

Kansas Administrative Regulations

Department of Health and Environment

Article 29.—Solid Waste Management

28-29-1604. Land-spreading; conditions for disposal.

Disposal of drilling waste by land-spreading shall be approved by the KCC only if the operator has certified, and provided supporting documentation if required by K.A.R. 28-29-1602, that the drilling waste and the disposal site meet all of the following conditions:

(a) Drilling waste. The drilling waste meets both of the following conditions:

(1) The drilling mud that will be used in each well that will produce the drilling waste is water-based drilling mud.

(2) The predicted NORM level, as defined in K.A.R. 28-29-1600, meets both of the following conditions:

(A) The maximum predicted NORM level is no more than 1.5 times the highest NORM level found in drilling waste samples collected from Kansas wells.

(B) The maximum predicted NORM level is no more than 370 Bq/kg (10 pCi/g).

(b) Previous land-spreading. No land-spreading has occurred at the disposal site in the past three years.

(c) Soil chloride concentration. The chloride concentration in the soil at the disposal site is less than the following:

(1) 300 parts per million (ppm) if the disposal site has previously been used for land-spreading; and

(2) 500 ppm if the disposal site has not previously been used for land-spreading.

(d) Buffer zones. The disposal site is located as follows:

(1) At least 100 feet from each of the following:

(A) Each intermittent stream; and

(B) each drainage swale, ditch, or other physical feature that channels overland flow;

(2) at least 200 feet from each of the following:

(A) The property boundary, unless the adjacent property ownership and use are the same as the property ownership and use of the disposal site;

(B) each perennial stream; and

(C) each freshwater pond, lake, and wetland;

(3) at least 500 feet from each habitable structure;

(4) at least 1,000 feet from each water well that is being used or could be used for domestic or agricultural purposes. If the applicant demonstrates to the KCC that the disposal site is hydrogeologically downgradient from the water well, this distance may be reduced to 500 feet; and

(5) one-half mile or more from each actively producing water well that is used for municipal purposes.

(e) Physical characteristics. The disposal site meets the following conditions:

(1) The maximum slope at the site is eight percent or less.

(2) The depth of unconsolidated material at the surface is at least 24 inches.

(3) Within the top six feet below the surface, there is at least one layer of soil that meets all of the following conditions:

(A) Is continuous across the site;

(B) is at least 12 inches thick;

(C) is above the shallowest consolidated layer; and

(D) consists of one or more of the following soil textures:

(i) Clay, silty clay, or sandy clay;

(ii) silt; or

(iii) loam, clay loam, silty clay loam, sandy clay loam, silt loam, fine sandy loam, or sandy loam.

(4) Based on historical data or site conditions, the groundwater elevation in the uppermost aquifer underlying the disposal site is at least 10 feet below the ground surface.

(f) Irrigation. If the disposal site is irrigated, the chloride concentration of the irrigation water is less than 350 ppm.

(g) Contamination. There is no chloride groundwater contamination below the disposal site, based on the chloride contamination map provided by the KCC.

(Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)

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