## Rules and Regulations Western Kansas Groundwater Management District No. 1 Division of Water Resources Kansas Department of Agriculture November, 2019

- **K.A.R. 5-21-1. Definitions.** As used in these rules and regulations, the following words and phrases shall have the meaning ascribed to them in this section.
- (a) "Aquifer" means a geologic water-bearing formation that will yield considerable quantities of water to wells and springs.
- (b) "Board" means the board of directors constituting the governing body of the western Kansas groundwater management district no. 1.
- (c) "Chief engineer" means the chief engineer of the division of water resources of the Kansas state board of agriculture.
  - (d) "District" means the western Kansas groundwater management district no. 1.
- (e) "Authorized representative of the board" means an individual designated by the board to perform duties and functions on its behalf.
  - (f) "Groundwater" means water below the surface of the earth.
- (g) "Substantially" means within 300 feet of the approved location, but in no case closer to other wells than the minimum spacing requirements allow.
- (h) "Tailwater" means that portion of the irrigation water applied which appears as run-off from the authorized place of use.
- (i) "Tailwater re-use system" means a facility to collect, store and transport irrigation tailwater for reapplication to the authorized place of use.
- (j) "Unconsolidated aquifer" means unconsolidated deposits that will yield water in a sufficient quantity to supply pumping wells and springs.
  - (k) "Waste of water" means any act or omission which causes:
- (1) groundwater to be diverted or withdrawn from a source of supply and not used, managed or reapplied to a beneficial use on or in connection with land authorized as the place of use by a vested right, an appropriation right or an approved application for permit to appropriate water for beneficial use;
- (2) the unreasonable deterioration of the quality of water in any source of supply thereby causing impairment of a person's right to the use of water;
- (3) groundwater intended for irrigation use to escape and drain from the authorized place of use; or
- (4) groundwater to be applied to an authorized beneficial use in excess of the needs for such use.
- (1) "Well" means any excavation that is drilled, cored, bored, washed, driven, dug or otherwise constructed when the intended use of such excavation is for the acquisition, diversion, or artificial recharge of groundwater. (Authorized by K.S.A. 82a-1028(o); effective May 1, 1979; amended May 23, 1994.)

- **K.A.R. 5-21-2. Tailwater control and waste.** No water user shall allow water which is pumped or diverted from any aquifer to leave the land under the water user's direct supervision and control. If the water is re-used, the user shall apply the water consistent with the approved application to appropriate water for beneficial use, vested right, or appropriation right. All water users shall construct and operate the water distribution systems in a manner as to prevent waste of water, and shall do everything necessary and proper to preserve the quality of the groundwater resources within the district. (Authorized by K.S.A. 1978 Supp. 82a-1028(o); effective May 1, 1979.)
- **K.A.R. 5-21-3. Well spacing requirements.** (a) Each well location described in an application for a permit to appropriate water for a beneficial use, other than domestic use, that proposes the diversion or withdrawal of water from the Ogallala aquifer shall be spaced at least 2,640 feet from all other non-domestic wells constructed into the Ogallala aquifer.
- (b)(1) Each well location described in an application for a permit to appropriate water for a beneficial use, other than domestic use, that proposes the diversion or withdrawal of water from the Dakota aquifer shall be spaced at least four miles from all other non-domestic wells constructed into the Dakota aquifer.
- (2) Each well in the Dakota aquifer shall be sealed off between the Dakota aquifer and any other aquifers in a manner that prevents migration of water to or from the Dakota aquifer and any other aquifers.
- (c) Each well included in an application for a permit to appropriate water for a beneficial use, other than domestic use, that proposes the diversion or withdrawal of water shall be at least 1,320 feet away from each domestic well constructed into the same aquifer unless the applicant has received written permission from the neighboring well owner or the applicant owns each domestic well.
- (d) The location of each well on an application for approval to change the point of diversion under an existing water right shall be no more than 1,320 feet from the originally authorized point of diversion and shall meet one of the following requirements:
- (1) Not decrease the distance to any other wells or authorized well locations by more than 300 feet; or
  - (2) meet the minimum well spacing requirements in this regulation.
- (e) Each new well shall be drilled in the location substantially as shown on the approved application and the accompanying map, plat, or aerial photograph.
- (f) Exceptions to this regulation may be granted on an individual basis by recommendation of the board in conjunction with the approval of the chief engineer. The applicant may be required by the board to submit information as it deems necessary in order to make the determination. (Authorized by and implementing K.S.A. 82a-706a and K.S.A. 2015 Supp. 82a-1028; effective May 1, 1979; amended May 23, 1994; amended March 17, 2017.)
- **K.A.R. 5-21-4. Safe yield.** (a) Except as specified in subsection (c), the district shall be closed to new appropriations of water in the portions of the unconsolidated aquifers commonly known as the Ogallala formation and the Niobrara formation that are located within the district.

