive material controlled under specific or general license or order authorized by any Federal, State or other government agency may not be processed at the facility, unless specifically exempted from disposal restrictions by an applicable Pennsylvania or Federal statute or regulation:

(1) Naturally-occurring and accelerator-produced radioactive material.
(2) Byproduct material.
(3) Source material.
(4) Special nuclear material.
(5) Transuranic radioactive material.
(6) Low-level radioactive waste.

(h) The following radioactive material may not be processed at the facility, unless approved in writing by the Department and the processing does not endanger the environment, facility staff or public health and safety:

(1) Short-lived radioactive material from a patient having undergone a medical procedure.
(2) TENORM.
(3) Consumer products containing radioactive material.

(i) The limitations in subsections (g) and (h) do not apply to radioactive material as found in the undisturbed natural environment of this Commonwealth.

Source

The provisions of this § 281.201 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial pages (226356) and (255081).

Cross References

This section cited in 25 Pa. Code § 281.111 (relating to operating plan).

§ 281.202. Areas where general composting facilities are prohibited.

(a) Except for areas that were permitted prior to April 9, 1988, a general composting facility may not be operated as follows:

(1) **Floodplain.** In the 100-year floodplain of waters of this Commonwealth unless demonstrated that the compost facility can be protected during flooding.

(2) **Wetland.**

   (i) In or within 300 feet of an exceptional value wetland, as defined in § 105.17 (relating to wetlands).

   (ii) For a general composting facility permitted on or after December 23, 2000, other than an expansion of a general composting facility that was permitted prior to December 23, 2000, in or within 100 feet of a wetland other than an exceptional value wetland, unless storage and processing will
not occur within that distance or storage and processing take place in an enclosed facility and one of the following is true:

(A) If the operation is in or along the wetland, the operator has received a permit from the Department under Chapter 105 (relating to dam safety and waterway management).

(B) If the operation is not in or along the wetland, no adverse hydrologic or water quality impacts will result.

(3) Occupied dwelling. Within 300 feet measured horizontally from an occupied dwelling, unless the owner of the dwelling has provided a written waiver consenting to the facility being closer than 300 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

(4) Perennial stream. Within 100 feet of a perennial stream, unless one of the following applies:

(i) Storage and processing will not occur within 100 feet of a perennial stream and no adverse impacts to the perennial stream will result.

(ii) Storage and processing take place in an enclosed facility and no adverse hydrologic or water quality impacts will result.

(5) Property line. Within 50 feet of a property line unless the operator demonstrates one of the following:

(i) That actual processing of waste is not occurring within 50 feet of a property line.

(ii) That storage and processing occurring within 50 feet of a property line take place in an enclosed facility.

(iii) That the owner of the adjacent property has provided a written waiver consenting to the facility being closer than 50 feet. The waiver shall be knowingly made and separate from a lease or deed unless the lease or deed contains an explicit waiver from the owner.

(6) Water source. Within 1/4 mile upgradient and within 300 feet downgradient of a private or public water source.

(7) Water table. In an area where the pad or vessel will be in contact with the seasonal high water table or perched water table.

(8) School, park or playground.

(i) For a municipal waste transfer facility permit issued on or after December 23, 2000, except an expansion of a municipal waste transfer facility permitted prior to December 23, 2000, within 300 yards of the following:

(A) A building which is owned by a school district or school and used for instructional purposes.

(B) A park.

(C) A playground.

(ii) The current property owner of a school building, park or playground may waive the 300-yard prohibition by signing a written waiver. Upon
receipt of the waiver, the Department will waive the 300-yard prohibition
and will not use the prohibition as the basis for the denial of a new permit.

(b) Except as provided in subsection (c), this section does not apply to a fea-
ture that may come into existence after the date of the first newspaper notice
under § 271.141 (relating to public notice by applicant).

(c) This section does not apply to a feature that may come into existence after
the date of the first newspaper notice under this subsection if the following apply:
   (1) The person or municipality publishes a notice of intent to file an appli-
cation for a general composting facility permit. The notice, which is separate
from the newspaper notice required by § 271.141, shall be published once a
week for 3 consecutive weeks in a newspaper of general circulation in the area
where the facility is proposed to be located. The notice shall include a brief
description of the location and proposed operation of the facility.
   (2) The person or municipality files an administratively complete applica-
tion with the Department within 1 year from the date of the first newspaper
notice under this subsection.

