Kansas Administrative Regulations

Department of Health and Environment

Article 16.—Water Pollution Control—Municipal, Commercial and Industrial Wastewater Lagoon Requirements.

28-16-165. Municipal, commercial, and industrial soil liners: postconstruction testing.

(a) Each permit applicant or permittee proposing a new municipal, commercial, or industrial wastewater treatment lagoon that will employ a soil liner system shall, when submitting construction plans and specifications to KDHE for review and consideration for approval, also submit information addressing each method to be employed for postconstruction testing of the soil liner for compliance with the required maximum soil liner seepage rate. Each proposed test method shall provide an appropriate degree of monitoring sensitivity and accuracy in addressing the following test variables:

(1) The maximum soil liner seepage rate;

(2) the surface area of the lagoon being tested;

(3) the proposed duration of the test;

(4) the time of year and general weather conditions expected during the test period;

(5) the proposed monitoring equipment;

(6) the expected magnitude of evaporation during the test period;

(7) the degree that wind and wave action will impact measurement accuracy; and

(8) the frequency of data collection during the test period.

(b) Within 45 days following the completion of construction, the permittee or applicant shall submit to the department a certification and, if requested, any supporting documentation, confirming that the wastewater lagoon and the wastewater lagoon liner system were constructed in accordance with the plans and specifications approved by the secretary.

(c) The certification specified in subsection (b) shall be signed by a licensed professional engineer who monitored the construction activities and installation of the soil liner system. The certification shall be based on actual observations by the licensed

professional engineer, or designee, during construction and any field or laboratory data developed during or following construction.

The construction activities and any sample collection for field or laboratory data developed during or following construction shall be directly observed by the licensed professional engineer or designee. The monitoring of construction activities or the collection of samples or data shall be conducted by the licensed professional engineer or a designee under the licensed professional engineer's direct supervision.

(d)(1) Within eight months following approval by the secretary to initiate the filling or use of the wastewater lagoon, the permittee or permit applicant shall conduct and report, to KDHE, the results of the postconstruction testing of the soil liner for compliance with the required maximum soil liner seepage rate. This report shall meet the requirements specified in paragraph (d)(2). If the required maximum soil liner seepage rate can not be met, the report submitted to KDHE for review and consideration for approval shall provide a plan and schedule of proposed actions required to achieve compliance.

(2) The postconstruction testing specified in paragraph (d)(1) shall be conducted in conformance with the method or methods approved by the secretary to ensure the protection of public health and the environment. The postconstruction testing of the soil liner shall be conducted by a licensed professional engineer or a designee under the licensed professional engineer's direct supervision.

The permittee or permit applicant shall provide a certification signed by the licensed professional engineer as to whether or not the soil liner meets the required maximum soil liner seepage rate.

(e) Each permit applicant, when directed by the secretary, shall notify the department a minimum of two days before performing any soil liner seepage testing to allow the opportunity for department staff to witness the test.

(f) Postconstruction testing shall not be required for erosion-control sediment ponds associated with construction activities.

(Authorized by K.S.A. 2004 Supp. 65-171d and K.S.A. 65-171h; implementing K.S.A. 65-164, K.S.A. 65-165, K.S.A. 65-166, K.S.A. 65-170b, K.S.A. 2004 Supp. 65-171d, and K.S.A. 65-171h; effective May 20, 2005.)

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