

Rules and Regulations
Big Bend Groundwater Management District No. 5
Division of Water Resources
Kansas Department of Agriculture
June, 2016

K.A.R. 5-25-1. Definitions. As used in these regulations for the Big Bend groundwater management district no. 5, unless the context clearly requires otherwise, the following words and phrases shall have the meaning ascribed to them in this regulation:

(a) **AAquifer@** means a geologic formation capable of yielding water in a quantity sufficient to supply water to a spring or pumping well.

(b) **ABaseflow@** means groundwater that seeps, flows, or is otherwise naturally discharged from an aquifer into a stream.

(c) **ABaseflow node@** means an artificial point located in the channel of a stream for the purpose of allocating a proportional amount of the baseflow to be considered when evaluating a new application to appropriate water from a proposed point of diversion located within two miles of the node.

(d) **ABaseflow node allocation@** means the annual quantity of water assigned to a baseflow node expressed in acre-feet per year. The baseflow node allocation shall be based on the natural discharge to a stream, which shall be the rate of flow in the stream that is equaled or exceeded 90 percent of the time.

(e) **ABedrock aquifer@** means any consolidated material and unconsolidated material that is older than the Dakota formation of the Dakota aquifer system, as defined in K.A.R. 5-1-1, and that will yield water in a quantity sufficient to supply a spring or a pumping well.

(f) **ABoard@** means the board of directors constituting the governing body of the Big Bend groundwater management district no. 5.

(g) **ADakota aquifer@** means that portion of the Cretaceous Dakota formation that is capable of yielding water in a quantity sufficient to supply water to a spring or pumping well.

(h) **ADistrict@** means the Big Bend groundwater management district no. 5.

(i) **ANeat cement@** means one 94-pound bag of Portland cement mixed with five to six gallons of clean water.

(j) **APortland cement@** means class A, type I cement.

(k) **AStream@** means any watercourse, or part of a watercourse, with a well-defined bed and banks that flows continuously during the calendar year, except during a drought.

(l) **ASustainable yield@** means the long-term yield of the source of supply, including hydraulically connected surface water or groundwater, allowing for the reasonable raising and lowering of the water table.

(m) **AWell@** means any excavation that is drilled, cored, bored, washed, driven, dug, or otherwise constructed, either by nature or by man, when the proposed use of the excavation is for the acquisition, diversion, or artificial recharge of groundwater. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1980; amended May 1, 1987; amended April 19, 1996; amended Oct. 31, 2003.)

K.A.R. 5-25-2. Well spacing. (a) With the exception of those wells described in subsection (b), the minimum spacing of all wells described in an application to appropriate water for beneficial use, other than those wells for domestic use, shall be 1,320 feet from the following:

- (1) All other non-domestic wells and proposed non-domestic wells that carry an earlier priority; and
- (2) baseflow nodes.

Non-domestic wells shall be 660 feet from all existing domestic wells, except those domestic wells owned by the applicant.

(b)(1) Each replacement well drilled within 100 feet of the originally authorized point of diversion shall be exempt from the well spacing requirement of subsection (a).

(2) Each non-domestic well that proposes the withdrawal of groundwater from the Dakota aquifer or any bedrock aquifer shall be one mile from all other wells withdrawing groundwater from the same formation, including domestic wells, except those domestic wells owned by the applicant. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1980; amended April 19, 1996; amended Oct. 31, 2003.)

K.A.R. 5-25-2a. Change in point of diversion. (a) The location of a well requested in an application to change a point of diversion shall be no more than 2,640 feet from the point of diversion currently authorized by a vested right, appropriation right, or an application to appropriate water for beneficial use. This well shall also meet the minimum spacing requirement established in K.A.R. 5-25-2. If the point of diversion was not completed at the currently authorized point of diversion, the location of a well requested in an application to change the point of diversion shall be no more than 2,640 feet from the last authorized point of diversion for which the diversion works were completed.

(b) If the current authorization for a well requires one or more observation wells to be installed in accordance with K.A.R. 5-25-10, then the approval of an application for a change in the point of diversion shall also require the installation of one or more new observation wells in accordance with K.A.R. 5-25-10 if either of the following conditions exists:

(1) The well is proposed to be located 300 feet or more from the currently authorized well location.