Source
521; amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preced-
ing text appears at serial pages (255081) to (255082).

Cross References
This section cited in 25 Pa. Code § 281.112 (relating to maps and related information).

DAILY OPERATIONS

§ 281.211. Signs and markers.
(a) A person or municipality that operates a general composting facility shall
identify the facility for the duration of operations by posting and maintaining a
sign which will be clearly visible and can be easily seen and read at the junction
of each access road and public road unless otherwise approved by the Depart-
ment. The sign shall be constructed of a durable, weather resistant material. The
sign shall show the name, business address and telephone number of the person
or municipality operating the facility, the operating hours of the facility and the
number of the current permit authorizing operations at the facility.

(b) Permanent physical markers for the grid coordinate system and permit
area markers shall be:
   (1) Posted and maintained during the duration of the operations to which
they pertain.
   (2) Clearly visible, readable and uniform throughout the operation.
   (3) Permanently fixed and made of a durable material.

(c) The perimeter of the site shall be clearly marked before the beginning of
operations.
(d) The permanent physical markers for the grid coordinate system shall be installed at the locations set forth in the permit, prior to the beginning of operations. The base line of the grid system shall be marked with two permanent monuments that show elevation.

Source

The provisions of this § 281.211 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial page (255082).

§ 281.212. Access roads.

(a) An access road shall be designed, constructed and maintained to prevent erosion to the maximum extent possible and to prevent contributions of sediment to streams or runoff outside the permit area.

(b) A crossing of a perennial or intermittent stream or a wetland shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) An access road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 25-year, 24-hour precipitation event. The drainage system shall comply with Chapter 102 (relating to erosion control and sediment control).

(d) An access road shall be paved or surfaced with asphalt, gravel, cinders or other equivalent material approved by the Department in the permit. An access road shall be capable of withstanding the load limits projected by the applicant under § 281.115 (relating to plan for access roads). The maximum sustained grade of an access road may not exceed 12%.

(e) An access road negotiable by loaded collection vehicles shall be provided from the entrance gate of the area to each unloading area, treatment facility or impoundment. An access road shall also be provided to surface and groundwater monitoring points approved by the Department under § 281.254 (relating to soil and groundwater monitoring).

(f) Roads shall be constructed on a base that is capable of withstanding anticipated loads.

(g) Prior to the construction of a road, topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the road.

(h) The disturbed areas adjacent to a road shall be vegetated or otherwise stabilized to prevent erosion.

(i) Access roads shall be designed, constructed and maintained to allow the orderly egress and ingress of vehicular traffic when the facility is in operation, including during inclement weather.
§ 281.213. Access control.

(a) A gate or other barrier shall be maintained at potential vehicular access points to block unauthorized access to the site when an attendant is not on duty.

(b) The operator shall construct and maintain a fence or other suitable barrier around the area sufficient to prevent unauthorized access.

(c) Access to the site shall be limited to times when an attendant is on duty.


(a) An operator of a general composting facility that has received, is receiving or will receive 30,000 or more cubic yards of solid waste in a calendar year shall weigh solid waste when it is received. The scale used to weigh solid waste shall conform to 3 Pa.C.S. Chapter 41 (relating to the Consolidated Weights and Measures Act) and 70 Pa. Code Part I (relating to weighmasters). The operator of the scale shall be a licensed public weighmaster under 3 Pa.C.S. Chapter 41 and 70 Pa. Code Part I.

(b) The operator of a facility that is not required by subsection (a) to weigh waste when it is received shall accurately measure waste by volume or weight prior to unloading.

(c) The operator of a general composting facility shall inspect and monitor incoming waste to ensure that the receipt of waste is consistent with this article and the permit.


(a) The operator shall maintain on the site equipment necessary for operation of the facility in accordance with the permit. The equipment shall be maintained in an operable condition.

(b) If a breakdown of the operator’s equipment occurs, the operator shall utilize standby equipment as necessary to comply with the act, the environmental protection acts, this subchapter and its permit conditions.
(c) Equipment shall be operated and maintained to prevent solid waste from being unintentionally removed from the site.
(d) Equipment shall be cleaned at frequencies specified in the permit based on scheduled or emergency maintenance periods.
(e) Provision shall be made for the routine operational maintenance of the facility.