The approval of each application for a change in the point of diversion shall be subject to the following requirements, if the diversion works have not been completed under the original approved application:

- (1) The proposed appropriation, when added to the vested rights, prior appropriation rights, and earlier priority applications, shall not exceed the allowable safe yield amount for the area included within a two-mile-radius circle, which is approximately 8,042 acres, of the proposed well.
- (2) For the purpose of analysis, all vested rights, certificates, permits, and prior unapproved applications shall be considered to be fully exercised, and all limitation clauses listed on permits to appropriate water and certificates shall be considered to be in force.
- (3) In the case of an application for change in the point of diversion referred to in subsection (b), each application and water right with a priority earlier than the priority established by the filing of the application for change shall be included in the analysis.
- (4) The allowable annual safe yield amount shall be calculated using the following formula:

$$Q = \frac{AR}{12}$$

Q = the allowable annual safe yield amount in acre-feet per year

A = area of consideration, within a two-mile-radius circle, approximately 8,042 acres

R = average annual recharge of 0.5 inches per year

- (5) If part of the radial area is located outside the district boundary, that part shall be included in the depletion analysis only if the chief engineer determines that hydraulically connected groundwater exists in that portion of the area outside the district. A part of the area of consideration lying outside the state of Kansas shall not be included in the analysis.
- (6) If wells authorized under a vested right, a certified water right, or a permit to appropriate water are divided by the circumference of the radial area, the authorized quantity of water shall be assigned to each well. If specific quantities are not authorized for each well, a proportional amount shall be assigned to each well.
  - (c) This regulation shall not apply to the following:
  - (1) Domestic use;
  - (2) temporary permits and term permits; and
- (3) a new application filed to appropriate groundwater in any area of the district not within an intensive groundwater use control area, meeting all of the following criteria:
- (A) The sum of the annual quantity requested by the proposed appropriation and the total annual quantities authorized by prior permits allowed because of an exemption pursuant to this subsection does not exceed 15 acre-feet in a two-mile-radius circle surrounding the proposed point of diversion.
  - (B) Well spacing criteria in the area have been met.
- (C) The approval of the application does not authorize an additional quantity of water out of an existing authorized well with a nondomestic permit or water right that would result in a total combined annual quantity of water authorized from that well in excess of 15 acre-feet.
- (D) All other criteria for approving a new application to appropriate water at that location have been met.

- (d) Exceptions to this regulation may be granted on an individual basis by recommendation by the board in conjunction with the approval of the chief engineer. The applicant may be required by the board to submit information necessary in order to make the determination. (Authorized by K.S.A. 82a-706a and K.S.A. 2009 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-708b, and K.S.A. 2009 Supp. 82a-1028; effective May 23, 1994; amended Sept. 22, 2000; amended April 15, 2011.)
- **K.A.R. 5-21-5. Battery of wells.** Within the boundaries of the district, an application for change of point of diversion from one well to a battery of wells shall not be approved unless the application meets the following criteria:
- (a) The proposed points of diversion constitute a "battery of wells" as defined in K.A.R. 5-1-1.
- (b) If the application for change has been filed pursuant to an appropriation right, the certificate shall be issued before approval of the application for change.
- (c) The maximum annual quantity and maximum instantaneous diversion rate approved shall not exceed the maximum annual quantity and the maximum instantaneous diversion rate actually used during any of the three consecutive full calendar years before the application.
- (d) The application meets the criteria for the approval of a new application. However, the wells comprising the battery of wells shall not be required to meet the well spacing requirements of K.A.R. 5-21-3 in relationship to each other. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)
- **K.A.R. 5-21-6. Water flowmeters.** (a) Except as specified in subsection (b), each well authorized within the boundaries of the district shall be equipped with a totalizing water flowmeter that is installed and maintained in accordance with the specifications in K.A.R. 5-1-4 through 5-1-12. Each water right owner shall maintain the water flowmeter so that the flowmeter functions properly whenever the diversion of water can reasonably be expected to occur. If the water flowmeter fails to function properly, the owner shall promptly initiate action to repair or replace the meter or to correct any problems with the installation.
- (b) The following types of water use shall be exempt from the requirements of this regulation:
  - (1) Domestic use; and
- (2) use pursuant to a temporary permit to appropriate water. (Authorized by K.S.A. 82a-706a and K.S.A. 2015 Supp. 82a-1028; implementing K.S.A. 82a-706c and K.S.A. 2015 Supp. 82a-1028; effective Jan. 24, 2003; amended May 27, 2016.)
- **K.A.R. 5-21-7.** (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5; implementing K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5 and K.S.A. 2001 Supp. 82a-1903, as amended by L. 2002, Ch. 137, § 7; effective Jan. 24, 2003; revoked Nov. 15, 2019.)
- **K.A.R. 5-21-8. Percent change of saturated thickness**. The map titled Apercent change in saturated thickness of the High Plains aquifer, west central Kansas, 1950 to average 1997-1999@ and

designated as the Kansas geological survey open file report 2000-15B, dated July 25, 2000, is hereby adopted by reference. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)

**K.A.R. 5-21-9. Saturated thickness.** The map titled Asaturated thickness of unconsolidated aquifer, west central Kansas average 1997-1999@ and designated as the Kansas geological survey open file report 2000-15A, dated July 25, 2000, is hereby adopted by reference. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)