(2) The well is proposed to be located more than 50 feet and less than 300 feet from the currently authorized well location, and the water quality analysis required pursuant to K.A.R. 5-25-10 shows that the chloride concentration exceeds 500 milligrams per liter (mg/l) at the currently authorized well location.

(c) The number and location of test holes or observation wells required for the approval of an application to change the point of diversion from a single well to a battery pursuant to subsection (b) shall be based on the locations and the number of wells in the proposed battery. Hydrologic factors, including groundwater flow direction, lithology, and chlorides at the location, shall be considered.

(d) An approval of an application to change the point of diversion shall not authorize the proposed well to be completed in an aquifer other than the aquifer or aquifers in which the currently

authorized well was authorized to be completed. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-3. Reasonable appropriation. (a) An application for a permit to appropriate water for irrigation use shall not be recommended by the board for approval for a quantity in excess of those quantities specified in K.A.R. 5-3-19.

(b) For livestock and poultry, the maximum annual quantity of water shall be limited to those quantities specified in K.A.R. 5-3-22.

(c) For all uses of water, the quantity of water requested shall be reasonable for the proposed beneficial use, and the approval shall neither impair an existing right nor prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-711, and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1980; amended April 19, 1996; amended Oct. 31, 2003.)

K.A.R. 5-25-4. Sustainable yield. (a) Except as set forth in subsections (b) and (c), the district has been determined to be appropriated to the sustainable yield level, and therefore the entire district shall be closed to further new surface water and groundwater appropriations filed on or after December 17, 1998.

(b) The following types of applications shall be exempt from the closure of the district to new appropriations of water described in subsection (a):

- (1) Domestic use;
- (2) temporary permits;
- (3) applications for a change in the point of diversion for which the diversion works have been completed under the original approved application;
- (4) standby wells used for emergency purposes only;
- (5) permits to appropriate 15 acre-feet of water or less per year that are exempt pursuant to K.A.R. 5-25-15;

(6) term permit applications of one year or less and those term applications meeting the requirements of K.A.R. 5-25-13;

(7) permits to appropriate water from a bedrock aquifer;

(8) permits to appropriate water from the Dakota aquifer if the applicant can show either of the following:

(A) No Pleistocene aquifer exists within 5,280 feet of the proposed well location; or

(B) there is a significant difference in hydraulic head between the Pleistocene aquifer and the Dakota aquifer; and

(9) an application that proposes to use water in a manner so that there is no significant consumptive use of the local source of supply either in quantity or availability of water for use by other appropriators.

(c)(1) For each application for a change in the point of diversion, if the diversion works have not been completed, the application shall be exempt from the closure to new appropriations set forth in subsection (a). However, the proposed appropriation, when added to the vested rights, prior

appropriation rights, earlier priority applications, term permits for more than a year, and all baseflow node allocations within a two-mile-radius circle whose center is the location of the proposed well, shall not exceed 1,500 acre-feet. It shall be assumed for purposes of analysis that all prior applications, permits, certificates, and vested rights are being fully exercised and that all limitation clauses listed on permits and certificates are in force.

(2) If part of the area within the two-mile-radius circle around the proposed well location is outside the district boundaries, the 1,500 acre-feet quantity of water referred to above in paragraph (c)(1) shall be reduced proportionately by the percentage of the circle lying outside of the district boundaries. Only the baseflow node allocations, vested rights, prior appropriations, earlier priority applications, and term permits for more than one year ascribed to wells within the portion of the circle within the district shall be considered.

(3) If all of the wells authorized under a vested right or an application are not included inside the circumference of the circle, then a reasonable quantity shall be allocated to each well based upon the best available information.

(4) Each analysis for an application for a change in the point of diversion referred to in subsection (c) shall include all applications with a priority earlier than the priority established by the filing of the application for change. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-708b, and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1980; amended May 1, 1981; amended, T-86-4, March 22, 1985; amended May 1, 1986; amended May 1, 1987; amended May 1, 1988; amended April 19, 1996; amended March 16, 2001; amended Oct. 31, 2003.)

