

# **Kansas Administrative Regulations**

## **Department of Health and Environment**

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

#### **28-29-1602. Land-spreading; application.**

Each operator that submits an application shall provide the operator name and the lease name on each part of the application that is not submitted directly on the forms provided by the KCC. The operator shall include the following items in the application:

- (a) A nonrefundable application fee, as specified in K.S.A. 65-3407c and amendments thereto;
- (b) certification that the drilling waste or the disposal site meets each of the following conditions:
  - (1) The drilling mud that will be used in each well that produces the drilling waste is water-based drilling mud;
  - (2) the predicted NORM level of the drilling waste meets the requirements of K.A.R. 28-29-1604. The operator shall submit an affidavit and supporting documentation as required by K.A.R. 28-29-1602(d)(7);
  - (3) no land-spreading has occurred at the disposal site in the past three years;
  - (4) the chloride concentration in the soil at the disposal site meets the requirements of K.A.R. 28-29-1604;
  - (5) the location of the disposal site meets the buffer zone requirements of K.A.R. 28-29-1604;
  - (6) the maximum slope at the site is eight percent or less;
  - (7) the depth of unconsolidated material at the surface is at least 24 inches;
  - (8) the soil at the site meets the requirements of K.A.R. 28-29-1604;
  - (9) 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;
  - (10) if the disposal site is irrigated, the chloride concentration of the irrigation water is less than 350 ppm; and

(11) there is no chloride groundwater contamination below the disposal site, based on the chloride contamination map provided by the department;

(c) for the operator, the following information:

(1) Operator license number;

(2) name;

(3) mailing address; and

(4) the following information about the contact person for the application:

(A) Name;

(B) telephone number;

(C) facsimile number, if available; and

(D) electronic mail address, if available;

(d) for each well from which drilling waste will be generated, the following information:

(1) If the well is permitted in a state other than Kansas, the name and telephone number of the state authority that permitted the well;

(2) the location of the well, including the following:

(A) The state and county in which the well is located;

(B) the legal description of the well;

(C) the number of feet the well is located from the north or south section line and the east or west section line; and

(D) the latitude and longitude of the well, which shall be determined using GPS;

(3) the lease name;

(4) the well number;

(5) the American petroleum institute (API) number;

(6) the expected spud date, as defined in K.A.R. 82-3-101;

(7) an affidavit on a form provided by the KCC, according to the following requirements:

(A) The operator shall certify that the predicted NORM level of the drilling waste meets both of the following conditions:

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

wells. A summary of NORM levels found in drilling waste samples collected from Kansas wells shall be maintained by the department and provided to any person upon request; and

(ii) the maximum predicted NORM level in the drilling waste is no more than 370 Bq/kg (10 pCi/g);

(B) the operator shall make the certification based upon data from wells drilled through the same geological formations as those of the well identified in the land-spreading application; and

(C) the operator shall include on the affidavit the maximum predicted NORM level of the drilling waste, according to the following:

(i) If the well will be drilled through formations for which the department has summarized and provided data, the operator may use this data to determine the maximum predicted NORM level of the drilling waste;

(ii) if the well will be drilled through formations for which the department has not summarized and provided data, the operator shall submit to the KCC all information available to the operator that can be used to predict the maximum NORM level in the drilling waste; and

(iii) if the NORM level of a formation is dependent on geographic location, the operator shall use that information to determine the maximum predicted NORM level of the drilling waste;

(8) a list of the expected components of the drilling mud and a detailed list of all additives, including the product name and the constituents of each additive; and

(9) a sampling and analysis plan that meets the requirements of K.A.R. 28-29-1605 to determine the chloride concentration of the drilling waste. The plan shall describe the following:

(A) The sampling rate;

(B) the procedures that will be used to collect the samples; and

(C) the procedures that will be used to prepare the samples for analysis;

(e) for the proposed disposal site, the following information:

(1) The name and mailing address of the property owner;

(2) the size of the site, as measured in acres;