Source

§ 281.216. Operations.

(a) The approach and unloading area shall be adequate in size and design to facilitate the rapid unloading of solid waste from collection vehicles and the unobstructed maneuvering of the vehicles and other equipment.
(b) The unloading and storage areas shall be constructed of impervious material which is capable of being cleaned by high pressure water spray and shall be equipped with drains or sumps connected to a sanitary sewer system or treatment facility to facilitate the removal of water.
(c) An attendant or clearly marked signs shall direct vehicles to the unloading area.
(d) The operator shall ensure that collection vehicles unload waste promptly in unloading areas.
(e) Solid waste shall be confined to the unloading area or a storage area approved as part of the operator’s permit.
(f) If bulky waste is handled or processed at the facility, the operator shall remove the waste daily or take other action sufficient to prevent nuisances or unsightliness.
(g) The operator shall maintain sufficient distance between windrows or piles to allow the proper use of equipment during the deposit, removal and turning of the compost.
(h) The operator shall inspect the facility daily to detect hot spots in a storage or composting area, dust accumulation, vectors, litter and other problems, and promptly take necessary corrective actions.

§ 281.217. Air resources protection.

(a) The operator shall control fugitive air contaminants and otherwise prevent and control air pollution under the Air Pollution Control Act (35 P. S. §§ 4001—4014), Article III (relating to air resources) and § 281.218 (relating to nuisance minimization and control).
(b) A person or municipality may not cause or allow open burning at the facility.
§ 281.218. Nuisance minimization and control.

(a) The operator shall control and minimize the attraction, harborage or breeding of vectors.

(b) The operator shall control and minimize conditions not otherwise prohibited by this subchapter that are harmful to the environment or public health, or which create safety hazards, odors, dust, noise, unsightliness and other public nuisances.

§ 281.219. Salvaging.

(a) Salvaging of materials may not be allowed or conducted unless salvaging is controlled by the operator to prevent interference with prompt and sanitary operations and is conducted to prevent a health hazard or nuisance.

(b) Salvaged materials shall be promptly removed from the unloading area and either stored in an approved area under Chapter 285 (relating to storage, collection and transportation of municipal waste) or transported offsite.

§ 281.220. Litter.

(a) The operator may not allow solid waste, compost or other materials to be blown or otherwise deposited offsite.

(b) Fences or other barriers sufficient to control blowing litter shall be located in the area immediately downwind from the composting and storage areas unless operations are conducted within an enclosed building or the solid waste or compost being stored cannot create blowing litter.

(c) At least weekly, blown off and intercepted litter shall be collected from fences, roadways, tree-lined barriers and other barriers, and disposed or stored in accordance with the act and regulations thereunder, unless a greater frequency is set forth in the permit.
§ 281.221. Radiation monitoring and response.

(a) An operator of a commercial composting facility that will receive sewage sludge or unseparated municipal waste, or both, shall implement the action plan approved under § 281.119 (relating to radiation protection action plan).

(b) An operator of a commercial composting facility that will receive sewage sludge or unseparated municipal waste, or both, shall monitor incoming waste in accordance with the Department’s “Guidance Document on Radioactivity Monitoring at Solid Waste Processing and Disposal Facilities,” Document Number 250-3100-001 or in a manner at least as protective of the environment, facility staff and public health and safety. Monitoring shall meet the requirements of this section and the facility’s approved radiation protection action plan.

(c) Radiation detector elements shall be as close as practical to the waste load and in an appropriate geometry to monitor the waste. The radiation monitoring system shall be set to alarm at a level no higher than 10 microroentgen per hour (µR/hr) above the average background at the facility when any of the radiation detector elements is exposed to a Cesium-137 gamma radiation field. Radiation detector elements shall be shielded to maintain the average background below 10 µR/hr. If capable of energy discrimination, the radiation monitoring system shall be set to detect gamma rays of a 50 kiloelectron volt (keV) energy and higher.

(d) An operator shall have portable radiation monitors capable of determining the radiation dose rate and presence of contamination on a vehicle that has caused an alarm. Upon a confirmed exceedance of the alarm level in subsection (c), a radiological survey of the vehicle shall be performed.

