

Kansas Administrative Regulations

Department of Health and Environment

Article 30.—Water Well Contractor's License; Water Well Construction and Abandonment

28-30-2. Definitions.

In addition to the definitions in K.S.A. 82a-1203 and amendments thereto, each of the following terms shall have the meaning assigned in this regulation:

(a) "Abandoned water well" means a water well determined by the department to meet at least one of the following conditions:

(1) Use of the water well has been permanently discontinued.

(2) Pumping equipment has been permanently removed from the water well.

(3) The water well either is in such disrepair that it cannot be used to supply water or has the potential for transmitting surface contaminants into the aquifer, or both.

(4) The water well poses potential health and safety hazards.

(5) The water well is in such a condition that it is not an active well or cannot be placed in inactive status.

(b) "Above-grade surface completion" means the termination of a water well or boring if the casing being used is at least 12 inches above the surrounding ground surface.

(c) "Active well" means a water well that is operating and is used to withdraw water or to monitor or observe groundwater conditions.

(d) "Annulus" means the space between the casing and the boring or the space between two or more strings of casing.

(e) "Aquifer" means an underground formation that contains and is capable of transmitting groundwater.

(f) "At-grade surface completion" means the termination of a monitoring well or boring if the casing is at the surrounding ground surface.

(g) "Cased test hole" means any test hole in which casing has been installed and grouted.

(h) "Confined aquifer" means an aquifer overlain and underlain by impermeable layers. Groundwater in a confined aquifer is under pressure greater than atmospheric pressure and will rise in a water well above the point at which groundwater is first encountered.

(i) "Department" means Kansas department of health and environment.

(j) "Designated person" means the individual designated by a water well contractor who is the contact person for compliance issues and who is responsible for submitting water well records and for earning the units of approved continuing education credits required by K.A.R. 28-30-3. The designated person may be the water well contractor.

(k) "Drill rig" means an apparatus operated to create a hole or shaft in the ground in which a water well is constructed.

(l) "Drill rig license number" means the numbers and letters assigned by the department that are affixed to each drill rig operated by or for a water well contractor.

(m) "Drilling fluid" means any fluid, including water, that is added during the drilling process to help increase the drilling efficiency.

(n) "Fresh groundwater" means water containing not more than 1,000 milligrams of total dissolved solids per liter and 500 milligrams of chloride per liter.

(o) "Groundwater" means the part of the subsurface water that is in the zone of saturation.

(p) "Grout" means bentonite clay grout, cement grout, neat cement grout, or other material approved by the secretary used to create a permanent impervious, watertight bond between the casing and the undisturbed formation surrounding the casing or between two or more strings of casing.

(1) "Bentonite clay grout" means a mixture of water and either commercial grouting or plugging sodium bentonite clay, including sodium bentonite clay manufactured under the trade name "volclay grout," or an equivalent approved by the department according to the following:

(A) The mixture shall be prepared according to the manufacturer's recommendations to achieve a weight of at least 9.4 pounds per gallon of mix. Weighting agents may be added according to the manufacturer's recommendations.

(B) Sodium bentonite pellets, tablets, or granular sodium bentonite may also be used if these additives or materials meet the specifications listed in paragraph (p)(1).

(C) Sodium bentonite products that are designed for drilling purposes or contain organic polymers shall not be used.

(2) "Cement grout" means a mixture of one 94-pound bag of portland cement, an equal volume of sand having a diameter no larger than two millimeters, and five to six gallons of clean water.

(3) "Neat cement grout" means a mixture of one 94-pound bag of portland cement and five to six gallons of clean water.

(q) "Grout tremie pipe" and "grout pipe" mean a steel or galvanized steel pipe or similar pipe having equivalent structural soundness that is used to pump grout to a point of selected emplacement during the grouting of a casing or plugging of an abandoned water well or test hole.

(r) "Heat pump hole" means a hole drilled to install piping for an earth-coupled water source heat pump system, also known as a vertical closed-loop system.

(s) "Inactive status" means a water well that is not presently operating but is maintained so that the water well can be put back in operation with minimum effort.

(t) "Monitoring well" means a water well used to monitor, obtain, or collect hydrologic, geologic, geophysical, chemical, or other technical data pertaining to groundwater, surface water, or other hydrologic conditions. A monitoring well is also known as an "observation well."

(u) "Pitless well adapter or unit" means an assembly of parts installed below the frost line that permits pumped groundwater to pass through the wall of the casing or the extension of the casing and prevent the entrance of contaminants.

(v) "Public water-supply well" means a water well that meets both of the following conditions:

- (1) Provides groundwater to the public for human consumption; and
- (2) has at least 10 service connections or serves an average of at least 25 individuals daily for at least 60 days during a calendar year.

(w) "Pump pit" means a watertight structure that meets both of the following conditions:

(1) Is constructed as follows:

(A) At least two feet away from the water well; and

(B) below ground level to prevent the freezing of pumped groundwater; and

(2) houses the pump or pressure tank, distribution lines, electrical controls, or other appurtenances.

(x) "Reconstructed water well" means an existing water well that has been deepened or has had the casing replaced, repaired, added to, or modified in any way for the purpose of obtaining groundwater.

(y) "Sand point" has the meaning specified in K.S.A. 82a-1203, and amendments thereto.

(z) "Sanitary well seal" means a manufactured seal installed at the top of the casing that, when installed, creates an airtight and watertight seal to prevent contaminated or polluted water from gaining access to the groundwater supply.

(aa) "Static water level" means the highest point below or above ground level that the groundwater in the water well reaches naturally.

(bb) "Test hole" and "hole" mean any excavation constructed for the purpose of determining the geologic, hydrologic, and water quality characteristics of underground formations.

(cc) "Treatment" means the stimulation of the production of groundwater from a water well through the use of hydrochloric acid, muratic acid, sulfamic acid, calcium or sodium hypochlorite, polyphosphates or other chemicals, and mechanical means, to reduce or remove iron and manganese hydroxide and oxide deposits, calcium and magnesium carbonate deposits, and slime deposits associated with iron or manganese bacterial growths that inhibit the movement of groundwater into the water well.

(dd) "Uncased test hole" means any test hole from which casing has been removed or in which casing has not been installed.

(ee) "Unconfined aquifer" means an aquifer containing groundwater at atmospheric pressure. The upper surface of the groundwater in an unconfined aquifer is the water table.

(ff) "Water well" has the meaning specified in K.S.A. 82a-1203, and amendments thereto.

(Authorized by K.S.A. 82a-1205 and 82a-1213; implementing K.S.A. 82a-1202, 82a-1205, and 82a-1213; effective, E-74-34, July 2, 1974; modified, L. 1975, ch. 481, May 1, 1975; amended May 1, 1980; amended May 1, 1987; amended Nov. 22, 1993; amended June 7, 2013.)

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