Kansas Administrative Regulations

Department of Health and Environment

Article 16.—Water Pollution Control—Surface Water Quality Standards.

28-16-28c. General provisions.

(a) Antidegradation.

(1) General purpose waters.

(A) Levels of water quality in surface waters of the state shall be maintained to protect the existing uses of those surface waters.

(B) For all surface waters of the state, if existing water quality is better than applicable water quality criteria established in K.A.R. 28-16-28b through 28-16-28g, that existing water quality shall be fully maintained and protected.

Water quality may be lowered only if the secretary finds, after full satisfaction of the intergovernmental coordination and public participation requirements on antidegradation contained in the "Kansas antidegradation policy," as adopted by reference in K.A.R. 28-16-28b, that a lowering of water quality is needed to allow for important social or economic development in the geographical area in which the waters are located.

In allowing the lowering of water quality, the maintenance and protection of existing uses shall be ensured, and the highest statutory and regulatory requirements for all new and existing point sources of pollution and all cost-effective and reasonable best management practices for nonpoint sources of pollution shall be achieved.

(2) Exceptional state waters. Wherever surface waters of the state constitute exceptional state waters, discharges shall be allowed only if existing uses and existing water quality are maintained and protected.

(3) Outstanding national resource waters. Wherever surface waters of the state constitute an outstanding national resource water, existing uses and existing water quality shall be maintained and protected. New or expanded discharges shall not be allowed into outstanding national resource waters.

(4) Threatened or endangered species. No degradation of surface water quality by artificial sources of pollution shall be allowed if the degradation will result in harmful effects on populations of any threatened or endangered species of aquatic or semiaquatic life or terrestrial wildlife or its critical habitat as determined by the secretary of the department of wildlife, parks, and tourism pursuant to K.S.A. 32-960, and amendments thereto, K.A.R. 115-15-3, or the federal endangered species act, 16 U.S.C. Section 1532 et seq., as in effect on July 1, 2012.

(5) Temporary discharges. Temporary sources of pollution meeting the requirements of subsection (d) of this regulation and K.A.R. 28-16-28e, producing only ephemeral surface water quality degradation not harmful to existing uses, may be allowed by the department.

(6) Thermal discharges. Implementation of these antidegradation provisions for thermal discharges shall be consistent with the requirements of 33 U.S.C. Section 1326, as in effect on July 1, 2012.

(7) Implementation. Implementation of these antidegradation provisions shall be consistent with the "Kansas antidegradation policy," available upon request from the department.

(b) Mixing zones.

(1) General limitations. Mixing zones shall not extend across public drinking water intakes, stream tributary mouths, or swimming or boat ramp areas, nor shall mixing zones exist in locations that preclude the normal upstream or downstream movement or migration of aquatic organisms. Mixing zones associated with separate discharges shall not overlap unless a department-approved demonstration indicates that the overlapping will not result in a violation of the general water quality criteria specified in K.A.R. 28-16-28e or in an impairment of the existing uses of the receiving surface water. The zone of initial dilution for a mixing zone shall comprise, in terms of volume, not more than 10 percent of the mixing zone.

(2) Discharges into classified stream segments. No mixing zone within a classified stream segment, as defined in K.S.A. 2013 Supp. 82a-2001 and amendments thereto, shall extend beyond the middle of the nearest downstream current crossover point,

where the main current flows from one bank to the opposite bank, or more than 300 meters downstream from the point of effluent discharge.

(3) Effluent-dominated streams. If the ratio of the receiving stream critical low flow to the discharge design flow is less than 3:1, then the mixing zone shall be the cross-sectional area or the volumetric flow of the stream during critical low flow conditions, as measured immediately upstream of the discharge during the critical low flow.

(4) Applications. Mixing zones shall be applied in accordance with paragraphs (b)(7) and (b)(8), based on the classification and designated uses of a stream segment for individual pollutants. For surface waters classified as outstanding national resource waters or exceptional state waters, or designated as special aquatic life use waters, mixing zones for specific discharges may be allowed by the secretary in accordance with paragraphs (b)(6), (b)(7), and (b)(8)(A). Mixing zones also may be allowed if there are no aquatic life criteria for an individual pollutant.

(5) Restrictions. The right to prohibit the use of mixing zones or to place more stringent limitations on mixing zones than those stipulated in paragraphs (b)(2), (3), and (13) shall be reserved by the secretary wherever site conditions preclude the rapid dispersion and dilution of effluent within the receiving surface water or if, in the judgment of the secretary, the presence of a mixing zone would unduly jeopardize human health or any of the existing uses of the receiving surface water.

(6) Outstanding national resource waters. Mixing zones may be allowed by the secretary for existing permitted discharges in surface waters re-designated as outstanding national resource waters in the "Kansas surface water register" pursuant to K.A.R. 28-16-28g but shall be evaluated on an individual permit basis to prevent the degradation of the outstanding national resource waters.