K.A.R. 5-25-5. Water flowmeter requirements. Each non-domestic well, except any well authorized by a temporary permit, shall be equipped with a water flowmeter. Each water flowmeter required by the board shall meet or exceed the specifications in K.A.R. 5-1-4 through 5-1-12. (Authorized by and implementing K.S.A. 82a-706a and K.S.A. 2009 Supp. 82a-1028; effective May 1, 1980; amended May 1, 1985; amended April 19, 1996; amended Oct. 31, 2003; amended Nov. 19, 2010.)

K.A.R. 5-25-6. Reporting water use. Each water right owner shall report to the board the readings of water meters, gauges and other measuring devices at such times as may be required by the board. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(l); effective May 1, 1980; amended April 19, 1996.)

K.A.R. 5-25-7. Water quality tests. Each water right owner shall take water samples from the owner's wells and have water quality analyses made on those samples at the owner's expense at times specified by the board. A laboratory licensed by the Kansas department of health and environment shall conduct the water quality analyses. The type of water quality analyses conducted shall be specified by the board. The owner shall submit the results of the water quality analyses to the board. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(k); effective May 1, 1980; amended April 19, 1996.)

K.A.R. 5-25-8. Waste of water. A person shall not commit or allow a waste of water as defined in K.A.R. 5-1-1. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1980; amended April 19, 1996; amended Oct. 31, 2003.)

K.A.R. 5-25-9. Procedures for non-compliance with rules and regulations. (a) The district's board or manager, any eligible voter or any person 18 years or older residing within the district may file a written complaint with the district alleging a violation of these rules and regulations, the management program, the groundwater management district act or the Kansas water appropriation act, as amended. The written complaint shall be filed at the district office.

(b) Within 30 days following the filing of the complaint, a representative of the district designated by the board shall investigate the complaint. If the representative of the district finds that a violation exists or did exist, the representative shall issue a written directive to the violator to come into compliance with the applicable rules and regulations, management program and laws, within a reasonable period of time.

(c) If the violator fails to comply with the directive of the representative within a reasonable period of time as determined by the board, the district may:

(1) seek to enjoin the violator's use of water by suitable action in district court until such time as the violator complies;

(2) seek the assistance of the chief engineer and attorney general of the state of Kansas to enjoin the violator's use of water until such time as the violator complies; or

(3) pursue other courses of action in the public interest. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective May 1, 1980; amended May 1, 1981; amended April 19, 1996.)

K.A.R. 5-25-10. Test holes and water quality analyses. (a) Except for those types of applications described in K.A.R. 5-25-4(b), each applicant proposing to divert groundwater for non-domestic use within the district shall drill a test hole that shall meet the following requirements:

(1) Be drilled within 20 feet of the proposed well to the bottom of the aquifer;

(2) be completed as an observation well according to the following specifications:

(A) A casing made of schedule 80 PVC with a minimum outside diameter of three inches shall be used;

(B) five feet of well screen shall be installed at the base of the usable aquifer;

(C) the annular space shall be grouted with neat cement from the top of the well screen to the land surface; and

(D) centralizers shall be placed on the casing at intervals of not greater than 40 feet starting at the bottom of the casing; and

(3) be drilled under the supervision of the district.

(b) Each applicant shall have a water sample taken from within five feet of the bottom of the aquifer and shall have the water sample analyzed for chloride content by a laboratory certified by the Kansas department of health and environment. The applicant shall furnish the results of the water quality analysis and a copy of the test hole log to the district.

(c) If the analysis of the water sample taken within five feet of the bottom of the aquifer indicates that the chloride content exceeds 500 milligrams per liter (mg/l), the application to appropriate water shall be recommended for denial by the district unless both of the following conditions are met:

(1) The applicant shows that approval of the application will not cause an unreasonable deterioration of the water quality nor prejudicially and unreasonably affect the public interest.

