Kansas Administrative Regulations

Department of Health and Environment

Article 29.—Solid Waste Management—Part 2. Standards for Management of Solid Wastes/Composting.

28-29-25f. Solid waste composting.

For the purposes of this regulation, subsections (a), (b), (c), and (d) shall apply to each facility that composts solid waste and has a composting area of one-half acre or less, except facilities that compost only yard waste, manure, dead animals, source-separated organic waste, or any combination of yard waste, manure, dead animals, and source-separated organic waste. Subsections (a), (b), (c), and (e) of this regulation shall apply to each facility that composts solid waste and has a composting area larger than one-half acre, except facilities that compost only yard waste, manure, dead animals, source-separated organic waste, or any combination of yard waste, manure, dead animals, and source-separated organic waste.

(a) Facility design. The owner or operator of each solid waste composting facility shall design and construct the facility to meet the following requirements:

(1) Composting surface and drainage.

(A) Storm water run-on shall be prevented from entering the receiving, processing, curing, or storage areas by the use of berms or other physical barriers.

(B) The facility shall not cause a discharge of pollutants into waters of the state, in accordance with K.S.A. 65-164, and amendments thereto.

(C) Leachate control shall be provided wherever leachate is generated.

(D) The composting area shall be graded to prevent ponding of liquids.

(E) The surface of the composting area shall be capable of supporting the equipment used.

(F) The floor shall be composed of a layer of material that is at least one foot thick and has a hydraulic conductivity no greater than 10^{-7} cm/sec, or the facility shall be designed to provide the same level of protection to the groundwater.

(G) The receiving, processing, and curing areas shall be covered by a roof, or the facility shall be designed to provide the same level of protection from the weather.

(2) Facility access.

(A) At each facility that composts solid waste that is brought in from off-site, the following information shall be posted on one or more signs:

(i) Facility name;

(ii) permit number;

(iii) site hours;

(iv) traffic flow;

(v) a list of the materials appropriate for composting; and

(vi) the name and telephone number of an emergency contact person.

(B) Unauthorized dumping shall be discouraged by access control.

(C) Access roads shall be of all-weather construction and shall be negotiable at all times. Load limits on bridges and access roads shall be sufficient to support all traffic loads generated by the use of the facility.

(3) Capacity and storage. The facility shall have the capacity to store the following materials:

(A) Incoming materials waiting to be processed;

(B) the materials being processed; and

(C) the finished compost, not to exceed 18 months' production.

(b) Facility operations. The owner or operator of each solid waste composting facility shall perform the following:

(1) Minimize odors;

(2) control disease vectors, dust, litter, and noise;

(3) protect the facility from scavenging by animals;

(4) segregate incoming waste from finished compost;

(5) inform the public of disposal sites for waste not acceptable for composting at the facility;

(6) limit public access to hours when an attendant or any operating personnel are at the facility;

(7) begin processing incoming waste within 24 hours of receipt;

(8) use one of the following processes to further reduce pathogens (PFRP):

(A) Windrow composting method. When using this method, the following conditions shall be met:

(i) Aerobic conditions shall be maintained within the windrow;

(ii) the waste shall attain a temperature of 55° C, 131° F, or greater for at least 15 days during the composting period; and

(iii) the windrow shall be turned a minimum of five times during the high temperature period;

(B) Aerated static pile composting method. When using this method, the waste shall be covered with six to 12 inches of insulating material and maintained at a temperature of 55° C, 131° F, or greater for a minimum of three consecutive days;

(C) Enclosed-vessel composting method. When using this method, the waste shall be maintained at a temperature of 55° C, 131° F, or greater for a minimum of three consecutive days; or

(D) any other method approved by the department;

(9) record the following information:

(A) The temperature and moisture content of materials during the composting process, in accordance with the operating plan;

(B) the daily volume or weight of waste received;

(C) the source of waste;

(D) all laboratory analyses required by the permit; and

(E) the volume of recovered materials; and

(10) remove all finished compost within 18 months of the completion of the composting process.

(c) Facility closure. The owner or operator of each facility that composts solid waste shall perform the following:

(1) Notify the department, in writing, at least 60 days before closure;

(2) remove all material from the facility within 10 days of ceasing operation; and

(3) clean all containers, equipment, machines, floors, and site surfaces that have been in contact with solid waste.

(d) Registration. Each owner or operator of a facility that composts solid waste and has a composting area of one-half acre or less shall submit registration information to the department on a form provided by the department.

(e) Permit applications. The owner or operator of each facility that composts solid waste and has a composting area larger than one-half acre shall submit a permit application to the department on a form provided by the department. The applicant shall include the following items with the permit application:

(1) Facility design plan. The facility design plan shall contain the following items:

(A) A 7.5 minute topographic map of the area, as typically available from the U.S. geological survey, indicating the facility boundary and the property boundary;

(B) a soil map of the area, as typically available from the U.S. department of agriculture natural resources conservation services;

(C) a 100-year floodplain map of the area, as typically available from the federal emergency management agency;

(D) plan and profile views of the facility indicating the following features:

(i) Roads;

(ii) the existing and final grades and contours;

(iii) storm water control;

(iv) buildings and equipment to be installed;

(v) utilities;

(vi) access control; and

(vii) all other structures;

(E) information on the permeability of the floor structure; and

(F) a flow diagram of the proposed processing steps involved in recovering recyclable materials and mixed organic material from solid waste, including a total mass balance.

(2) Operations plan. The operations plan shall contain the following information:

(A) Job descriptions of persons responsible for operation, control, and maintenance of the facility;

(B) the anticipated annual quantity of waste to be received, and the seasonal variations of the quanity of waste to be received;

(C) the sources of waste to be received;

(D) the methods to control traffic and to expedite unloading;

(E) the methods for measuring incoming waste;

(F) the methods to control the types of waste received;

(G) the methods for removing noncompostable wastes from the incoming waste stream, including procedures for storage and disposal of these wastes;

(H) the location of disposal sites for noncompostable wastes;

(I) the method of composting;

(J) a description of equipment proposed to be used in composting, including equipment specifications and manufacturer's performance standards. The proposed equipment shall be compatible with the proposed process and throughput;

(K) a description of any additives used in the process;

(L) the methods for managing biological conditions;

(M) a quality assurance and quality control plan that outlines the monitoring, sampling, and analysis plans for testing the compost process and product;

(N) the proposed end use of compost;

(O) the methods to minimize, manage, and monitor odors;

(P) disease vector, dust, litter, and noise control measures;

(Q) leachate and national pollutant discharge elimination system storm water control measures;

(R) the plans for operations during wind, heavy rain, snow, freezing temperatures, or other inclement weather conditions;

(S) a contingency plan for events including equipment failure, power outages, natural disasters, fire, receipt of prohibited materials, or similar interruptions of normal activities; and

(T) a fire protection and control plan.

(3) Closure plan. The closure plan shall include the following information:

(A) The steps necessary to close the facility;

(B) the final surface contours; and

(C) a closure cost estimate based on the third-party cost of removing and disposing of the maximum amount of wastes that may be contained at the facility.

(Authorized by and implementing K.S.A. 1998 Supp. 65-3406; effective Oct. 1, 1999.)

***** Authenticated Kansas Administrative Regulation *****