

# **Kansas Administrative Regulations**

## **Department of Health and Environment**

### **Article 29.—Solid Waste Management**

#### **28-29-302. Construction and demolition (C&D) landfill location restrictions.**

This regulation shall apply to each new C&D landfill and to each expansion of an existing C&D landfill that requires a permit modification.

(a) Definitions. For the purposes of this regulation, the following definitions shall apply:

(1) "Application" shall mean a permit application for a new C&D landfill or a permit modification application for the expansion of an existing C&D landfill.

(2) "New C&D unit" shall mean a new C&D landfill or the expansion of an existing C&D landfill.

(b) Floodplains.

(1) Each new C&D unit shall be located outside the 100-year floodplain, unless the applicant submits, as part of the application, one of the following:

(A) Justification that the location of the new C&D unit will not cause any of the following:

- (i) Restriction of the flow of the 100-year flood;
- (ii) reduction of the temporary water storage capacity of the floodplain; or
- (iii) washout of the C&D waste; or

(B) a statement from the U.S. army corps of engineers, if the site is under its jurisdiction, and a statement from the Kansas department of agriculture, division of water resources, indicating that neither of the following, if likely to occur as a result of the location of the new C&D unit, will adversely affect public health, safety, or the environment:

- (i) Restriction of the 100-year flood; and
- (ii) reduction of the temporary water storage capacity of the floodplain.

(2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to the floodplain from the following agencies:

- (A) The U.S. army corps of engineers; and
- (B) the Kansas department of agriculture, division of water resources.
- (c) Protection of threatened or endangered species.

(1) For the purposes of this subsection, the following definitions shall apply:

(A) "Destruction or adverse modification" means a direct or indirect alteration of critical habitat that appreciably diminishes the likelihood of the survival and recovery of threatened or endangered species using that habitat.

(B) "Endangered species" means any species listed as such pursuant to the endangered species act, as referenced in K.S.A. 32-958, and amendments thereto.

(C) "Taking" means harassing, harming, pursuing, hunting, wounding, killing, trapping, capturing, or collecting, or attempting to engage in such conduct.

(D) "Threatened species" means any species listed as such pursuant to the endangered species act, as referenced in K.S.A. 32-958, and amendments thereto.

(2) Each new C&D unit shall be located to meet both of the following requirements:

(A) The new C&D unit shall not cause or contribute to the taking of any endangered or threatened species.

(B) The new C&D unit shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species.

(3) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to threatened or endangered species from the following agencies:

- (A) The U.S. fish and wildlife service;
- (B) the Kansas department of wildlife and parks; and
- (C) the Kansas biological survey.
- (d) Surface waters.

(1) For purposes of this subsection, "surface waters" shall have the meaning specified in K.A.R. 28-16-28b.

(2) A new C&D unit shall not be located in any surface waters.

(3) A new C&D unit shall not cause or contribute to significant degradation of surface waters. As part of the application, the applicant shall provide the following information:

- (A) Identification of all surface waters within one-half mile of the property boundary;
- (B) the erosion, stability, and migration potential of materials used to construct the new C&D unit;
- (C) the volume and characteristics of the waste to be managed in the new C&D unit;
- (D) the impact on fish, wildlife, and other aquatic resources and their habitat from the release of C&D waste or C&D contact water;
- (E) the potential effects of a catastrophic release of C&D waste or C&D contact water to the surface water and the resulting impact on the environment; and
- (F) any additional information relative to the site that concerns the protection of ecological resources in surface waters.

(4) As part of the application, the applicant shall provide information verifying that the total area of wetlands, as defined by acreage and function, will be preserved by one or more of the following practices:

- (A) Avoiding impact on the wetlands to the maximum extent practicable;
- (B) minimizing impact on the wetlands to the maximum extent practicable; and
- (C) offsetting unavoidable wetland impact through all appropriate and practicable compensatory mitigation actions, including the restoration of existing degraded wetlands or creation of manmade wetlands.

(5) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to surface waters from the following agencies:

- (A) The U.S. army corps of engineers;
- (B) the U.S. fish and wildlife service;
- (C) the Kansas department of agriculture, division of water resources;
- (D) the Kansas department of wildlife and parks; and
- (E) the Kansas biological survey.
- (e) Buffer zones.