(2) The applicant desires to proceed and is willing, at the applicant's expense, to drill and complete at least two additional observation wells at locations to be determined by the district based on the lithology and the construction of the proposed well. Both of these two additional observation wells shall be constructed according to specifications adopted by the district and in the presence of a representative of the district. The two additional observation wells shall be constructed and screened above the saltwater and freshwater interface at a depth specified by the district. If the proposed point of diversion is to be a well battery, the number and location of the test holes and observation wells required shall be determined by the district based on the best hydrogeologic information available, including groundwater flow direction, lithology, and chloride levels.

(d) If at any time the chloride concentration in either of the latter two observation wells exceeds 500 mg/l, the owner shall reduce the instantaneous rate of pumping or the annual quantity pumped, or both, as necessary to reduce the chloride concentration in both observation wells to below 500 mg/l.

(e) The permit shall be dismissed and the owner shall properly plug the well at the owner's expense if either of the following occurs:

(1) Within one year after the chloride concentrations exceed 500 mg/l in either of the two observation wells, the chloride concentrations are not reduced below 500 mg/l.

(2) Operation of the well causes impairment of any other water right, including a domestic water right. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a, and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1983; amended April 19, 1996; amended Oct. 31, 2003.)

K.A.R. 5-25-11. Determination of well locations. If a question arises as to where a well is located, the burden of proof shall remain upon the applicant to show the actual location of the well in question. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective May 1, 1983; amended Oct. 31, 2003.)

K.A.R. 5-25-12. Approval of application for additional rate only. Each application for a permit to appropriate water for beneficial use that requests only an increase in the authorized rate of diversion, and no net increase in maximum annual quantity, from a specific point of diversion already authorized by another water right or approval of application shall be exempt from meeting the requirements of K.A.R. 5-25-4 if the application meets the requirements of K.A.R. 5-4-5. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-13. Term permits. The approval of an application, or an extension of a term permit, for more than one year may be granted only if one of the following conditions is met:

- (a) The term permit authorizes the use of contaminated water. For the purpose of this regulation, water containing chlorides in excess of 1,000 milligrams per liter (mg/l) shall be considered to be contaminated. For other types of contamination, the level of contamination at which an application may be approved in accordance with this regulation shall be based on the best information available.
- (b) The term permit authorizes the use of water for aquifer remediation.
- (c) The term permit authorizes hydraulic dredging.
- (d) The applicant demonstrates that approval of an extension of the expiration date of a term permit for more than one year will neither impair a use under an existing water right or approval of application nor prejudicially and unreasonably affect the public interest. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-14. Battery of wells. (a) An application for a change in point of diversion to convert one well to a battery of wells, as defined in K.A.R. 5-1-1, shall not be considered for approval unless all of the criteria in paragraph (a)(1), (2), or (3) below are met:

- (1)(A) The proposed battery of wells meets the definition of a battery of wells as defined in K.A.R. 5-1-1.
- (B) The time to construct the diversion works has not expired.
- (C) The proposed rate of diversion does not exceed the currently authorized rate of diversion.
- (2)(A) The proposed battery of wells meets the definition of a battery of wells as defined in K.A.R. 5-1-1.
- (B) Water is available for appropriation at the geocenter of the proposed well battery based on the criteria set forth in K.A.R. 5-25-4(c).
- (C) The proposed rate of diversion does not exceed the currently authorized rate of diversion.
- (3)(A) The proposed battery of wells meets the definition of a battery of wells as defined in K.A.R. 5-1-1.
- (B) A certificate of appropriation has been issued pursuant to K.S.A. 82a-714 and amendments thereto.
- (C) The maximum instantaneous rate of diversion approved shall be either of the following:
 - (i) The maximum instantaneous rate of diversion under normal operating conditions actually used during any of the three consecutive calendar years before the date of the application for change; or
 - (ii) the tested rate of diversion achieved under actual operating conditions made by a tester approved by the chief engineer. The test of the rate of diversion shall be made within six months either before or after the change application is filed.
- (D) The proposed rate of diversion does not exceed the currently authorized rate of diversion.

(b) In addition to meeting the requirements specified in subsection (a), the applicant shall also demonstrate that approval of the battery of wells will not impair existing water rights or approvals of applications and will not prejudicially and unreasonably affect the public interest.