(7) Exceptional state waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 25 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(8) General purpose waters.

(A) Special aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 25 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(B) Expected aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 50 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(C) Restricted aquatic life use waters. If the ratio of the receiving stream critical low flow to the discharge design flow is equal to or greater than 3:1, the mixing zone shall not exceed 100 percent of the cross-sectional area or volumetric flow of the receiving stream during critical low flow conditions, measured immediately upstream of the discharge during the critical low flow.

(D) Recreational uses. Mixing zones for classified surface waters designated for recreational uses may be allowed by the secretary on an individual permit basis in accordance with paragraph (b)(10).

(9) Alternate low flows. Alternate low flows may be utilized by the department as the critical low flow in the calculation of the mixing zone cross-sectional area or volumetric flow for specific water quality criteria.

(A) The 30Q10 flow for ammonia or the guaranteed minimum flow provided by a water assurance district, if applicable, shall be used by the department in the calculation of the mixing zone cross-sectional area or volumetric flow.

(B) Other alternate low flows, with a specific recurrence frequency and averaging period, shall be considered by the department if those flows will not result in excursions above aquatic life criteria more frequently than once every three years.

(C) Each proposed alternate low flow shall be subject to approval by the secretary.

(10) Alternate or site-specific mixing zones. Alternate mixing zones employing specific linear distances for mixing zones or alternate stream dilution volumes or cross-sectional areas, or both, may be allowed by the secretary. Site-specific mixing zones

may be allowed if data generated from a site-specific study supports the use of an alternate mixing zone, but maintains a zone of passage for aquatic life.

(11) Discharges into classified lakes. Mixing zones shall not extend into any lake classified as an outstanding national resource water or exceptional state water, or designated as a special aquatic life use water according to K.A.R. 28-16-28d.Mixing zones in lakes designated as expected aquatic life use water or restricted aquatic life use waters may be allowed by the department if the mixing zones do not extend farther than 50 meters from the point of effluent discharge or do not comprise more than one percent of the total volume of the receiving lake as measured at the conservation pool.

(12) Discharges into classified ponds. Mixing zones shall not extend into any classified pond.

(13) Discharges into classified wetlands. Mixing zones shall not extend into any classified wetland.

(c) Special conditions. The following special conditions shall not remove the obligation to design, build, or use pollution control structures or methods to control point sources and nonpoint sources:

(1) Low flow. Any classified stream segment may be exempted by the secretary from the application of some or all of the numeric surface water criteria specified in K.A.R. 28-16-28e if streamflow is less than the critical low flow.

(2) Effluent-created flow.

(A) For any current classified stream segment in which continuous flow is sustained primarily through the discharge of treated effluent and the segment does not otherwise meet the requirements of a classified stream in K.A.R. 28-16-28d, the discharger shall provide treatment in accordance with the federal secondary treatment regulation, 40 C.F.R. 133.102, dated July 1, 2012.

(B) This discharge shall not violate the general surface water quality criteria listed in K.A.R. 28-16-28e or impair any of the existing or attained designated uses of a downstream classified stream segment.

(C) If a use attainability analysis demonstrates that the designated uses of a surface water segment are not attainable, then the new use designations for effluent-created

flow shall be adopted as specified in K.A.R. 28-16-28d and approved by the EPA before serving as a basis for limitations in any new, reissued, or modified permit.

(d) Treatment requirements.

(1) All effluent shall receive appropriate minimum levels of treatment in accordance with 40 C.F.R. 122.44, dated July 1, 2012.

(2) Effluent shall receive a higher level of treatment than that stipulated in paragraph (d)(1) of this regulation, if the department determines that this higher level of treatment is needed to fully comply with the terms and conditions of subsection (a) of this regulation or K.A.R. 28-16-28e.

(e) Analytical testing. All methods of sample collection, preservation, and analysis used in applying K.A.R. 28-16-28b through 28-16-28g shall be in accordance with those methods prescribed by the department.

(f) Application of standards to privately owned reservoirs or ponds. The application of water quality standards to privately owned reservoirs or ponds shall be subject to the provisions of K.S.A. 65-171d, and amendments thereto.

(Authorized by K.S.A. 2014 Supp. 65-171d, K.S.A. 2014 Supp. 82a-2010, and K.S.A. 65-171m; implementing K.S.A. 2014 Supp. 82a-2002, 82a-2003, 82a-2004, and 82a-2005; effective May 1, 1986; amended, T-87-8, May 1, 1986; amended May 1, 1987; amended Aug. 29, 1994; amended July 30, 1999; amended Aug. 31, 2001; amended Jan. 3, 2003; amended Jan. 28, 2005; amended March 20, 2015.)

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