(e) An operator shall notify the Department immediately and isolate the vehicle when radiation dose rates of 20 µSv/hr (2 mrem/hr) or greater are detected in the cab of a vehicle, 500 µSv/hr (50 mrem/hr) or greater are detected from any other surface, or contamination is detected on the outside of the vehicle.

(f) Monitoring equipment shall be calibrated at a frequency specified by the manufacturer, but not less than once a year.

(g) If radioactive material is detected at a composting facility, the vehicle containing the radioactive material may not leave the facility without written Department approval and an authorized United States Department of Transportation exemption form.

Source

The provisions of this § 281.221 adopted December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685.
§ 281.222. Daily volume.
A person or municipality operating a composting facility may not receive solid waste at the facility in excess of the maximum daily volume approved in the permit.

Source

COMPOSTING PROVISIONS

§ 281.231. Composting pad or vessel.
(a) Solid waste may not be composted, loaded, unloaded or stored, except on a composting pad or vessel that meets the requirements of this section.
(b) The composting pad or vessel shall be adequate in size and capacity to manage the projected solid waste, compost and residue volumes.
(c) A composting pad or vessel shall be:
   (1) For a pad, capable of preventing the migration of waste and leachate generated from the composting process through the pad.
   (2) Designed, constructed and maintained to protect the integrity of the pad or vessel during the projected life of the facility.
   (3) Designed to collect leachate.
   (4) For a pad, constructed of noneartan material.
   (5) Inspected for uniformity, damage and imperfections during construction and installation.
   (6) Designed and operated so that the physical and chemical characteristics of the composting pad or vessel and its ability to restrict the flow of solid waste, solid waste constituents or leachate is not adversely affected by the leachate.
(d) The operator shall inspect the composting pad or vessel in a manner and frequency approved by the Department in the permit.
(e) Upon completion of the construction of a composting pad or vessel, the operator shall:
   (1) Submit a certification by a registered professional engineer on forms provided by the Department. The certification shall describe the composting pad or vessel being certified, using drawings and plans if appropriate and shall state that the actual construction was observed by the engineer or persons under his direct supervision, and that the construction was carried out in a manner that is consistent with the permit.
   (2) Notify the Department that the facility is ready for inspection. Solid waste may not be composted, and no solid waste or compost may be stored, loaded or unloaded on the composting pad or in the composting vessel, until
the Department has conducted an inspection and has transmitted its written approval to the permittee indicating that the construction was done according to the permit.

**Source**

The provisions of this § 281.231 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial pages (226362) to (226363).

**Cross References**

This section cited in 25 Pa. Code § 281.121 (relating to composting pad design).

§ 281.232. Continuing analysis of sludge.

If sewage sludge is composted at the facility:
(1) The operator shall submit to the Department a chemical analysis of the sludge under § 281.122 (relating to chemical analysis of sludge), every 4 months following the date of permit issuance, unless the Department approves a different schedule in the permit.
(2) The operator shall perform and submit to the Department additional analyses if there is a significant change in the quality of sludge.


Residue from processing of solid waste at general composting facilities shall be disposed or processed at a permitted facility for municipal or residual waste.

§ 281.234. Sale or utilization of compost.

Prior to sale or utilization of compost, the operator shall obtain a general permit from the Department under Chapter 271, Subchapters I or J (relating to beneficial use of municipal waste; and beneficial use of sewage sludge by land application).

**Source**


§ 281.235. Availability of plans and designs.

The operator shall maintain a copy of engineering plans and designs for the facility on the site.

**REVEGETATION**

§ 281.241. General requirements.
(a) Except to the extent authorized in the postclosure plan approved under § 281.142 (relating to postclosure land use plan), vegetation shall be established on land affected by a general composting facility.
(b) Revegetation shall provide for a diverse, effective and permanent vegetative cover of the same seasonal variety native to the area of land to be affected and capable of self-regeneration and plant succession. Introduced species may be used when desirable and necessary to achieve the approved postclosure land use. Vegetative cover shall be considered of the same seasonal variety when it consists of a mixture of species that is equal or superior to native vegetation during each season of the year.

(c) Revegetation shall provide a quick germinating, fast-growing vegetative cover capable of stabilizing the soil surface from erosion.

(d) Disturbed areas shall be seeded and planted when weather and planting conditions permit, but the seeding and planting of disturbed areas shall be performed no later than the first normal period for favorable planting after final grading.

(e) Fertilizer and lime shall be applied to disturbed areas as necessary to maintain plant growth.