(c) Each permit shall also be conditioned by the chief engineer so that the permit is subject to K.A.R. 5-25-2a (b) and (c). (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-706b, and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003)

K.A.R. 5-25-15. Exemptions for up to 15 acre-feet of groundwater. Except as specified in subsections (b) and (c), an application to appropriate groundwater for up to 15 acre-feet of water shall be approved if all of the conditions in subsection (a) are met. (a)(1) The sum of the annual quantity of water requested by the new application and the total annual quantities authorized by prior approvals of applications because of an exemption pursuant to this regulation does not exceed 15 acre-feet in a one-mile-radius circle surrounding the proposed point of diversion.

(2) The application meets the spacing criteria set forth in K.A.R. 5-25-2.

(3) The approval of an application will not authorize an additional quantity of water from an existing non-domestic vested right, permit, or water right that would result in a total combined annual quantity of water authorized from the point of diversion in excess of 15 acre-feet.

(4) The applicant demonstrates that approval of up to 15 acre-feet of water will not impair existing water rights or permits to appropriate water for beneficial use and will not prejudicially and unreasonably affect the public interest.

(5) All requirements of K.S.A. 82a-709 and K.S.A. 82a-711, and amendments thereto, and K.A.R. 5-3-1 and K.A.R. 5-3-1b for processing a new application to appropriate water have been met.

(b) Exemptions to approve a new application to appropriate water in accordance with this regulation shall not be approved if the exemption would conflict with any provisions of an intensive groundwater use control area order issued by the chief engineer pursuant to K.S.A. 82a-1036 through K.S.A. 82a-1040, and amendments thereto.

(c) In addition to meeting the conditions in subsection (a), each application to appropriate groundwater for beneficial use shall meet the requirements of subsection (d) if the application includes a proposed point of diversion located within the boundaries of any of the following drainage basins as defined in K.A.R. 5-6-15:

(1) Rattlesnake Creek basin;

(2) Arkansas River basin;

(3) Walnut Creek basin;

(4) Pawnee River basin; and

(5) Buckner Creek basin.

(d) The following requirements shall apply to the applications described in subsection

(c):

(1) The maximum annual quantity of water proposed in the application shall be 15

acre-feet or less.

(2) The proposed point of diversion shall meet the spacing criteria provided in K.A.R. 5-25-2.

(3) The authorized quantity of an existing water right shall be reduced, as provided in paragraph (d)(7), to offset the annual quantity requested in paragraph (d)(1), and the existing water right shall divert water from the same source of water supply that has a point of diversion located according to either of the following:

(A) Within 3.5 miles of the proposed point of diversion; or

(B) within a one-mile corridor of the major stream segment designated for stream restoration in the same basin of the proposed point of diversion.

(4) The point of diversion proposed through an offset shall not be closer to a stream than the point of diversion reduced pursuant to paragraph (a)(3) if the authorized well is within three miles of a stream.

(5) All issues relating to the possible abandonment of the offsetting water right shall be resolved by the chief engineer before determining the annual quantity of offset water that is available from the existing water right.

(6) The approval of the application shall not authorize an additional quantity of water to be used on a currently authorized nondomestic place of use.

(7) If the water right to be used as the offset for the new appropriation is a water right authorized for irrigation use, the authorized quantity of water needed to offset the new appropriation of not more than 15 acre-feet of water shall be calculated as follows:

(A) Step one.

(i) Multiply the net irrigation requirement for the 50 percent chance rainfall for the county of origin, as specified in K.A.R. 5-5-12, times the maximum number of acres legally irrigated in any one calendar year during the perfection period. For vested rights, the acreage used shall be the maximum acreage legally irrigated in any one calendar year before June 28, 1945.

(ii) The calculation made in paragraph (d)(7)(A)(i) shall result in the maximum annual quantity of water that could be changed to another type of beneficial use if the entire water right were changed pursuant to K.A.R. 5-5-9(a)(1).

(B) Step two.

(i) Divide the annual quantity of water desired to be changed to the new beneficial use by the maximum annual quantity of water that could be changed if the entire water right were changed to the new use.

