Kansas Administrative Regulations

Department of Health and Environment

Article 29.—Solid Waste Management—Part 8. Construction and Demolition Landfills.

28-29-304. Construction and demolition (C&D) landfill design.

The design requirements of this regulation shall apply to all C&D landfills.

(a) Facility access. The owner or operator of each C&D landfill shall provide fencing or other barriers, with one or more gates that can be locked to restrict access to the C&D landfill when the C&D landfill is not open for business.

(b) Facility signage. The owner or operator of each C&D landfill shall post permanent signage at the facility.

(1) The following information shall be posted at the entrance to the facility:

(A) The name of the facility;

(B) the landfill permit number;

(C) the facility's telephone number, if there is one;

(D) the emergency telephone number; and

(E) a statement indicating who may bring waste to the landfill for disposal and, if appropriate, the hours of operation.

(2) Information concerning the types of waste that are accepted or not accepted for disposal or recycling shall be posted at the facility's entrance or at a location prominently visible to the public inside the facility's boundaries.

(c) Facility roads.

(1) The owner or operator of each C&D landfill shall design and construct on-site roads to accommodate expected traffic flow in a safe and efficient manner.

(2) On-site facility roads shall be of all weather construction and shall be negotiable at all times.

(3) Load limits on bridges and on-site roads shall be sufficient to support all traffic loads generated by the use of the facility.

(d) Storm water control. The owner or operator of each C&D landfill shall design and construct a storm water control system.

(1) The storm water control system shall prevent flow onto the active area of the landfill of discharge resulting from the 25-year, 24-hour storm and lesser storms.

(2) The system shall consist of trenches, conduits, berms, and proper grading, as needed.

(3) The system shall control erosion of cover materials.

(4) Storm water discharge from the permitted property shall be reduced to predevelopment discharge rates and nonerosive velocities.

(e) C&D contact water control and management. The owner or operator of each C&D landfill shall design and construct C&D contact water control and management systems that meet the following requirements:

(1) The C&D contact water control system shall control storm water runoff from the active area of the C&D landfill.

(2) The C&D contact water management system shall meet one or more of the following requirements:

(A) Storage of C&D contact water.

(i) C&D contact water shall be stored in the permitted C&D waste disposal units, or in structures or ponds on the permitted C&D waste disposal site.

(ii) The storage system shall have provisions for overflow.

(iii) The storage system may be designed to allow percolation of C&D contact water through subsurface soils.

(B) On-site treatment of C&D contact water. The treatment system shall produce water of a quality adequate for the intended use or method of disposal.

(C) Beneficial reuse of C&D contact water on the permitted C&D waste disposal site. Beneficial reuse may include the following:

(i) Wetting of on-site roads or other site areas for dust control;

(ii) irrigation of vegetated areas, not including agricultural crops intended for human or animal consumption;

(iii) distribution on C&D waste, as necessary, for fire protection; or

(iv) other uses that do not adversely impact public health, safety, and the environment.

(D) Discharge or hauling of C&D contact water to an off-site treatment facility.

(i) The operator of each C&D landfill may discharge or haul C&D contact water to the off-site treatment facility only with written permission from the owner or operator of the off-site treatment facility. As part of the permit application or permit modification application, the applicant or permittee shall submit a copy of the written permission.

(ii) The off-site treatment facility shall have all required permits and approvals required for proper treatment of the C&D contact water. As part of the permit application or permit modification application, the applicant or permittee shall submit a copy of all required permits and approvals.

(iii) Discharge of C&D contact water to the offsite treatment facility shall conform with K.A.R. 28-16-1 through K.A.R. 28-16-7.

(E) Discharge of C&D contact water to surface waters. The applicant or permittee shall be required to obtain a national pollutant discharge elimination system (NPDES) permit from the secretary.

(F) Discharge of C&D contact water to deep injection wells. The applicant or permittee shall be required to obtain a permit from the secretary for installation and operation of deep injection wells.

(3) The C&D contact water control and management system shall meet the following requirements:

(A) Operate for the entire design period, including the active operating and closure phases of the C&D landfill;

(B) allow for the management of C&D contact water during routine maintenance and repairs;

(C) have the capacity to handle the water generated from a 25-year, 24-hour storm and lesser storms;

(D) operate via gravity flow whenever possible; and

(E) be chemically resistant to the contact water expected to be produced.

(f) Phasing of landfill development. The owner or operator of each C&D landfill shall develop the landfill in phases, according to the operating plan.

(1) The phasing plan shall provide for the sequential construction, filling, and closure of discrete units or parts of units.

(2) In determining the size of each phase, the owner or operator shall consider seasonal differences in weather and the amount of C&D waste received.

(3) Each phase shall be completed by covering all exposed waste with intermediate cover.

(A) The intermediate cover shall consist of a minimum of one foot of soil and shall meet the following requirements:

(i) Limit air intrusion to control the risk of fire;

(ii) control litter; and

(iii) limit vector harborage.

(B) Alternative material, if approved by the secretary, may be used for intermediate cover. The alternative material shall consist of material acceptable for disposal in the C&D landfill and shall meet the requirements specified in paragraphs (f)(3)(A)(i) through (f)(3)(A)(iii) of this regulation.

(g) Final cover. Within six months after the last placement of waste in the unit, the owner or operator shall construct a final cover in accordance with the approved facility closure plan.

(1) The final cover shall include the following:

(A) A low-permeability layer consisting of a minimum of 18 inches of compacted soil having permeability equal to or less than the natural subsoils or the constructed liner, and no greater than 1×10^{-5} centimeters per second; and

(B) a protective soil layer consisting of a minimum of 12 inches of topsoil and appropriate vegetative cover.

(2) The final cover shall be graded with a minimum slope of two percent and a maximum slope of 3:1, horizontal to vertical.

This regulation shall take effect 90 days after publication in the Kansas register. (Authorized by and implementing K.S.A. 65-3406; effective March 17, 2004.)

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