Kansas Administrative Regulations

Department of Health and Environment

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

28-16-161. Municipal and commercial lagoons: general provisions.

The following general provisions shall apply to municipal and commercial wastewater treatment system lagoons. (a) New or modified municipal or commercial wastewater treatment system lagoons shall be prohibited if the groundwater separation distance between the lagoon bottom and the groundwater table is 10 feet or less.

(b) For each new or modified lagoon, the permittee may employ a constructed soil liner if the maximum soil liner seepage rate is less than ¼ inch per day and the lagoon is not constructed over sensitive groundwater areas, including the Equus Beds.

(c) For each new or modified lagoon constructed over sensitive groundwater areas, excluding the Equus Beds, the permittee may employ a constructed soil liner if the maximum soil liner seepage rate is less than $\frac{1}{10}$ inch per day.

(d) For each new or modified lagoon constructed over the Equus Beds, the permittee shall, at a minimum, employ a single impermeable synthetic membrane liner and provide for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171. Constructed soil liners may be employed if all of the following conditions are met:

(1) The groundwater separation distance between the lagoon bottom and the groundwater table is greater than 10 feet.

(2) The hydrogeologic information developed for the site indicates that in situ soils exist in sufficient quantity to provide an effective pollution barrier to protect groundwater.

(3) A constructed soil liner will provide a maximum soil liner seepage rate of less than $\frac{1}{10}$ inch per day.

(4) The design provides for the installation and sampling of groundwater monitoring wells as specified in K.A.R. 28-16-171.

(e) For each new or modified lagoon, the permittee may utilize a single impermeable synthetic membrane liner, in lieu of a constructed soil liner.

(f) Municipal and commercial wastewater treatment system lagoons in existence on the effective date of this regulation shall not be required to be modified or retrofitted to comply with the provisions of this regulation, unless either of the following occurs:

(1) The secretary determines that environmental or public health threats result from the operation of the lagoon, or data exists showing the actual or potential soil or water pollution.

(2) The modification, replacement, or expansion of a municipal or commercial wastewater lagoon results in the lagoon being dewatered, and the secretary orders the implementation of specific lagoon improvements to address conditions that result in noncompliance with statutory, regulatory, or permit requirements or that fail to ensure protection of public health or the environment. The permittee shall implement the specific improvements required by the secretary.

(g) For the purpose of K.A.R. 28-16-160 through K.A.R. 28-16-174, an actual or potential environmental or public health threat may be deemed to exist if physical, chemical, biological, or radiological substances, or a combination of these substances, is released into subsurface waters of the state and results in a concentration or amount of a substance in excess of the numerical criteria designated for aquatic life protection, agricultural use, or public health protection as provided in the "Kansas surface water quality standards: tables of numeric criteria," dated December 6, 2004, which is adopted by reference in K.A.R. 28-16-28e. If the background concentration of a substance is naturally occurring and is greater than the numerical criteria, the background concentration shall be considered the criteria.

(h) No person shall construct, operate, or maintain any municipal or commercial wastewater lagoon without obtaining a permit or permit modification from the department.

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

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