(ii) The calculation made in paragraph (d)(7)(B)(i) shall result in the percentage of the entire reduced water right that will be changed to the new use. The remaining percentage of the offsetting water right may be retained by the owner of the irrigation water right.

(C) Step three.

(i) Multiply the remaining percentage calculated in paragraph (d)(7)(B)(ii) times the total currently authorized quantity. The resulting product shall be the annual quantity of water that may be retained by the owner of the irrigation water right.

(ii) The portion of the authorized annual quantity of water not retained by the irrigator as described in paragraph (d)(7)(C)(i) shall be permanently reduced from the authorized annual

quantity of the offsetting water right and used to offset the new appropriation.

(8) If the water right to be used as the offset for the new appropriation is an existing water right authorized for non-irrigation use, the total net consumptive use of the offsetting water right after the change and the new appropriation shall not exceed the net consumptive use of the offsetting water right before the change.

(9) The place of use authorized by the offsetting water right for irrigation shall be reduced in proportion to the reduction in the maximum annual quantity of water as determined in paragraph (d)(7)(A)(ii). The directions specified in K.A.R. 5-5-11(b)(2)(B)(ii) shall be followed to determine the number of acres that may be retained.

(e) After the application has been approved pursuant to this regulation, no application to change that water right shall be approved if that approval would authorize the water use to be diverted from any other point of diversion authorized when the application is filed or to be used on any other place of use authorized when the application for change is filed.

(f) An application approved as an exemption under this regulation shall not be leased or placed in a water bank so that the approved water use can be diverted at another location. (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-706a, K.S.A. 2009 Supp. 82a-711, and K.S.A. 2009 Supp. 82a-1028; effective Oct. 31, 2003; amended May 21, 2010.)

K.A.R. 5-25-16. Water quality analyses and observation wells in the Rattlesnake creek subbasin. Groundwater rights that have points of diversion located in the Rattlesnake creek subbasin east and north of federal highways US-281 and US-50 shall be subject to the following requirements:

(a) The water right owner, or the authorized representative, shall test water samples to determine, as needed, whether the water being pumped contains more than 300 milligrams of chlorides per liter. The district may require the tests to be made at a frequency not to exceed once in 365 days. All water quality samples shall be taken in the presence of an authorized representative of the district, and one-half of the sample shall be given to the authorized representative of the district when the sample is taken. The owner shall have the water sample analyzed for chloride content by a laboratory certified by the Kansas department of health and environment. The applicant shall furnish the results of the water quality analysis to the district within 60 days after the date the sample was taken.

(b) If the analysis of the water sample taken indicates that the chloride content exceeds 300 milligrams of chlorides per liter, the owner shall be required, before any approval of a change in point of diversion, to drill an observation well to bedrock in the manner specified in K.A.R. 5-25-10(a). (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-706a, K.S.A. 2002 Supp. 82a-708b, and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-17. Voluntary reductions of water rights in the Rattlesnake creek subbasin. Each water right owner in the Rattlesnake creek subbasin that agrees to meet, and does meet, all of the conditions specified in subsections (a) through (e) no later than March 31, 2004 on a water right for a center pivot irrigation system with a priority date on or before April 12, 1984 shall receive a

credit toward any reduction required by alternative management actions implemented in accordance with the Rattlesnake creek basin management program accepted by the chief engineer on July 11, 2000. The amount of the credit shall be calculated by multiplying by 1.5 the total number of years that the water right has been voluntarily reduced in accordance with the terms of this regulation before any alternative actions are taken under this program times the quantity of water that was voluntarily reduced. Water right owners who have taken a reduction in their water right under this regulation shall have any further reduction through the Rattlesnake creek basin management program based on the authorized amount before a voluntary reduction is made under this regulation.

(a) The owner permanently reduces the maximum number of acres actually irrigated in any one calendar year during the period 1987 through 1996 by the number of acres previously watered by the end gun and provides documentation to the chief engineer of the number and location of the acres irrigated by the end gun during the period 1987 through 1996.

(b) The owner removes the end gun from the center pivot and certifies to the chief engineer what type of end gun has been removed.