(3) the legal description of the site;  
(4) a description of current land use at the site and surrounding areas;  
(5) documentation of all land-use restrictions and zoning restrictions for the site;  
(6) documentation of all local permits that are required for land-spreading at the site;  
(7) the distance and direction from the site to the nearest habitable structure;  
(8) if the site is irrigated, the chloride concentration in the irrigation water in parts per million. The concentration shall be determined by a laboratory that is accredited for chloride analysis by the secretary;

(9) the depth to the water table and a description of how the depth was determined;

(10) the direction of groundwater flow under the site, if known;

(11) an aerial map of the site. The map shall be detailed enough to locate the site or to determine directions to the site from the nearest highway and shall include the following:

(A) A north arrow and scale;

(B) the location of the site and the property boundaries; and

(C) each of the following features if that feature is located within one-half mile of the site:

(i) Habitable structures;

(ii) waters of the state;

(iii) perennial and intermittent streams;

(iv) ponds, lakes, and wetlands;

(v) domestic water wells;

(vi) municipal wells;

(vii) drainage swales, ditches, and all other physical features that channel overland flow; and

(viii) all other relevant features;

(12) a topographic map of the site that shows the slope of the ground to be used for land-spreading;

(13) a cell identification map that shows a grid dividing the site into cells. Each cell shall cover an area of no more than 10 acres. The map shall include the following information:

- (A) The legal description of the site;
- (B) the county in which the site is located;
- (C) delineation of the boundary of the land-spreading area and each cell within the land-spreading area, based on one or both of the following:
  - (i) Physical references and measurements; or
  - (ii) GPS measurements;
- (D) a unique label for each cell;
- (E) the location of each soil sample that was collected to provide information for the application;
- (F) the chloride concentration of the soil within each cell, as determined according to the requirements of K.A.R. 28-29-1603;
- (G) the soil texture or textures of the site, as determined according to the requirements of K.A.R. 28-29-1603;
- (H) the depth of unconsolidated material at the site;
- (I) the areas that receive irrigation;
- (J) the areas where vegetation will be established;
- (K) the areas where conditions to support crops will be established;
- (L) the areas where land restoration, other than establishing vegetation or conditions to support crops, is planned;
- (M) the property boundaries;
- (N) the ownership and use of adjacent properties; and
- (O) the buffer zones required by K.A.R. 28-29-1604;
- (14) documentation and analyses supporting all of the chloride concentration and soil texture information provided on the cell identification map, including laboratory chain-of-custody documents; and
- (15) a copy of the United States department of agriculture's soil survey map for the site;
- (f) documentation that the owner of the proposed disposal site has agreed to the land-spreading, which shall be submitted on a form provided by the KCC;

(g) a site access agreement that grants access to the proposed disposal site to the department and the KCC for the purposes of observation, inspection, and sampling, which shall be submitted on a form provided by the KCC;

(h) a description of the proposed land-spreading procedures, including descriptions of the following:

(1) The manner in which the drilling waste will be stored at the site of generation;

(2) the processes and equipment that will be used to spread the drilling waste at the land-spreading site;

(3) the manner in which the equipment will be operated to ensure that the drilling waste is spread at the approved rate. The description shall include information on the boom width, flow rate, ground speed, and all other factors that will be used to control the land-spreading rate; and

(4) if the operator is required by K.A.R. 28-29-1607 to incorporate the drilling waste into the soil, the processes and equipment that will be used to incorporate the drilling waste into the soil;

(i) a contingency plan that describes how drilling waste will be managed if land-spreading is not allowed due to either of the following:

(1) Weather restrictions; or

(2) the drilling waste exceeding the composition limitations specified in K.A.R. 28-29-1607;

(j) a plan describing how the land-spreading area will be restored after land-spreading, including establishment of vegetation or conditions to support crops. If the land-spreading area is not cropland, the plan shall include the erosion-control measures that will be implemented until vegetation is established; and

(k) any other relevant information required by the KCC to evaluate the application.  
(Authorized by and implementing K.S.A. 2012 Supp. 65-3407c; effective Oct. 11, 2013.)