(f) Mulch shall be applied to regraded areas at rates adequate to control erosion, promote germination of seeds and increase the moisture retention of the soil.

Cross References

§ 281.242. Standards for successful revegetation.

(a) The standard for successful revegetation shall be the percent of groundcover of the vegetation which exists on the area affected by the facility. The Department will not approve less than a 70% groundcover of permanent plant species in the approved plan.

(b) No more than 1% of the total area may have less than 30% groundcover. No single or contiguous area exceeding 3,000 square feet may have less than 30% groundcover.

Cross References

SOIL AND WATER PROTECTION

§ 281.251. General requirements.

(a) The operator may not cause or allow a point or nonpoint source discharge of pollution from or on the facility to surface waters of this Commonwealth.

(b) A general composting facility shall be operated to prevent and control water pollution. An operator shall operate and maintain necessary surface and groundwater treatment facilities until surface or groundwater pollution from or on the facility has been permanently abated.

281-23

(273237) No. 316 Mar. 01
(c) Neither compost nor municipal waste may be stored where continuous or intermittent contact could occur between the compost or waste and groundwater.
(d) The operator may not cause or allow water pollution within or outside of the site.

Source
The provisions of this § 281.251 amended December 22, 2000, effective December 23, 2000, 30 Pa.B. 6685. Immediately preceding text appears at serial page (226364).

Cross References
This section cited in 25 Pa. Code § 281.253 (relating to sedimentation ponds).

§ 281.252. Soil erosion and sedimentation control.
The operator shall manage surface water and control erosion and sedimentation to:
(1) Divert surface water away from the storage and composting areas with measures and structures necessary to handle surface water flows based on a 25-year, 24-hour precipitation event, and supported by written calculations.
(2) Meet the requirements of Chapters 102 and 105 (relating to erosion and sediment control; and dam safety and waterway management).
(3) Prevent erosion to the maximum extent possible, including where possible, using revegetation.

Cross References
This section cited in 25 Pa. Code § 281.132 (relating to soil erosion and sedimentation control plan).

§ 281.253. Sedimentation ponds.
(a) Surface drainage from the disturbed area shall be passed through a sedimentation pond or a series of sedimentation ponds before leaving the site. The Department may waive the required use of sedimentation ponds when a person demonstrates to the Department that sedimentation ponds are not necessary to meet the requirements of § 281.251 (relating to general requirements).
(b) Sedimentation ponds shall be constructed, operated and maintained under this section, Chapters 102 and 105 (relating to erosion and sediment control; and dam safety and waterway management) and the minimum design criteria contained in the United States Soil Conservation Service’s Engineering Standard 378, ‘Pond’ Pa., as amended.
(c) Sedimentation ponds and other treatment facilities shall be maintained until removal of the ponds and facilities is approved by the Department.
(d) A pond shall include a nonclogging, dewatering device approved by the Department that will allow the draining of the water from the inflow. The dewatering device may not be located at a lower elevation than the maximum elevation of the sedimentation storage volume.
(e) The ponds shall be designed, constructed and maintained to prevent short circuiting to the maximum extent possible.

(f) The design, construction and maintenance of a sediment pond under this section does not relieve the operator of the responsibility for complying with the applicable treatment requirements and effluent limitations established under § 281.251.

(g) At a minimum, sedimentation ponds shall be capable of treating the run-off resulting from a 25-year, 24-hour precipitation event.

(h) A sedimentation pond shall be designed and inspected during construction under the supervision of a registered professional engineer, who shall certify to the Department upon completion of construction that the pond was constructed as approved in the permit.

Source


§ 281.254. Soil and groundwater monitoring.

(a) If required by the Department as part of the permit, the operator shall conduct soil or groundwater monitoring, or both. The monitoring shall be in accordance with §§ 273.282—273.288, as required by the Department, and the terms and conditions of the permit, and shall continue for the period specified in § 281.282 (relating to cessation of operations).

(b) For purposes of interfacing with §§ 273.282—273.288, the following terms apply:

1. The term “disposal area” shall be substituted with “area where storage and processing occur.”
2. The term “municipal waste landfill” shall be substituted with “composting facility.”
3. The term “disposed” shall be substituted with “stored or processed.”

Source


Cross References


§ 281.255. Water supply replacement.