(c) The owner installs pressure regulators on the center pivot to prevent the same rate of diversion from being pumped after the end gun is removed as was pumped before the end gun was removed and certifies to the chief engineer what pressure regulators have been installed.

(d) The chief engineer permanently reduces the authorized place of use of that water right by the maximum number of acres actually irrigated in any one calendar year by the end gun during the period 1987 through 1996.

(e) The chief engineer permanently reduces the maximum annual quantity authorized by that water right by the quantity of water that is calculated by multiplying the number of acres previously watered by the end gun times the net irrigation requirements (NIR) for the 50 percent chance rainfall for the county in which the point of diversion is located, as set forth in K.A.R. 5-5-12. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-18. Changes of well locations within the Rattlesnake creek basin. (a) Each application to change the location of a well within the Rattlesnake creek basin by more than 2,640 feet may be approved by the chief engineer if all of the following conditions are met:

(1) The source of water supply for the currently authorized well and the proposed well is the Rattlesnake creek basin as defined in K.A.R. 5-6-15.

(2) The currently authorized well is located within the corridor or the number two priority decline area as defined in figure two of the Rattlesnake creek management plan accepted by the chief engineer on July 11, 2000.

(3) The well will be moved to a location outside the corridor or the number two priority decline area as defined in figure two of the Rattlesnake creek management plan accepted by the chief engineer on July 11, 2000

(4) The average saturated thickness in the two-mile-radius circle in which the proposed well will be located is greater than 40 feet as shown on the saturated thickness map adopted by reference in K.A.R. 5-25-19.

(5) The water level within the two-mile-radius circle surrounding the proposed well location has not declined in excess of 20 feet of the predevelopment water level as shown in Kansas geological survey bulletins numbered 65, 80, and 88.

(6) The change proposes the relocation of all the water right or a divided water right.

(7) No other well has previously been authorized by the chief engineer to be relocated within a one-mile radius of the proposed well location under the provisions of this regulation, or the applicant demonstrates that the proposed well will not impair existing water rights.

(8) The water right that is proposed to be changed is vested or certified.

(9) All other statutory and regulatory requirements for approval of a change in point of diversion that do not conflict with this regulation are met.

(b) The approval of the change in point of diversion shall be subject to the conditions specified in this subsection:

The approval of the application to change the point of diversion shall be subject to review by the chief engineer 10 years after the approval of the change application. If the water level at the new well location has declined in excess of 10 feet from the date the new well was drilled, for the sole purpose of administering wells concerning direct impairment, the new well shall be considered to have the priority of the date of the application to change the point of diversion. The owner of the well shall have the option of applying for another change in point of diversion.

(c) The quantity of water that can be approved for a change in point of diversion meeting the requirements of subsection (a) above shall be determined based on the following tables.

Points			
point value for each column at right	saturated thickness at proposed well site, in feet	quantity of water authorized in two-mile-radius circle around proposed well, in acre-feet	feet of decline in two-mile-radius circle around proposed well since pre-development
1	146+	0-1,500	0-4
2	111-145	1,501-3,000	5-8
3	91-110	3,001-4,500	9-12
4	66-90	4,501-6,000	13-16
5	41- 65	6,001+	17-20
Percent of a water right that can be moved to a new location			
number of points scored by proposed well		percent of water right that can be moved to new well location	

3-6	100
7-9	90
10-12	80
13-15	70

(Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-19. Saturated thickness map. (a) The following electronic data files, all dated July 10, 2002 and prepared by the district using data developed by the Kansas geological survey and the district, are hereby adopted by reference by the chief engineer:

- (1) Rattlesnake basin.dbf;
- (2) Rattlesnake basin.sbn;
- (3) Rattlesnake basin.sbx;
- (4) Rattlesnake basin.shp;
- (5) Rattlesnake basin.shx; and
- (6) Wln.dbf.

(b) Except as set forth in subsection (c), the electronic data files described in subsection (a) shall be used in all situations in which determination of the saturated thickness of the aquifer within the boundaries of the district is necessary.

