

Kansas Administrative Regulations

Department of Health and Environment

Article 29.—Solid Waste Management

28-29-1605. Land-spreading; sampling and analysis of drilling waste.

Each operator that conducts land-spreading shall meet all of the following requirements:

(a) Samples of the drilling waste shall be collected using a procedure that ensures that the samples are representative of the waste.

(b) Samples shall be collected according to the following rates:

(1) For drilling waste stored in tanks, at least one sample from each tank;

(2) for earthen pits containing not more than 12,500 barrels of drilling waste, at least four samples, each from a different quadrant of the pit; and

(3) for earthen pits containing more than 12,500 barrels of drilling waste, at least one sample from each quadrant of the pit, plus at least one additional sample for every additional 1,000 barrels of drilling waste contained in the pit.

(c) Samples of the drilling waste shall be analyzed for chloride concentration in parts per million by one of the following methods:

(1) Sending the samples to a laboratory that meets at least one of the following conditions:

(A) The laboratory is accredited for chloride analysis by the secretary; or

(B) the laboratory is a participant in the North American proficiency testing program for chloride analysis; or

(2) performing a field analysis of the samples. For calculating land-spreading rates, each chloride concentration determined using field analysis shall be multiplied by 1.2, as specified in the land-spreading worksheet.

(d) If the drilling waste is analyzed in the field, all of the following requirements shall be met:

(1) One or more of the following methods shall be used to analyze the drilling fluid filtrate:

(A) Silver nitrate titration;

(B) mercuric nitrate titration;

(C) direct measurement using a chloride ion selective electrode;

(D) calculation of concentration based on electrical conductivity, using the equations $EC \times 0.64 = TDS$ and $TDS \times 0.61 = CC$, where EC means electrical conductivity in micromhos or microsiemens per centimeter, TDS means total dissolved solids, and CC means chloride concentration in parts per million; or

(E) an alternate field method proposed by the operator and approved in writing by the director of the KCC's conservation division.

(2) Each analysis shall be accompanied by the following information:

(A) The manufacturer's information sheet for the equipment that will be used;

(B) the calibration requirements for the equipment;

(C) the methods that will be used to prepare the sample for testing;

(D) the chloride concentration range of the method; and

(E) any limitations of the method.

(3) The operator shall ensure that each person that analyzes drilling waste in the field is qualified to perform each analysis. The operator shall maintain documentation of the qualifications, including training and experience, of each person that analyzes drilling waste in the field.

(4) All equipment that is used for analyzing drilling waste in the field shall be calibrated according to the manufacturer's instructions before the analyses are conducted. For each piece of equipment, a log documenting all calibrations shall be maintained.

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

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