(a) A person or municipality operating a composting facility which adversely affects a water supply by degradation, pollution or other means shall restore or replace the affected water supply with an alternative source that is of like quantity and quality to the original supply at no additional cost to the owner.

281-25

(273239) No. 316 Mar. 01
(b) A temporary water supply shall be provided as soon as practicable but not later than 48 hours after receipt of one of the following:
   (1) Information showing that the operator is responsible for adversely affecting the water supply.
   (2) Notice from the Department that the operator is responsible for adversely affecting the water supply.
(c) A permanent water supply shall be provided as soon as practicable but not later than 90 days after the receipt of one of the following:
   (1) Information showing that the operator is responsible for adversely affecting the water supply.
   (2) Notice from the Department that the operator is responsible for adversely affecting the water supply.
(d) Permanent water supplies include development of a new well with a distribution system, interconnection with a public water supply or extension of a private water supply, but do not include provision of bottled water or a water tank supplied by a bulk water hauling system, which are temporary water supplies.

Source

EMERGENCY PROCEDURES

   A composting facility shall be designed, constructed, maintained and operated to prevent and minimize the potential for fire, explosion or release of solid waste constituents to the air, water or soil of this Commonwealth that could threaten public health or safety, public welfare or the environment.

Cross References
This section cited in 25 Pa. Code § 281.141 (relating to contingency plan).

§ 281.262. Emergency equipment.
   (a) Except as provided in subsection (b), a person or municipality operating a general composting facility shall have available in proper working condition the following equipment at the immediate operating area of the facility:
      (1) An internal communications or alarm system capable of providing immediate emergency instruction by voice or signal to facility personnel.
      (2) A communications system capable of summoning emergency assistance from local police, fire departments, emergency medical services and from State and local emergency response agencies.
      (3) Portable fire extinguishers, fire control equipment, spill control equipment, decontamination equipment and self-contained breathing apparatus. For
fire control equipment requiring water, the facility shall have a water supply of adequate quantity and pressure to supply the equipment.

(b) The Department may waive or modify the requirements of subsection (a) in the permit if the operator demonstrates to the Department’s satisfaction that the requirements are not necessary to protect public health and safety, public welfare or the environment.

(c) Equipment and material required by this section shall be tested and maintained so that it is operable in time of emergency.

(d) Adequate space shall be maintained to allow the unobstructed movement of emergency personnel and equipment to an operating area of the facility.

Cross References
This section cited in 25 Pa. Code § 281.141 (relating to contingency plan).

§ 281.263. Implementation of contingency plan.

(a) The operator of the facility shall immediately implement the applicable provisions of the approved contingency plan when there is an emergency. For purposes of this section, an emergency shall include a fire, spill or other hazard, that threatens public health and safety, public welfare or the environment and personal injury.

(b) During an emergency, the operator shall:

(1) Assess actual or potential hazards to public health and safety, public welfare and the environment that are occurring or may occur.

(2) Ensure that fires, spills or other hazards do not occur, reoccur or spread to other solid waste at the facility.

(3) Immediately telephone the Department and county emergency management agency, and report the following information:

(i) The name of the person reporting the incident and telephone number where that person can be reached.

(ii) The name, address and permit number of the facility.

(iii) The date, time and location of the emergency.

(iv) A brief description of the nature of the emergency, the type and quantity of the solid waste involved and what dangers to public health and safety, public welfare and the environment exist or may occur.

(v) The nature of injuries.

(vi) The parts of the emergency plan being implemented to alleviate the emergency.

(c) After an emergency, the operator of the facility shall do the following:

(1) Clean up the area affected by the emergency and treat, store or dispose of recovered solid waste, contaminated soil, contaminated water or other material in a manner approved by the Department.
(2) Prevent processing or storage of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has inspected and approved the cleanup.

**Source**


**Cross References**

This section cited in 25 Pa. Code § 281.141 (relating to contingency plan).

**RECORDKEEPING AND REPORTING**

§ 281.271. Daily operational records.

(a) A person or municipality that operates a general composting facility shall make and maintain an operational record for each day that municipal waste is received, processed or transported offsite.

(b) The daily operational record shall include the following:

(1) The type and weight or volume of the solid waste received.

(2) The county in which the solid waste originated, or if the waste originated outside of this Commonwealth, the state.

(3) The transporters of the solid waste.