(c) The saturated thickness shown in the electronic data files shall be used unless the applicant provides, or the chief engineer has available, better or more site-specific data concerning the actual saturated thickness of the two-mile-radius circle surrounding the well in question. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; effective Oct. 31, 2003.)

K.A.R. 5-25-20. Recommendations by the board. (a) The following types of applications shall be submitted by the chief engineer to the district for review and recommendation:

(1) All applications to appropriate water for beneficial use, except for temporary use and domestic use; and

(2) all applications to change the point of diversion, place of use, the use made of the water, or any combination thereof, except applications to move the point of diversion less than 300 feet.

(b) The district shall conduct a review of the proposed application. Except as set forth in subsection (d), the district's recommendation to the chief engineer shall be consistent with the provisions of the Kansas water appropriation act, the groundwater management district act, and the regulations adopted by the chief engineer pursuant to those acts.

(c) Within 15 working days after the date the chief engineer submits the application to the district for review, or within any extension of time authorized by the chief engineer, the district shall submit its findings and recommendation for approval, denial, or modification of the application and shall specify the basis for the recommendation.

(d) The district may submit to the chief engineer a written recommendation of an exemption from or a waiver of a regulation. If the district submits such a recommendation, the district shall demonstrate to the chief engineer that the granting of the proposed waiver or exemption will not prejudicially and unreasonably affect the public interest and will not cause impairment of any existing water right. (Authorized by K.S.A. 82a-706a and K.S.A. 2002 Supp. 82a-1028; implementing K.S.A. 82a-706, K.S.A. 82a-706a, and K.S.A. 2002 Supp. 82a-711; effective Oct. 31, 2003.)

K.A.R. 5-25-21. Alternative method for calculating the amount of water deposited in a multiyear flex account. Each water right owner within the boundaries of the district who is otherwise eligible to establish a multiyear flex account under K.S.A. 82a-736, and amendments thereto, and the implementing regulations and who meets all of the requirements in subsection (b) shall be eligible to use the alternative calculation method in subsection (a) pursuant to K.S.A. 82a-736(c)(1)(D)(iii), and amendments thereto, to determine the amount of water deposited in the multiyear flex account.

(a) The alternative calculation method for the district shall be to compute 450 percent of the base water right's certified appropriation. However, the amount of water deposited in the multiyear flex account shall not exceed the greatest of the quantities derived using the calculation methods specified in K.S.A. 82a-736(c)(1)(D), and amendments thereto.

(b) To be eligible to use the alternative calculation method specified in subsection (a), the following requirements shall be met and shall remain met throughout the term of the period covered by the multiyear flex account permit:

(1) The owner shall meet all requirements and conditions for eligibility and participation specified in K.S.A. 82a-736, and amendments thereto, and the implementing regulations, except as modified by this regulation.

(2) The owner's base water right shall be for a center pivot irrigation system with a functional end gun.

(3) The owner shall remove the end gun from the center pivot and cap the end.

(4) Before diverting any water under the multiyear flex account, the owner shall certify to the chief engineer, on forms supplied by the chief engineer, the following information:

(A) The location of the tract of land to be covered by the multiyear flex account term permit;

(B) the length of each center pivot system covered by the multiyear flex account term permit;

(C) the type of end gun removed and any other information sufficient to enable the chief engineer to determine the number of acres irrigated by the end gun; and

(D) the date of removal of the end gun.

(5) The owner shall maintain the center pivot without an end gun for the duration of the period covered by the multiyear flex account term permit.

(6) The authorized place of use shall not be increased during the term of the multiyear flex account permit.

(7) The authorized place of use shall be located wholly within the boundaries of the district.

(c) If the owner qualifies for a multiyear flex account term permit and is eligible under this regulation to use the alternative calculation method, the chief engineer shall enter an order that reduces the authorized place of use of the owner's base water right during the multiyear flex account

permit term. The reduced authorized place of use shall be equal to the maximum number of acres legally irrigated by the center pivot system for the previous five calendar years minus the number of acres irrigated by the center pivot system's end gun. (Authorized by K.S.A. 82a-706a and K.S.A. 2015 Supp. 82a-1028; implementing K.S.A. 2015 Supp. 82a-736; effective March 25, 2016.)