

# **RULES AND REGULATIONS**

## **KANSAS CORPORATION COMMISSION**

**(Excerpted)**

**May 2004**

**K.A.R. 82-3-706. Groundwater management districts #2 and #5: drilling contractor; logging; construction; reports.** This regulation shall apply only within the boundaries of groundwater management districts #2 and #5.

- (a) Only a driller or water well contractor licensed with the Kansas department of health and environment under K.S.A. 82a-1201 et seq., and amendments thereto, shall drill and construct each cathodic protection borehole.
- (b) The total depths of the borehole and the bottom of the cathodic surface casing shall not exceed the authorized depths in the approved permit to drill and construct a cathodic protection borehole.
- (c) The cathodic protection borehole shall be logged according to the following requirements:
  - 1) The drill cuttings shall be sampled and recorded at intervals not greater than five feet or more frequently, if needed, to produce an accurate lithologic or driller's log of the complete cathodic protection borehole.
  - 2) The electrical readings or log and any other geophysical readings or logs of the complete cathodic protection borehole shall be recorded and made a permanent record.
- (d) No uncased cathodic protection borehole shall be drilled or completed below shale or impermeable bedrock surface.
- (e) The minimum diameter of each cathodic protection borehole shall be one of the following:
  - 1) Eight inches for uncased boreholes; or
  - 2) six inches greater than the outside diameter (OD) of the surface casing for cased boreholes.
- (f) Except for uncased cathodic protection boreholes, each borehole shall be constructed according to the following requirements:
  - 1) Nonmetallic casing equipped with centralizers shall be installed in the borehole when the drilling penetrates 20 feet into either shale or impermeable bedrock.
  - 2) The casing shall be new, clean, serviceable, and free of defects.
  - 3) The casing shall have a standard dimension ratio (SDR) of 21 or less and shall be calculated by dividing the casing's outside diameter (OD) by its minimum wall thickness (MWT).
  - 4) Centralizers shall be installed along the entire length of the casing at intervals not greater than 40 feet, starting at the bottom end of the casing.
  - 5) The annular space shall be grouted, and the grout shall be installed using a grout tremie pipe or as recommended by the grout manufacturer's instructions and allowed to set undisturbed as recommended by the grout manufacturer's specifications.
  - 6) No opening shall be made through the casing, except for the installation of a pitless casing adapter.
- (g) Measurements shall be made as necessary to determine the depth, dimensions, or spacing of the borehole, casing, anode, anode conductor, grout, and other borehole materials.
- (h) Drilling products and borehole materials containing organic polymers shall not be used to either drill or construct the borehole.

- (i) 1) If the manager of the appropriate GMD determines that the use of a drilling pit threatens to contaminate groundwater, the operator, owner, or person responsible shall ensure that the pit meets one of the following requirements:
  - (A) Be constructed so that the bottom and sides have a hydraulic conductivity no greater than  $1 \times 10^{-7}$  cm/sec during use;
  - (B) be constructed aboveground; or
  - (C) consist of a portable aboveground tank.2) All fluids that threaten to contaminate the groundwater shall be removed from the drilling pit and disposed of upon closure of the pit, in accordance with K.A.R. 82-3-602.
- (j) If drilling and construction operations are temporarily suspended or interrupted by an unforeseen circumstance, the following requirements shall apply:
  - 1) All drilling and grouting equipment shall be removed from the borehole.
  - 2) The borehole shall be secured to prevent the following:
    - (A) The entry of contaminating or polluting materials into the borehole; and
    - (B) unauthorized access.
  - 3) The borehole shall be maintained in a stable condition to prevent collapse.
- (k) Two copies of the following information shall be submitted to the appropriate GMD office within 30 days after the cathodic protection borehole is completed:
  - 1) The well completion form provided by the commission and completed by the operator;
  - 2) any electrical or geophysical readings or logs; and
  - 3) an as-built plan.The manager of the appropriate GMD shall provide one copy of this information to the conservation division within 30 days of receipt by the GMD office.
- (l) 1) Each failure to construct a cathodic protection borehole in accordance with these regulations shall be punishable by a penalty of up to \$2,500.
- 2) Each failure to submit the report required under subsection (k) to the appropriate GMD office shall be punishable by a penalty of \$100.

(Authorized by K.S.A. 55-152 and K.S.A. 2003 Supp. 82a-1028; implementing K.S.A. 55-152, K.S.A. 2003 Supp. 55-164, and K.S.A. 2003 Supp. 82a-1028; effective, T-82-1-21-04, Jan. 21, 2004; effective May 14, 2004.)