

Kansas Administrative Regulations

Department of Health and Environment

Article 46.—Underground Injection Control Regulations

28-46-30a. Monitoring and reporting requirements for class III salt solution mining wells.

40 CFR 146.33, as in effect on July 1, 2008, is hereby adopted by reference. In addition, all of the following requirements shall apply to each permittee of a class III salt solution mining well:

(a) Within two years of the effective date of this regulation, each permittee shall submit a facility plan for monitoring the injection and withdrawal volumes and injection pressures that meets the secretary's approval and ensures the protection of public health, safety, and the environment.

(b) Each permittee shall monthly submit the following monitoring records to the department on a form provided by the department:

(1) The weekly injection and withdrawal volume for each salt solution mining well or gallery;

(2) the weekly injection and withdrawal ratio for each salt solution mining well or gallery; and

(3) a summary of the weekly minimum and maximum injection pressures for each salt solution mining well or gallery.

(c) Each permittee shall annually submit a report to the department, on a form provided by the department, which shall include the following information:

(1) For each well, a percentage of the remaining amount of salt that can potentially be mined in accordance with these regulations; and

(2) a summary of facility activities regarding abnormal fluid loss, well drilling, well plugging, geophysical well logging, sonar caliper surveys, mechanical integrity testing, calibration and maintenance of flow meters and gauges, elevation survey results, and the description of the model theory used to calculate the percentage of the total amount of remaining salt that can potentially be mined in accordance with these regulations.

(d) If an unanticipated loss of fluid has occurred or the monitoring system indicates that leakage has occurred and has been verified, the permittee shall notify the department orally within 24 hours of discovery and shall provide written confirmation within seven days regarding the abnormal loss or leakage.

(e) A sonar caliper survey shall be conducted on each well when calculations based on a model, approved by the secretary, indicate that 20 percent of the total amount of remaining salt that can be potentially mined in accordance with these regulations has been mined. The well shall be checked by the permittee to determine the dimensions and configuration of the cavern developed by the solutioning. Thereafter, a sonar caliper survey shall be conducted when the calculations indicate that each additional 20 percent of the remaining salt that can be potentially mined in accordance with these regulations has been mined.

(f) Any permittee may use an alternative method for determining the dimensions and configuration of the solution mining cavern if the secretary determines that the alternative method is substantially equivalent to the sonar caliper survey. The permittee shall submit the following information for the secretary's consideration:

(1) A description of the survey method and theory of operation, including the survey sensitivities and justification for the survey parameters;

(2) a description of the well and cavern conditions under which the survey can be conducted;

(3) the procedure for interpreting the survey results; and

(4) an interpretation of the survey upon completion of the survey.

(g) More frequent monitoring of the cavern dimensions and configuration by sonar caliper survey may be required by the secretary if the secretary receives information that the cavern could be unstable. Each existing well shall meet the requirements of the survey frequency established in the well permit. The results of the survey, including logs and an interpretation by a contractor experienced in sonar interpretation, shall be submitted to the department within 45 days of completing the survey.

(h) Any permittee may submit a variance request regarding the sonar caliper survey frequency to the department, if both of the following conditions are met:

(1) The variance is protective of public health, safety, and the environment.

(2) The permittee agrees to perform any additional monitoring or well improvements, or any combination of these, if required by the secretary.

(i) Each permittee seeking a variance shall submit a written request, including justification for the variance and any supporting data to the secretary for review and consideration for approval.

(j) Each permittee shall check the thickness of the salt roof at the end of two years of use and biennially thereafter, unless otherwise permitted by the secretary, by gamma ray log or any other method approved by the secretary. A report of the method used and a copy of the survey shall be submitted to the department within 45 days from completion of the test.

(k) Each permittee shall give oral notification to the department of a verified exceedence of the maximum permitted injection pressure within 24 hours of discovery of the exceedence and submit written notification within seven calendar days to the department.

(l) Each new well shall have a meter to measure injection or withdrawal volume. The permittee shall maintain records of these flow volumes at the facility and shall make the records available to the secretary upon request.

(m) Each permittee shall submit a ground subsidence monitoring plan to the secretary within two years after the effective date of these regulations. The following requirements shall apply:

(1) The ground subsidence monitoring plan shall include the following information:

(A) A description of the method for conducting an elevation survey; and

(B) the criteria for establishing monuments, benchmarks, and wellhead survey points.

(2) The ground subsidence monitoring plan shall meet all of the following criteria:

(A) Level measurements to the accuracy of 0.01 foot shall be made.

(B) Verified surface elevation changes in excess of 0.10 foot shall be reported within 24 hours of discovery to the department.

(C) No established benchmark shall be changed, unless the permittee submits a justification that the change is protective of public health, safety, and the environment.

(D) If a benchmark is changed, the elevation change from the previous benchmark shall be noted in the elevation survey report.

(E) Each permittee shall submit the elevation before and after any wellhead work that results in a change in the survey point at the wellhead.

(3) The elevation survey shall be conducted by a licensed professional land surveyor.

(4) All annual elevation survey results shall be submitted to the department within 45 days after completion of the survey.

(5) All certified and stamped field notes shall be made available by the permittee upon request by the secretary.

(Authorized by and implementing K.S.A. 2009 Supp. 55-1,117 and 65-171d; effective Aug. 6, 2010.)

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