(4) The weight or volume of each material recycled, marketed or disposed of as a result of the process.

(5) A record of deviations from the approved design or operational plans.

(6) A record of activities for which entries are needed to comply with the annual operation report required in § 281.272 (relating to annual operation report).

(7) A record of actions taken to correct violations of the act, the environmental protection acts and this title.

(8) A description of waste handling problems or emergency disposal activities.

(9) A record of each incident in which radioactive material is detected in waste loads. The record shall include:

(i) The date, time and location of the occurrence.

(ii) A brief narrative description of the occurrence.

(iii) Specific information on the origin of the material, if known.

(iv) A description of the radioactive material involved, if known.

(v) The name, address and telephone numbers of the supplier or handler of the radioactive material and the name of the driver.

(vi) The final disposition of the material.
(c) The operator shall maintain accurate operational records sufficient to determine whether municipal waste is being stored in compliance with Chapter 285, Subchapter A (relating to storage of municipal waste).

(d) Daily operational records shall be retained for the life of the facility bond, or longer if determined by the Department to be necessary to meet the standards of the environmental protection acts. These records shall be made available to the Department upon request.

Source


§ 281.272. Annual operation report.

(a) A person or municipality that operates a general composting facility shall submit to the Department an annual operation report on or before June 30 of each year.

(b) The annual operation report, which shall be submitted on a form supplied by the Department, shall include the following:

1. The county in which the waste originated, or if the waste originated outside of this Commonwealth, the state.

2. The weight or volume of each type of waste received.

3. The weight or volume of each material recycled, marketed or disposed of as a result of the process.

4. A current certificate of insurance, as specified in § 271.374(a) (relating to proof of insurance coverage), evidencing continuous coverage for public liability insurance as required by § 271.371 (relating to insurance requirement).

5. Changes in the previous year concerning the information required by §§ 271.124 and 271.125 (relating to identification of interests; and compliance information). The report shall state if no changes have occurred.

6. A change in the ownership of the land upon which the facility is located or a change in a lease agreement for the use of the land that may affect or alter the operator’s rights upon the lands.

7. A written update of the total bond liability for the facility under § 271.331 (relating to bond and trust amount determination). If additional bond is determined to be necessary, it shall be submitted to the Department within 90 days after the annual report is due.

8. Certification that the operator has received all analyses required by § 287.54 (relating to chemical analysis of waste) for each type of residual waste or special handling waste received at the facility during the calendar year.


(273243) No. 316 Mar. 01
(c) The annual operation report shall be accompanied by a nonrefundable annual permit administration fee of $700 in the form of a check payable to the “Commonwealth of Pennsylvania.”

Source


Cross References

This section cited in 25 Pa. Code § 281.271 (relating to daily operational records).

CESSATION AND CLOSURE

§ 281.281. Temporary shutdown.

(a) An alternate permitted solid waste processing or disposal facility shall be available for use if the facility is shut down.

(b) If the composting facility is out-of-service for a longer period than the storage capacity of the site will allow, no additional solid waste may be received at the facility.

§ 281.282. Cessation of operations.

(a) Upon cessation of composting operations at the facility, the operator shall remove solid waste and structures or other materials which contain or are contaminated with solid waste, and shall provide for the processing or disposal of the waste or material under the act, the environmental protection acts and this title.

(b) Areas requiring vegetation shall be revegetated under §§ 281.241 and 281.242 (relating to general requirements; and standards for successful revegetation).

(c) An operator required under § 281.254 (relating to soil and groundwater monitoring) to conduct soil monitoring may discontinue soil monitoring upon cessation of composting operations with the Department’s approval. In deciding whether to allow the discontinuance of monitoring, the Department will consider the operational history of the facility, the likelihood that groundwater degradation will manifest itself in the future and other relevant factors.

(d) An operator required under § 281.254 to conduct groundwater monitoring may discontinue groundwater monitoring after cessation of composting operations and cleanup only upon written approval by the Department. In deciding whether to allow discontinuance of monitoring, the Department will consider the operational history of the facility, the likelihood that groundwater contamination will manifest itself in the future, whether the remediation standards in § 271.342(b)(4) (relating to final closure recertification) are met and maintained and other relevant factors.

Cross References
This section cited in 25 Pa. Code § 281.254 (relating to soil and groundwater monitoring).