(1) Each new C&D unit shall be located at least 500 feet from each dwelling, school, or hospital that was occupied on the date when the department first received the

application, unless the owner of the dwelling, school, or hospital consents in writing to the siting of the C&D unit less than 500 feet from the dwelling, school, or hospital.

(2) Each new C&D unit shall be located a minimum of 150 feet from the property line.

(3) The applicant may petition the secretary for a reduction of the buffer zone distances, if the county commission of the county in which the landfill is located approves the request.

(4) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to buffer zones from the following agencies:

(A) The Kansas state conservation commission;

(B) the Kansas corporation commission; and

(C) the Kansas water office.

(f) Navigable streams and public drinking water supplies.

(1) Each new C&D unit shall be located according to the requirements of K.S.A. 65-3407, and amendments thereto.

(2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to public drinking water supplies from the department's bureau of water.

(g) Vertical separation from groundwater.

(1) At each new C&D unit, there shall be a minimum vertical separation of five feet from the lowest point of the unit to the highest predicted groundwater elevation, based on historical data or site conditions, in the uppermost aquifer underlying the disposal area. The minimum vertical separation shall be provided by naturally occurring, in-situ soil or geologic material, or alternative material that ensures the protection of public health, safety, and the environment.

(2) As part of the application, the applicant shall submit one of the following:

(A) On-site groundwater elevations and a prediction, based on historical data or site conditions, of the highest groundwater elevation in the uppermost aquifer underlying the disposal area; or

(B) other evidence that the highest groundwater elevation in the vicinity is five feet or more from the lowest point of the C&D landfill.

(h) Unstable areas.

(1) For purposes of this subsection, the following definitions shall apply:

(A) "Areas susceptible to mass movement" means those areas of influence, including areas characterized as having active, or a substantial possibility of, mass movement, where the movement of earth material at, beneath, or adjacent to the C&D landfill, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Mass movement shall include the following:

- (i) Landslides;
- (ii) avalanches;
- (iii) debris slides and flows;
- (iv) solifluction;
- (v) block sliding; and
- (vi) rock falls.

(B) "Karst terrain" means an area where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. The physiographic features characteristic of karst terrains may include the following:

- (i) Sinkholes;
- (ii) sinking streams;
- (iii) caves;
- (iv) large springs; and
- (v) blind valleys.

(C) "Poor foundation areas" means those areas where features exist that indicate that a natural or human-induced event could result in inadequate foundation support for the structural components of a C&D landfill.

(D) "Structural components" means liners, leachate collection systems, final covers, run-on systems, runoff systems, and any other component used in the construction and operation of the C&D landfill that is necessary for protection of public health, safety, and the environment.

(E) "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the C&D landfill structural components used to prevent releases from a landfill. This term shall include poor foundation areas, areas susceptible to mass movements, and karst terrains.

(2) As part of the application, the applicant for each C&D landfill shall submit an assessment of the stability of the area and shall consider the following factors when determining whether or not an area is unstable:

- (A) On-site or local conditions that could result in significant differential settling;
- (B) on-site or local geologic or geomorphologic features; and
- (C) on-site or local human-made features or events, both surface and subsurface.

(3) As part of the application, the applicant for each C&D landfill proposed to be located in an unstable area shall provide information verifying that engineering measures have been incorporated into the C&D landfill's design to ensure that the integrity of the structural components of the C&D landfill will not be compromised.

(4) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to stability from the Kansas geological survey.

(i) Cultural resources.

(1) Each new C&D unit shall be located so that the unit does not pose a threat of harm or destruction to the essential features of an irreplaceable historic or archaeological site that is listed on the Kansas state register of historic sites, pursuant to K.S.A. 75-2721 and amendments thereto.

(2) As part of the application, the applicant shall submit an approval or exemption for the siting of the new C&D unit with respect to cultural resources from the Kansas state historical society.

(j) Waivers. The requirement to submit a specific approval, exemption, or demonstration as part of the permit application may be waived by the secretary. 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.)